

Identifying Research-Based Parameters for Developing Public Higher Education  
Outcomes-Based Funding Models

A Dissertation submitted  
to the Graduate School  
Valdosta State University

in partial fulfillment of requirements  
for the degree of

DOCTOR OF EDUCATION

in Adult and Career Education

in the Department of Adult and Career Education  
of the Dewar College of Education and Human Services

December 2016

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## ABSTRACT

The purpose and outcome of this study was to provide insight into clearly articulated parameters that might serve as a basis for the development of a generalizable outcomes-based funding model that *any* higher education system could use. Funding models were analyzed and telephone interviews were conducted from the ten states that were identified by the National Center for Higher Education Management Systems (NCHEMS.Org) as having fully implemented funding models for the 2010 - 2015 fiscal years. The analysis of the funding models and research participant responses from these ten states provided the parameters that might serve as a basis for the development of a generalizable outcomes-based funding model that *any* higher education system could use.

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## ACKNOWLEDGEMENTS

I would like to express my deepest thanks to my Dissertation Committee chair: Dr. Reynaldo L. Martinez Jr., and my dissertation committee members: Dr. Kenneth D. Ott, Dr. Anthony J. Scheffler, and Dr. Luis J. Gonzales. Gentlemen, thank you very much for your knowledge, leadership, and support on this great adventure!

I would like to thank my Valdosta State University (VSU) Doctoral program instructors: Dr. Reynaldo L. Martinez Jr., Dr. Kenneth D. Ott, Dr. Herb R. Fiester, Dr. Jerry Siegrist, Dr. Richard W. Schmertzing, Dr. Lantry L. Brockmeier, Dr. Nicole M. Gibson, Dr. Iris C. Ellis, Dr. Xavier V. McClung, and Dr. Steve E. Downey. Ladies and gentlemen, thank you very much for your knowledge and guidance in preparing me for this great adventure!

I would like to thank my pilot study participants: Mr. Dennis P. Jones and Dr. Marianne Boeke from the National Center for Higher Education Management Systems (NCHEMS.Org), and the state research participants. Mr. Jones and Dr. Boeke, thank you very much! Your valuable support was of great benefit to my research.

This great adventure would not be possible without the support of the two wonderful ladies in my life: my wife Tina and my daughter Rachel - *thank you very much!*

## DEDICATION

For Tina and Rachel.

## Chapter I

### INTRODUCTION

This chapter begins with a description of how the workforce, economy, and education are tied together in this country, and how the states were involved in this dynamic interaction. “Worker productivity is a major factor affecting a state’s long-term prospects for economic growth. More highly educated and trained workers typically are more productive than those who have less education and training. And more productive workers generally earn higher incomes” (America Works: The Benefit of a More Educated Workforce to Individuals and the Economy, 2014, p. 1), and will require more college completions to be more competitive in the future (Governor Nathan Deal, 2012a, para. 2). As stated by President Barack Obama, “Earning a post-secondary degree or credential is no longer just a pathway to opportunity for a talented few; rather, it is a prerequisite for the growing jobs of the new economy” (The White House: President Barack Obama, 2014, para. 1). Complete College America (CCA) agreed with the president. The mission of CCA was: “To work with states to significantly increase the number of Americans with quality career certificates or college degrees and to close attainment gaps for traditionally underrepresented populations” (Complete College America: About CCA, 2014, para. 1) by a system of proposed game changers which included performance funding.

Due to the recent recession and other economic issues, there was less funding available for state colleges to support the need for more graduates. States understood the

need for more graduates in a climate of less available tax revenues for funding, and as a result some states such as Tennessee, Indiana, Oklahoma, and Nevada had adopted some of CCA's clear path forward model initiatives which include tying funding to progress and success for colleges and universities to help deal with these economic issues. For example, lets take a look at Georgia.

### Georgia as an Example

The following was a quote from a press release by Georgia Governor Nathan Deal on June 4, 2014, where he introduced a \$1 million grant to support "Guided Pathways to Success" (GPS) education initiative that would make college more affordable, and save taxpayers millions:

College completion is not only a higher education issue. It's an economic issue, a business issue, and a workforce issue. By 2020, more than 60 percent of job openings in Georgia will require some form of postsecondary education. To meet this demand, we must increase the number of students graduating with postsecondary degrees in a timely, cost-effective manner. (Governor Nathan Deal, 2014c, para. 2)

The United States (U.S.) Department of Labor, Bureau of Labor Statistics (BLS) characterized a recession as "a general slowdown in economic activity, a downturn in the business cycle, a reduction in the amount of goods and services produced and sold" (U.S. Department of Labor, 2012, para. 1). The impact of the 2007-2009 recession on Georgia's economy had been felt in consumer spending, the housing market, productivity, and in one of the most widely recognized indicators of a recession that was higher unemployment rates (U.S. Department of Labor, 2012, para. 2). The U.S.

Department of Labor (2012) identified the most recent recession as having spanned from December 2007 to June 2009. According to Tharpe (2014, p. 1), Georgia suffered and was still recovering from one of the worst economic downturns since the 1930s.

As reported by the U.S. Census Bureau (2014) State Government Tax Collection Reports for 2007 - 2014, Georgia state government tax revenues decreased during the recession (see Figure 1 left scale, Georgia Tax Revenues vs. State Allocations by Regents in \$ Billions). This decrease in tax revenues resulted in a reduction in annual funding allocations by the Board of Regents for the University System of Georgia (USG) (see Figure 1, right scale). This figure graphically shows the dependency of regents' allocations on tax revenues. The Red dashed line on Figure 1 shows that State Allocations by Regents up to Fiscal Year (FY) 2014 had not met pre-recession levels. Alm and Sjoquist's (2014, p. 1) view is that Georgia's economy had not fully recovered from the recession (based on GDP growth and recovery ratio) to pre-recession levels. This was the economic context for this study.





Figure 1. Georgia Tax Revenues vs. State Allocations by Regents in \$ Billions.

Note. (1) Retrieved from <http://www.census.gov//govs/statetax/>. (2) Retrieved from [http://www.usg.edu/fiscal\\_affairs](http://www.usg.edu/fiscal_affairs). Recession timeframe is identified by the [Red Block]. Scales for Tax Revenues and Regents Allocations are different.

There were efforts in progress to improve the economy in Georgia. For example, the Consumer News and Business Channel (CNBC) ranked Georgia the No. 1 state in the U.S. for business in 2014 (Governor Nathan Deal, 2014a). The Commissioner of the Georgia Department of Economic Development Chris Carr adds, “Being named America’s top state for business by CNBC is another win for everyone involved in economic development in Georgia” (Governor Nathan Deal, 2014a, para. 5). CNBC’s ranking was based on ten broad categories that included the cost of doing business, economy, infrastructure and transportation, workforce, quality of life, technology and innovation, business friendliness, education, the cost of living and access to capital. In November 2013, an Office of the Governor press release stated that Georgia was named the No. 1 most competitive state in the nation (Governor Nathan Deal, 2014b). “Remaining competitive is key to staying ahead in the global marketplace” according to

Chris Carr, Commissioner of the Georgia Department of Economic Development

(Governor Nathan Deal, 2014b, para. 3). As stated in the same press release, what made a state competitive was the:

- Total number of new and expanded facilities;
- Capital investment in new and expanded facilities;
- New jobs created;
- Rank in the corporate real estate executive portion of the 2013 Site Selection Business Climate Ranking;
- State tax climate as ranked by the Tax Foundation; and
- Performance in the Beacon Hill Institute's State Competitiveness Index, and the number of National Career Readiness Certificates per 1,000 residents aged 18-64 (Governor Nathan Deal, 2014b, para. 5).

Georgia Governor Nathan Deal stated in his addition to favorable tax policies,

Another important element of job growth is the availability of a trained and reliable workforce. We are fortunate that our workforce is ranked number one by CNBC, that our technical college system and its quick start program are regarded as the best in the country and that our colleges and universities, both public and private, provide excellent graduates. Even so, we have applied the same scrutiny to these institutions that hard times dictate. We have asked them to examine themselves through the prism of the work readiness of their graduates. (Governor Nathan Deal, 2014d, para. 13)

## Workforce Context

In a press release on February 28, 2012, Georgia Governor Nathan Deal charged campus presidents with the “Complete College Georgia” (CCG) mission (Governor Nathan Deal, 2012a, para. 1). The mission’s initiatives and strategies called for the state’s public and private colleges to add 250,000 college graduates by 2020. These results could be accomplished with one-year certificates, associate’s degrees and/or bachelor’s degrees. In the same press release, Governor Deal also discussed the “Georgia Competitiveness Initiative” which highlighted education and workforce development as top priorities. Governor Deal also stated:

Any significant increase in the number of Georgians who complete college will require a historic new era of coordination between the state’s public and private colleges and the business community. To have a successful future in Georgia, and remain competitive nationwide and globally, we have to have an educated workforce, and that means we need to do a better job getting people into college, make sure they receive a high-quality education and then graduate them.

(Governor Nathan Deal, 2012a, para. 2)

According to the Governor’s Office of Student Achievement (2011):

- Georgia faces a substantial skills gap between its future job needs and its available, qualified workforce;
- By the year 2020, more than 60 percent of the jobs in Georgia will require a career certificate or college degree;
- Currently, only 42 percent of Georgia’s young adults have a college education (a career certificate, an associate’s degree, or a bachelor’s degree or higher);

- Retention rates at Georgia colleges and universities are declining;
- Students who start in 2-year colleges and attend full-time, approximately 55 percent return for Year 2 and that number drops further to around 39 percent by Year 3;
- Of students entering a 4-year college and attending full-time, only 82 percent return for Year 2, and by Year 4, the number of students returning drops to 65 percent, and the data is even more discouraging for part-time students;
- Those students who stay in college are not graduating on schedule;
- 57 percent of students starting a bachelor's degree program graduate within six years;
- Only 11 percent starting an associate's degree program in the University System of Georgia (USG) graduate within three years; and
- In the Technical College System of Georgia (TCSG), 20 percent of students starting an associate's degree graduate within three years, and 23 percent of students starting a certificate graduate within two years. (Governor's Office of Student Achievement, 2011, para. 3)

In order for Georgia to meet the Governor's college completion goals and future workforce demands, deliberate steps needed to be taken to increase access to higher education. Georgia must also ensure that students graduated with the required postsecondary degrees and within a reasonable timeframe. The viability of Georgia's economy was at stake (Governor's Office of Student Achievement, 2011, para. 4).

## Complete College America – Complete College Georgia Context

In August 2011, Georgia Governor Deal launched “Complete College Georgia” (Governor Nathan Deal, 2012b). In this declaration, he laid out six steps to increase student access, retention, and completion at all institutions in the state’s University System and Technical College System. To meet the state’s projected economic development needs, Complete College Georgia called on leaders in higher education to implement the following six initiatives:

1. Development of comprehensive system-wide and campus-level completion plans;
2. Restructure of select Technical College System of Georgia (TCSG) programs to better support students who work;
3. Increase in articulation between TCSG and University System of Georgia (USG) to build a seamless education system;
4. Improvement in remediation as a part of the \$1 million Complete College America grant;
5. Creation of the R.E.A.C.H. (Realizing Education Achievement Can Happen – ReachGA.org) Scholarship—a privately funded, needs-based college scholarship; and
6. Formation of the Higher Education Funding Commission to study ways to change the funding formula to incentivize completion (Governor Nathan Deal, 2012b, para. 10).

The purpose of the Higher Education Funding Commission was to examine ways to encourage colleges and universities to turn their efforts to completion through the

state's funding formula (Higher Education Funding Commission: Report To Governor Deal, 2012, p. 4). The idea was to keep the formula simple and easy to implement and monitor.

The Complete College Georgia initiative (Complete College Georgia: An Overview, 2011, para. 1) was based on Complete College America (Kraft, 2011a). According to Complete College America (CCA), 38% of American young adults (25-34) had a 2-year degree or higher. For Georgia, the CCA website reported 34% for 2-year completion rates. The Complete College America website stated that 70% of young people started some form of advanced education or training. The Complete College America goal was to increase the percentage of young graduates with a college degree or credential of value to 60% by the year 2020 (Kraft, 2011b). Georgia was listed as one of their Alliance and model states, and had received \$1 million in grant money as a result of Governor Nathan Deal providing a plan to address college access and completion issues in Georgia (Complete College Georgia: An Overview, 2011, para. 1). Governor Deal's plan was to have an additional 250,000 graduates in Georgia by the year 2020 in response to the belief that there were significant skills gaps for future jobs that needed to be addressed. Governor Deal's 2011 plan to address these issues included these strategies to implement the initiative discussed above:

1. Development of comprehensive system-wide and campus-level completion plans;
2. Creation of a seamless education system;
3. Improvement in remediation as part of the \$1 million Complete College America Grant;

4. Creation of a needs-based scholarship program; and
5. Formation of the Higher Education Finance Commission (Complete College Georgia: An Overview, 2011, para. 6-10).

Part of the Complete College America initiative had a path forward model that included the following steps and model policies (Kraft, 2011b):

- Lead, measure, act, and innovate;
- Set state and campus completion goals;
- Uniformly measure progress and success;
- Shift to performance funding;
- Reduce the time to degree and accelerate success;
- Transform remediation; and
- Restructure delivery for today's students.

In reference to the fourth bulleted item above, performance funding tied funding to outcomes that provided incentives for advancing and graduating students, not just enrolling students at the beginning of the academic term. The belief was that colleges were motivated by head counts rather than student success (Complete College America: Essential Steps for States Shift to Performance Funding, 2011, p. 1). Complete College America believed performance measures should start out simple and focus on critical data points such as:

- Courses completed;
- Degrees produced;
- Credentials with labor market value earned; and

- On-time completions success (Complete College America: Essential Steps for States Shift to Performance Funding, 2011, p. 1).

Complete College Georgia took the idea from Complete College America, looked at 4-year degrees, and at returning and part-time students - not just young adults (Complete College America Alliance of States: Reduce Time & Accelerate Success, 2011, p. 1). Governor Deal's plan was to increase the number of graduates each year. Item 5 of Governor Deal's initiative: "Formation of the Higher Education Finance Commission" included a provision that the Finance Commission would serve in an advisory capacity to examine how funding could change in order to improve higher education outcomes for the state. Governor Deal's Higher Education Funding Commission created an outcomes-based formula framework funding model.

#### Higher Education Funding Context

Since colleges responded to funding, funding models needed to be changed to a mechanism where outcomes determined and allocated funding. Since graduation success and retention rates were lower than desired, this shift to an outcomes-based model was the strategy selected to improve those rates. Additionally, students did not graduate on time and were taking longer to graduate (Complete College Georgia: An Overview, 2011).

Georgia was the first state in the nation to require college completion plans for all (60) of its public institutions in the USG and the Technical College System of Georgia (Governor Nathan Deal, 2012b). In the future, outcomes-based funding models would determine which colleges receive funding. As stated by Jones (2013, p. 1), "Now more than a quarter of the states are implementing outcomes-based funding in at least one



segment of higher education, and numerous other states are moving in that direction.” As of October 2013, there were ten states implementing outcomes-based funding, six states were implementing in one sector, nine states were under development, and eight states that had an active interest in implementing outcomes-based funding (Jones, 2013, p. 1).

#### Description of the Study

The researcher has given the above economic, workforce, and higher education contexts that existed in the state of Georgia. These contexts gave rise to the Complete College America and Complete College Georgia initiatives that then lead to the outcomes-based funding strategy for higher education. Shortly, this funding strategy will require an outcomes-based model to fund institutions of higher education in other states including Georgia. Please see Figure 2 for a graphic of the Study Outline.

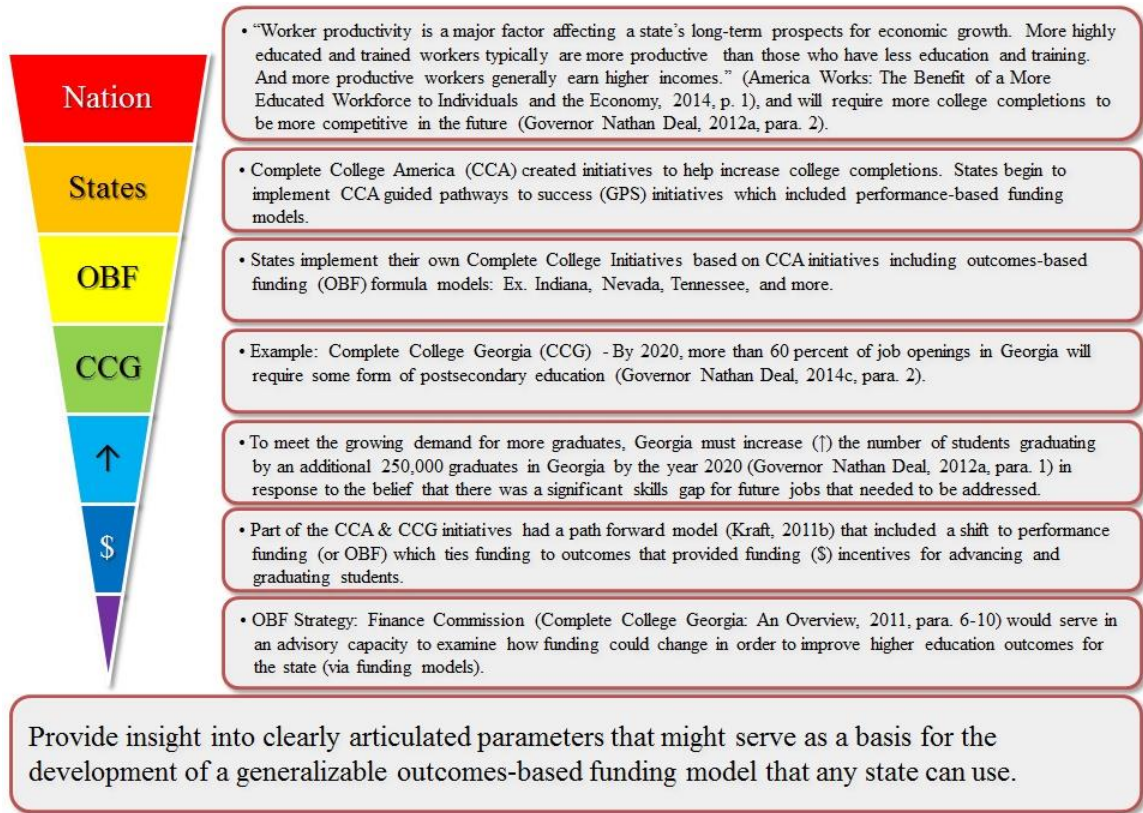


Figure 2. Study Outline.

Funding models were obtained from ten state higher education web sites.

Telephone interviews were conducted with representatives from these ten states. The funding models and transcripts from the telephone interviews were coded and analyzed to answer the research questions. These findings provided the research-based parameters that might serve as a basis for the development of a generalizable outcomes-based funding model that any state can use.

### Theoretical Framework

This research study was guided by the theoretical framework of a Six Sigma business improvement process called SIPOC. SIPOC means Suppliers, Inputs, Process, Outputs, and Customers (iSixSigma, 2015b). Creation of the SIPOC diagram usually took place during the “Define” phase of the Six Sigma DMAIC (Define, Measure,

Analyze, Improve, and Control) process (iSixSigma, 2015a). Six Sigma was a quality improvement process based on tools and methodologies, and it was used by business and industry to improve their business processes (iSixSigma, 2015c). DMAIC and SIPOC were two of the tools and methodologies used by Six Sigma to achieve their objectives of near perfection in outputs while simultaneously increasing profits by eliminating variability, defects and waste. Please see Figure 3 for a SIPOC Diagram of a Typical Funding Process.

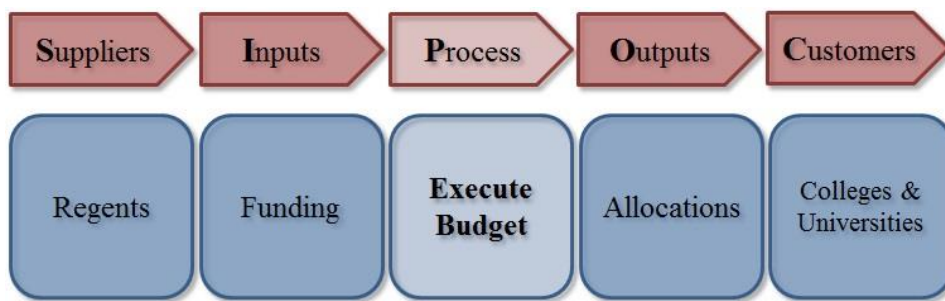


Figure 3. SIPOC Diagram of a Typical Funding Process.

With the Six Sigma SIPOC model, inputs and outputs might be materials (funds), information, or services. The SIPOC model’s focus was on capturing the set of inputs and outputs, not the individual steps in the process. For the purposes of this research study, the SIPOC *Process* phase will focus on execution of the budget that used funding models to determine state finding allocations to colleges and universities.

Since the CCA and CCG initiatives were using the business model of performance funding tied to outcomes in order to provide incentives in the future for funding higher education, the researcher has selected the Six Sigma business process improvement methodology to map the outcomes-based funding processes and assist in understanding the results. The Six Sigma SIPOC model’s *Process* phase were applied to the various states budgeting funding models to determine the metrics used to help the

researcher understand the findings and draw conclusions in order to provide empirically-based evidence for outcomes-based funding models.

#### Statement of the Problem

Currently Georgia, like most states, had not implemented a research-based, data-driven, or empirically supported outcomes-based funding model for funding institutions of higher education. Many states appeared to lack a clear set of articulated parameters needed to develop outcomes-based funding models.

#### Purpose of the Study

The purpose of this study was to provide insight into clearly articulated parameters that might serve as a basis for the development of a generalizable outcomes-based funding model that any state can use.

#### Research Questions

The following questions guided this research study:

1. What are the most commonly shared elements, metrics, and weights of state public higher education outcomes-based funding models that have been fully implemented?
2. What are the unique elements, metrics, and weights of those outcomes-based funding models that have been fully implemented?
3. What are the rationales for the choice of the progression metrics used by funding models that have been fully implemented?
4. If the metrics within the funding model are weighted, what is the nature of and rationale for those weights?

## Outcomes of the Study

Georgia is the first state in the nation to require college completion plans for all (60) public institutions in the USG and the Technical College System of Georgia (Governor Nathan Deal, 2012b). At the time of this research, these changes were still plans. Public higher education systems across the country were moving towards outcomes-based funding. The outcome of this study (see Figure 4) will provide insight into clearly articulated parameters that would be the basis to develop an outcomes-based funding model for public higher education systems from existing and state-wide implemented funding models that *any* higher education system could use to include those states that had *not* implemented outcomes-based funding. Please see Figure 5, Outcomes-Based Funding Implementation Map.

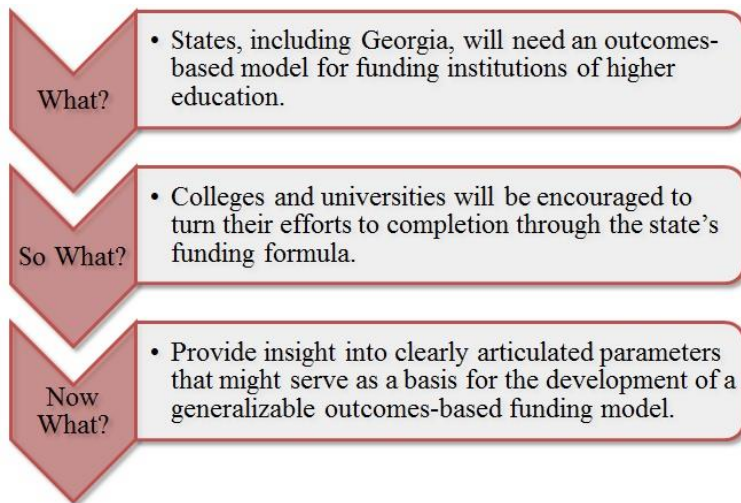


Figure 4. Outcomes of the Study.

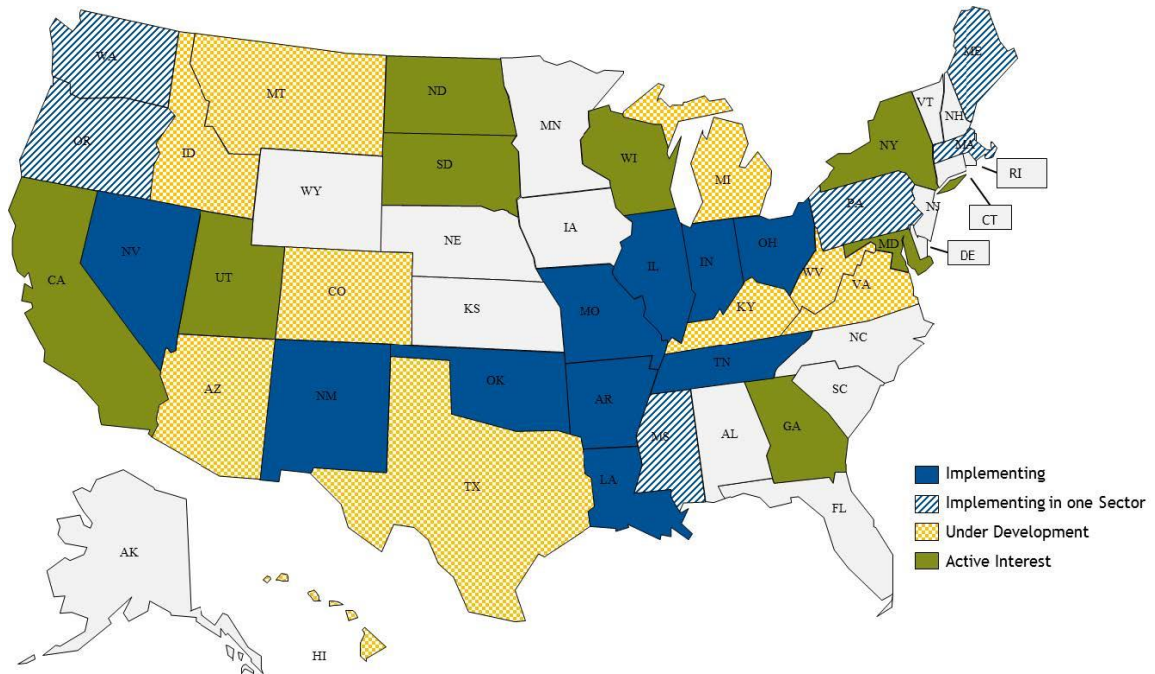


Figure 5. Outcomes-Based Funding Implementation Map.

*Note.* From “Outcomes-Based Funding: The Wave of Implementation,” by D. P. Jones, 2013, p. 1. © Copyright 2013 by the National Center for Higher Education Management Systems. Reprinted with permission (see Appendix A, Copyright Permission). Blank or ‘White’ states indicate no Outcomes-Based Funding activity.

### Limitations

Data collected and analyzed for this study came from the ten states that had fully implemented state-wide outcomes-based funding models. Please see Table 1, States Fully Implementing Outcomes-Based Funding, from Jones (2013, p. 1). Verifying the authenticity and accuracy of the funding model information might have been a limitation; however, this limitation was avoided by sending a copy of the funding models that were analyzed to the corresponding State Higher Education (SHED) office for verification. This verification process included a survey questionnaire and telephone interview for the ten states that participated in this research. Some research participants did not have firsthand knowledge concerning the rationales for their state metrics and weights;

however, they did provide their perceptions based on their experiences working with the funding models.

Table 1

*States Fully Implementing Outcomes-Based Funding*

State	
Arkansas	Nevada
Illinois	New Mexico
Indiana	Ohio
Louisiana	Oklahoma
Missouri	Tennessee

*Note.* Jones (2013, p. 1).

#### Assumption

The researcher assumed that all information reported was accurate and that the statements from the research participants in the survey questionnaire and follow-up telephone interviews were answered or were completed truthfully to their best knowledge and ability.

#### Definition of Key Terms

Several key terms are used throughout this study and are operationally or conceptually defined as follows:

- *Complete College America (CCA)*. A national nonprofit with a single mission: to work with states to significantly increase the number of Americans with quality career certificates or college degrees and to close attainment gaps for traditionally underrepresented populations (<http://www.completecollege.org/about/>).
- *Complete College Georgia (CCG)*. Similar to CCA except the focus is on implementing Governor Nathan Deal's CCG initiatives.

- *Context Metrics*: Tell the broader story of how the state is doing on college completion. These metrics allow state policymakers to understand both college completion outcomes relative to growth in enrollment and the overall effectiveness of their higher education system in increasing educational attainment of the state's citizens (Complete College America, 2014, p. 3).
- *Elements* (principles) of funding models. Items used to calculate funding for public institutions such as degrees granted or successful transfers for a metric.
- *Fully Implemented*. Outcomes-based funding models are applied to *all* state-funded 2-year and 4-year institutions.
- *Metrics*: The data and information by which progress is measured (Southern Regional Education Board, 2012, p. 5).
- *NCHEMS*: National Center for Higher Education Management Systems (NCHEMS.org and HigherEdInfo.org).
- *Outcome Metrics*. Quantify the end product of the educational process, mainly the completion of an undergraduate academic program, and additionally for community colleges, successful transfer of students to a baccalaureate campus (Complete College America, 2014, p. 3).
- *Outcomes-based Funding*. A type of performance funding that intentionally rewards institutions for producing specific, pre-determined outcomes (Southern Regional Education Board, 2012, p. 5).
- *Parameter*. A limit or boundary that defines the scope of a particular process or activity (Oxford Dictionaries, n.d.).



- *Progress/Progression Metrics.* Measure student progress from semester-to-semester or year-to-year toward the completion of an undergraduate academic program. Such metrics allows institutions of higher education the ability to track student progression in a way that allows for early intervention and support to increase the likelihood of a successful completion or transfer outcome (Complete College America, 2014, p. 3).
- *SHED:* State Higher Education.
- *Unique.* Being the only one of its kind; unlike anything else (Oxford Dictionaries, n.d.).
- *Weight.* The importance attached to something (Oxford Dictionaries, n.d.). For the purposes of this research study, weight is defined as the *value* a state placed on a metric.

## Chapter II

### REVIEW OF THE LITERATURE

#### Introduction

This chapter provides a review of the most current literature and research associated with the purpose of this study that is to provide insight into clearly articulated parameters that would be the basis to develop an outcomes-based funding model. The literature review was from a historical perspective to the evolution of outcomes-based funding in higher education. This chapter identified the origins of higher education funding, its sources, and how the funding was, is, and will be allocated in the future.

The literature review was conducted by using a comprehensive search of the *Education Resources Information Center* (ERIC) database, *Galileo*, Valdosta State University (VSU) library search engines (Vtext), ProQuest, peer-reviewed journals and articles, conference papers, dissertations, and *Google Scholar* (Scholar.Google.Com). The literature review included the use of business quality models being used in industry such as Six Sigma (iSixSigma, 2015c), its associated tools such as the Define, Measure, Analyze, Improve, Control (DMAIC) process (iSixSigma, 2015a), and the Suppliers, Inputs, Process, Outputs, and Customers (SIPOC) model (iSixSigma, 2015b) in which the theoretical framework for this study is based.

With the trends in state-funded higher education moving from academic enrollment-based funding to business outcomes-based funding (Governor Nathan Deal,

2012b, para. 10), the SIPOC business model tool was the appropriate theoretical framework to critically evaluate, analyze, and interpret data for the research problem.

#### Follow the Money: How It Started

From a historical perspective, the funding background for higher education in the state of Georgia began in 1784 in the form of a land endowment of 40,000 acres by the General Assembly for the purpose of “a college or seminary of learning” (Brief History, 2012, para. 1). The state provided appropriations throughout later years for other education branches to include the South Georgia Normal School in Valdosta, Georgia in 1906, now known as Valdosta State University (Brief History, 2012, para. 1).

On July 2, 1862, President Abraham Lincoln signed the Morrill Act. This first Morrill Act provided each state with 30,000 acres of Federal land for each member in their Congressional delegation. The official title of this Act was “An Act Donating Public Lands to the Several States and Territories which may provide Colleges for the Benefit of Agriculture and the Mechanic Arts” (Primary Documents, 2015, para. 1). The individual states could sell the land and use the money to fund public Agriculture and the Mechanic Arts (A&M) colleges specified in the Act.

The second Morrill Act: the Morrill Act of 1890, or “The Agricultural College Act of 1890” was passed by Congress on August 30, 1890 (Morrill Land Grant Acts, 2013, para. 9). This Act had multiple objectives. The primary objective of this Act was to advance education in the new territories and to provide requirements for the former Confederate states by establishing separate land-grant schools for persons of color or to admit students regardless of race. The second Act also provided funding for 16 Black land-grant colleges throughout the South. The support provisions were in the form of

federal grant funds instead of land grants as in the first Morrill Act (Morrill Land Grant Acts, 2013, para. 9).

To establish agricultural experiment stations in connection with the land-grant institutions of the first Morrill Act, the Hatch Act of 1887 provided payment of federal grant funds to each state that had land-grant institutions (The Land-Grant Tradition, 2008, p. 4). According to the provisions of the Hatch Act, the yearly funds varied based on a *formula* that included the number of small farmers in the state, and that the state must also match a majority of the funds allocated by the federal government (The Land-Grant Tradition, 2008, p. 1).

There were two amendments to the Morrill Acts from the Nelson Amendments in 1907 to the Morrill Acts of 1862 and 1890 which increased funding to land-grant institutions. This included the 1908 Amendments that extended these federal funds to include Puerto Rico (The Land-Grant Tradition, 2008, p. 6). In 1914, the Smith-Lever Act was passed. This Act provided federal support for land-grant institutions “to offer educational programs to enhance the application of useful and practical information beyond their campuses through cooperative extension efforts with states and local communities” (The Land-Grant Tradition, 2008, p. 6). These Acts provided federal funding to the various states that had institutions of higher learning with respect to the requirements of the earlier acts.

The individual states handling of the receipt and disbursement of funds was a different matter. According to Mr. David A. Dickerson, Assistant Budget Director, Board of Regents for the University System of Georgia (USG) “Prior to the creation of the Board of Regents in 1932, there was no central oversight or administration of the

higher education institutions in Georgia. Funding from the General Assembly was usually by institution, and done in a haphazard fashion with institutions lobbying the best-receiving preference in the funds appropriated,” D. A. Dickerson (personal communication, October 6, 2015). Creation of the USG (Lane & Johnstone, 2013, p. 51) and the Board of Regents for Georgia in 1932 were a result of the Georgia State Legislature's Reorganization Act of 1931 (Brief History, 2012, para. 2). The Board of Regents for Georgia now governed all state-supported institutions of higher learning (Reed, 1948, p. 2813), and guided the development of a unified system, which among their powers included the “internal allocation of the budget” (Brief History, 2012, para. 10).

The literature revealed that the funding background for higher education began with land grants from the federal government to the states, eventually transitioning to federal grant funds with the best interests of the country in mind. The funding of higher education evolved so that states had more control and power over the allocation of federal and state provided funds for higher education with the goals and interests of the state in mind vs. interests of the individual institutions. How does the state currently determine how much these institutions receive?

#### Follow the Money: Who Gets It?

At the time of this research, State’s determine how much higher education institutions receive by a finance policy. Figure 6 shows a Finance Diagram, which graphically depicted the elements of a basic finance policy. Based on the Economy, a portion of tax revenues was allocated to the State and Local Government, and then to the

Board of Regents (BOR) as shown previously in Figure 1, Georgia Tax Revenues vs. State Allocations by Regents.

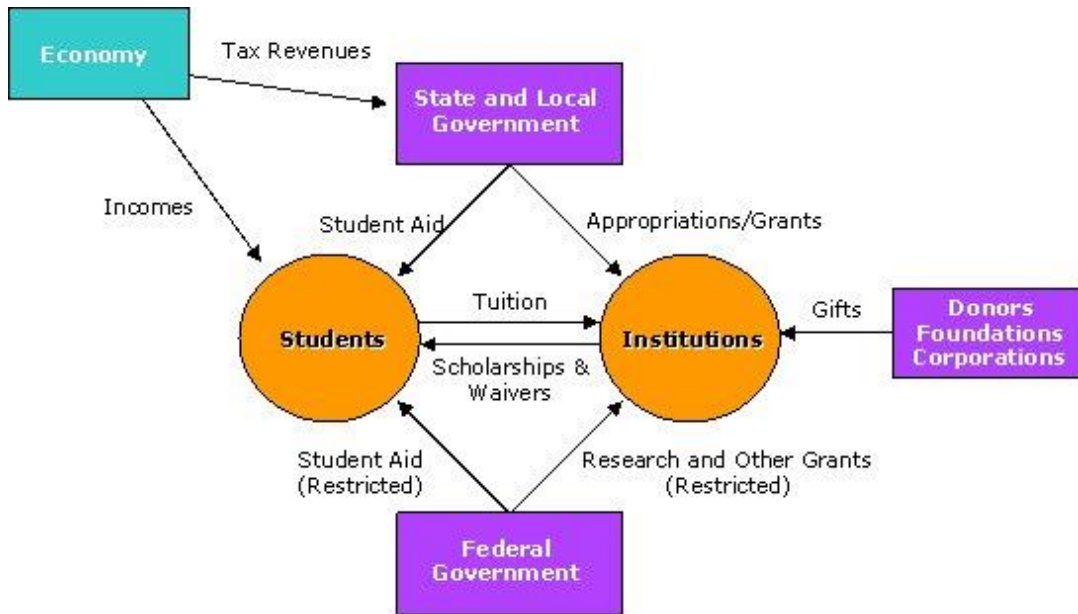


Figure 6. Finance Diagram.

Note. Retrieved from <http://www.higheredinfo.org/catcontent/cat8.php>. © Copyright 2015 by the NCHEMS. Reprinted with permission.

The BOR allocated portions of their budget by way of appropriations and grants (Board of Regents Policy Manual: USG Budget, 2015, para. 1). The interrelationships among these entities (Economy, State and Local Government, and Institutions) were involved in financing higher education (Finance Diagram, 2015, para. 1). The amount that was allocated to an institution was based on a funding formula (Jones, 2013, p. 2). The state of Georgia had a five-page funding formula (see Appendix B, Board of Regents Funding Formula) to calculate the amount of funds to be allocated to the USG annually (Business Procedures Manual, 2015, para. 1). As written in the Business Procedures Manual, Budget Process, 8.2.1 Formula Earnings: Enrollment Earnings, “All USG institutions use the Curriculum Inventory Reporting System (CIRS) to report enrollment

data for each semester. The Office of Strategic Research and Analysis at the Board of Regents provides a report of credit hours for each institution and the University System Fiscal Affairs” (Business Procedures Manual, 2015, para. 8). The following paragraph from the USG business process manual indicated that student enrollment is a factor in the USG budget process.

All USG institutions use the Curriculum Inventory Reporting System (CIRS) to report enrollment data for each semester. The Office of Strategic Research and Analysis at the Board of Regents provides a report of credit hours for each institution and the University System Fiscal Affairs. The report categorizes credit hour information in various groupings as required by the funding formula. The funding formula calculates the change in funding required for faculty, staff, and support expenditures caused by the change in credit hours. This is referred to as enrollment earnings/losses or workload adjustment. (Business Procedures Manual, 2015, para. 8)

The Georgia BOR typically made the allocation of funds to the institutions in April following the approval of the Appropriations Act, and approved the budgets of the institutions in June (BOR Policy Manual: Allocation of Funds, 2015, para. 1). Revenues received and expenditures made to support the teaching, research and public service missions of USG institutions were referred to as the “Educational and General Revenues and Expenditures” portion of the allocation (BOR Policy Manual: USG Budget, 2015, para. 2). Appendix C, USG FY 2016 Budget shows an example of the University System Budget that was approved by the BOR on May 19, 2015, and included the VSU base budget for Fiscal Year (FY) 2016 of \$136,984,050. The breakdown of the Educational

and General (E&G) budget components for VSU is included in Appendix C, USG FY 2016 Budget.

A visual representation of the USG BOR budget funding process can be seen in Figure 7, USG Board of Regents Finance Diagram. Figure 7 graphically depicts the process of appropriation of state funds (see Figure 1, Georgia Tax Revenues vs. State Allocations by Regents) to the BOR. Based on the funding formula at the time of this research, Georgia allocated portions of (E&G) funds (see Appendix C, USG FY 2016 Budget) to various institutions with student enrollment as a factor in the formula (see Appendix B, Board of Regents Funding Formula, Part I: Instruction and Research). This part of the process (state appropriations) is depicted by the *crosshair* on Figure 7. This study focuses on this particular point in the ten states funding model formulas with respect to the funding formula's outcomes-based elements, metrics, and weights.



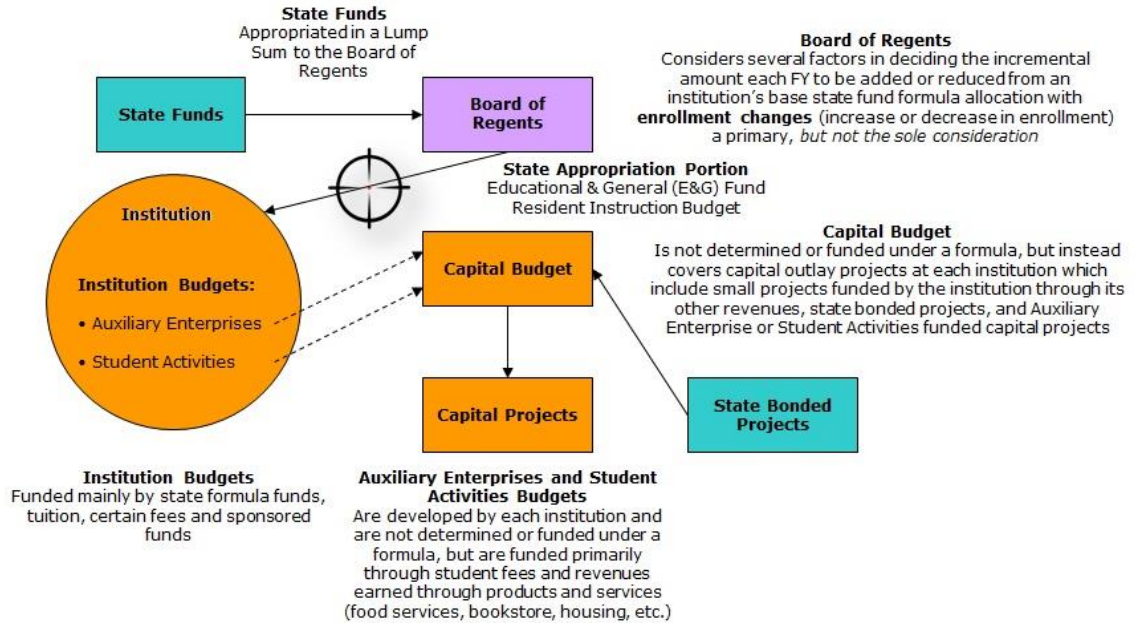


Figure 7. USG Board of Regents Finance Diagram.

Note. Diagram independently verified and validated (IV&V) by David A. Dickerson, USG, BOR, Fiscal Affairs (personal communication, October 6, 2015).

There are many parts to the current USG Funding formula as shown in Table 2,

Seven Parts to the Board of Regents Funding Formula:

Table 2

*Seven Parts to the Board of Regents Funding Formula*

Part	Description
I	Instruction and Research
II	Academic Support
III	Student Services and Institutional Support
IV	Operation and Maintenance of Plant
V	Fringe Benefits
VI	Public Service and Community Education
VII	Technology and Enhancement Program

Note. See Appendix B, Board of Regents Funding Formula.

Part I: Instruction and Research included calculations for the budget that included credit hours (for enrollment). However, these credit hours were counted from 2 years

*prior* to the current FY. The current USG Funding formula was developed in 1982 and first implemented in the FY 1984 budget (see Appendix B, BOR Funding Formula).

According to Mr. David A. Dickerson:

The present funding formula for the University System is enrollment based with the state funds related to the funding formula appropriated in a lump sum to the Board of Regents to distribute to the institutions as the Board sees fit. (D. A. Dickerson, personal communication, October 6, 2015)

Mr. David A. Dickerson also stated that:

Generally the Board considers several factors in deciding the incremental amount each fiscal year to be added or reduced from an institution's base state fund formula allocation with enrollment changes (increase or decrease in enrollment) a primary, but not the sole consideration. (D. A. Dickerson, personal communication, October 6, 2015)

Jones (2013, p. 2) argues that all funding models create incentives for institutional behavior, and more than a quarter of the states are implementing outcomes-based funding in at least one segment of higher education (p. 1). The shift from enrollment-based models to outcomes-based models was due to the new focus on success versus access as part of many states' goals and priorities (p. 7).

#### Follow the Money: A New Idea

As mentioned in Chapter 1, Georgia Governor Deal launched "Complete College Georgia" (Governor Nathan Deal, 2012b) in August 2011. The Complete College Georgia initiative (Complete College Georgia: An Overview, 2011, para. 1) was based on Complete College America (Kraft, 2011a). According to Complete College America

(CCA), 38% of American young adults (25-34) had a 2-year degree or higher. The Complete College America website stated that 70% of young people started some form of advanced education or training. The Complete College America goal was to increase the percentage of young graduates with a college degree or credential of value to 60% by the year 2020 (Kraft, 2011b).

To meet the state's projected economic development needs, Complete College Georgia called on leaders in higher education to implement six initiatives. The sixth initiative was the, "Formation of the Higher Education Funding Commission to study ways to change the funding formula to incentivize completion" (Governor Nathan Deal, 2012b, para. 10), which was a new concept for Georgia.

Laird stated, "Pay for performance, or the tying of pay (in this case, state higher education appropriation allocations) to performance (institutional success in attainment of prescribed outcomes), has been used extensively in the business world" (2014, p. 7).

This rationale was the basis for outcomes-based funding business performance models that were being pushed into academia. Mortensen refers to this shift as "market-oriented higher education policy environment" (2009, p. 52), and that "States tend simultaneously to pursue divergent governance models in an effort to satisfy competing, yet equally compelling, public interests" (p. 1).

Georgia Governor Nathan Deal's CCG sixth initiative (Governor Nathan Deal, 2012a), and College Completion Plans (Governor Nathan Deal, 2012b) fell in line with these models. There are other names for this new concept such as "commodification" (Miller, 2003, p. 898), "corporatizing" (Lerner, 2008, p. 219), or the "marketization" (Natale & Doran, 2012, p. 191) of higher education. Toby Miller observed that this

“commodification” is due to “holding universities accountable for their conduct” by the governments that provided the funding (Miller, 2003, p. 902), and Natale and Doran (2012, p. 191) wrote that colleges may operate as “bottom-line-oriented organizations” (as compared to academic organizations).

Based on his experience in documenting states that had implemented outcomes-based funding, Mr. Dennis P. Jones of the National Center for Higher Education Management Systems (NCHEMS) offered the following design principles and guidelines as shown in the following list:

1. Recognize that all funding models create incentives for institutional behavior;
2. Get agreement on goals;
3. Include all public institutions in the model;
4. Design the model in such a way that it reflects and reinforces mission differentiation;
5. Include provisions that reward success in serving underrepresented populations;
6. Include provisions that reward progress as well as ultimate success (degree completion);
7. Limit the categories of outcomes to be rewarded;
8. Use metrics that are unambiguous and difficult to game;
9. Reward continuous improvement, not attainment of a fixed goal; and
10. Address the quality issue (Jones, 2013, pp. 2-6).

Jones recognized that outcomes-based funding is only one piece of the funding model, and but “one component of the methodology by which state funds are allocated to

institutions” (2013, p. 7). Jones suggested that resources should be allocated in ways that link achievement of state goals to funding (2013, p. 12), and institution missions (Laird, 2014, p. 45).

Tennessee was one of the first states to adopt performance-based funding in 1979, and by the mid-1990s other states created their funding models (Hillman, Tandberg, & Gross, 2014, p. 827). These models would work by allocating portions of state appropriations to public colleges and universities each year, or by setting aside funds as financial bonuses for meeting certain criteria (Hillman et al., 2014, p. 827). These criteria would be determined by the goals to be achieved, and how performance would be measured (Laird, 2014, p. 57).

Even though some funding models have been in existence since 1979, there are varying views and criticisms on using outcomes-based models to determine higher education funding. Some supporters of performance-based funding (PBF - now called outcomes-based funding, OBF) argued that existing traditional funding models did not provide enough incentive for colleges to improve outcomes; therefore they were unresponsive to students and inefficient for taxpayers (Hillman et al., 2014, p. 827). Hillman et al., observed that “very little is known about the extent to which these policies actually impact college completions,” and that South Carolina and Colorado had tried PBF but discontinued the practice (p. 828). Jones (2011, p. 1) believed it was not the idea of PBF that failed, but “the design and implementation of the strategies that derived from the idea.” Jones suggested that the principals involved should include the design of a system and a separate set of designs for the implementation of the system (2011, p. 1).

As written in the article titled “Policy Instruments and Their Immediate Institutional Impacts” in the Association for the Study of Higher Education (ASHE) Report issue #39: “The immediate institutional impacts of performance funding are the direct mechanisms through which performance funding programs catalyze changes in institutional performance” (Policy Instruments, 2013, p. 35). This was accomplished by changing funding incentives, increasing awareness of state priorities, increasing awareness of institution’s performance, increasing status competition among institutions, and building capacity for organizational learning (pp. 35-41). As recently as March 10, 2016, The Lumina Foundation found that, “A focus on equity in student outcomes is an essential objective of today’s outcomes-based funding models. In addition to increasing attainment, we must close the current achievement gaps for students of color and low income students” (Outcomes-Based Funding: Important Takeaways for State Policymakers, 2016, para. 4).

Samuel M. Natale and Caroline Doran (2012, p. 187) wrote that the “Marketization of Education” had reduced colleges to businesses, and students were being reduced to revenue streams. Natale and Doran observed that universities and faculty were affected by state’s and societies goals and question if the adoption of business practices were being beneficial to students and faculty.

In his dissertation “Accountability and Performance in Higher Education: Promise, Potential, and Pitfalls of Performance Management,” Thomas Rabovsky discussed critics that argued that performance management was usually ineffective in accomplishing stated goals and incentivizes dysfunctional behaviors resulting in reforms that rarely work as promised (Rabovsky, 2013, p. 19).

## Follow the Money: Does it Work?

As mentioned previously, there were other names for the new funding concept such as “commodification” (Miller, 2003, p. 898), “corporatizing” (Lerner, 2008, p. 219), or the “marketization” (Natale & Doran, 2012, p. 191) of higher education. More recently, this concept had been referred to as “The Completion Agenda” (Kelchen, 2013, p. 55). The premise behind the completion agenda was the strong push to increase college completion rates by the year 2020 to 60% for ages 25-34. The push was not only from President Obama but by the Bill and Melinda Gates Foundation that donated \$1 Million to Georgia for CCG (based on CCA - <http://completecollege.org/about-cca/>), and the Lumina Foundation (<http://www.luminafoundation.org/about>), (Kelchen, 2013, p. 55; Huber, 2013, p. 60). The first chapter in Kelchen’s book review was written by Arthur Hauptman. Hauptman believed the completion rates behind the statistics were not accurate “because it combines bachelor’s degree attainment (in which America does very well) with associate’s degree attainment (in which America does not perform as well).” Hauptman did not believe the 60% percent goal was reasonable based on current educational trends (Kelchen, 2013, p. 55).

Travis Reindl and Ryan Reyna prepared a guide for the Education Division of the National Governors Association (NGA) Center for Best Practices titled “From Information to Action: Revamping Higher Education Accountability Systems,” (2011, p. 4). Reindl and Reyna argued that a key ingredient in meeting the completion agenda challenge was “a strong accountability system made up of relevant performance metrics” (2011, p. 4). G. Walters had found that in Tennessee where performance funding had

been in place for over 5 years, the arguments would be more about the “data definitions and weightings than on how to achieve needed outcomes” (2012, p. 36).

Sanford C. Shugart suggested defining what “completion” means (2013, para. 17), and offered several principles to help inform and improve results towards completion:

1. Be careful what and how you are measuring -- it is sure to be misused;
2. Measure for improvement;
3. College outcomes measures should be based on college-ready students;
4. Align accountability measures to the proper level of analysis;
5. Performance measures should primarily be value--added;
6. Think educational ecosystem, not just institution;
7. The most important person to care about completion is the student; and
8. Learning comes before completion (Shugart, 2013, para. 16).

Reindl and Reyna found that even though higher education data collection had increased in the last few years, “relatively little effort has been put into developing a better understanding of performance and outcomes” (2011, p. 7).

Hillman, Tandberg, and Gross wrote an article for the *Journal of Higher Education* titled “Performance Funding in Higher Education: Do Financial Incentives Impact College Completions?” (2014, p. 826). This article analyzed the Pennsylvania performance-based funding model aimed at increasing degree productivity for the State’s System of Higher Education. Hillman et al. found that “the introduction of performance-based funding did not yield systematic improvements in college completions for the state” (2014, p. 850). Pennsylvania’s higher education officials’ belief that PBF models



would cause institutions to change behaviors and align with the state's goals were not realized (Hillman et al., 2014, p. 851).

Policy Instruments (2013, pp. 37-41) reported that colleges did not see these shifts (to PBF) as having much impact; however, there were side benefits such as increased awareness of state priorities, increased awareness of institution's performance, increased status competition among institutions, and building capacity for organizational learning.

In the Association for the Study of Higher Education (ASHE) report by Kevin J. Dougherty and Vikash Reddy (Introduction, 2013), the authors discussed how well the intended immediate (Policy Instruments, 2013, p. 35), intermediate (Intermediate Institutional Impacts, 2013, p. 45), and ultimate (Summary and Conclusions, 2013, p. 89) funding policy impacts were realized for Performance Funding for Higher Education. Dougherty and Reddy's conclusion thoughts were that "The relative absence of findings that performance funding does produce significant improvements in student outcomes should not lead us to dismiss it" (p. 90). Dougherty and Reddy found that "performance funding does have immediate impacts on colleges in the form of changes in funding, greater awareness of state priorities and their institutional performance, and increased status competition among institutions" (p. 79). The authors concluded that there has been partial evidence of improvements in Tennessee, Ohio, and Indiana (p. 80); however, these improvements cannot be definitively attributed to performance funding (p. 90).

The literature suggests that even though the shift to outcomes-based funding did not have a significant impact in achieving its objectives, and in some cases, improvements could not be definitively attributed to outcomes-based funding, there were other side benefits. These benefits include an increased awareness of state priorities,

increased awareness of institution's performance, increased status competition among institutions, and building capacity for organizational learning.

### Theoretical Framework

Six Sigma is a quality improvement technique created by Motorola in the mid-1980s. The main concepts and theories of Six Sigma are to help cut costs, improve processes, and reduce business cycle times (Smith & Blakeslee, 2002, p. 45). These concepts and theories are very similar to the principles of Complete College America, and Complete College Georgia, which included lead, measure, act, and innovate, shift to performance funding, and improve remediation (Kraft, 2011b).

There is a variation of Six Sigma called Lean Six Sigma. Lean includes processes that remove steps and processes that do not add to the final product (waste), and Six Sigma eliminates waste via the production process (Six Sigma vs. Lean Six Sigma, 2015, para. 7). Both methodologies have the same goal, but the focus of this literature review was on the tools and methodologies utilized to improve processes. One of the primary tools used in Six Sigma is the Define, Measure, Analyze, Improve, Control (DMAIC) quality improvement process (iSixSigma, 2015a; Smith & Blakeslee, 2002, p. 48). The following list describes the interconnected phases and process steps for DMAIC:

1. Define the Customer, their Critical to Quality (CTQ) issues, and the Core Business Process involved;
2. Measure the performance of the Core Business Process involved;
3. Analyze the data collected and process map to determine root causes of defects and opportunities for improvement;

4. Improve the target process by designing creative solutions to fix and prevent problems; and
5. Control the improvements to keep the process on the new course (iSixSigma, 2015a).

One of the methodologies that can be used during the Define or Measure phase of the DMAIC process mapping is a tool called the Suppliers, Inputs, Process, Outputs, and Customers (SIPOC) diagram (iSixSigma, 2015b; Simon, 2015, para. 3). The goal of the SIPOC diagram is that before work can begin on a process improvement project, the diagram is used to help identify the elements involved (Simon, 2015, para. 5). Please see Figure 3 for an example of a funding model SIPOC Diagram. Figure 3 shows how Six Sigma DMAIC and SIPOC tools and methodologies could be applied to the various state funding models to determine the metrics used by those states. There are other possibilities on how Lean Six Sigma or Six Sigma can be applied to the academic world.

In Theresa A. Waterbury's doctoral dissertation titled "Lean in Higher Education: A Delphi Study to Develop Performance Metrics and an Educational Lean Improvement Model for Academic Environments," Waterbury argued that in a climate of doing more with less, academia should look to the manufacturing and service industries for successful ideas on implementing Lean methodology into non-manufacturing business areas (Waterbury, 2008, pp. 3-5). Weinstein, Petrick, Castellano, and Vokurka (2008, p. 234), wrote an article for the *Journal of Education for Business* where they used Six Sigma and the DMAIC process to integrate Six Sigma concepts in an MBA-quality management class. Weinstein et al. used Six Sigma to focus on a real-world problem to create a solution to enhance learning (2008, p. 237). Waterbury argues that "The first

lean core principle is value. The basic premise of value is that customers define what they are willing to pay for a product or a service” (2008, p. 36). This is the same core principle behind the new funding models that was: is the state getting what it paid for (outcomes)?

### Summary

The literature suggests that improvements from outcomes-based funding could not be definitively attributed to outcomes-based funding, and that the shift to outcomes-based funding did not have a significant impact in achieving its objectives. There were side benefits that included an increased awareness of state priorities, institutional performance, and status competition among institutions. The metrics involved in determining if outcomes are successful should include improvement measures, accountability, be inclusive of all institutions, be value-added, and always with the students in mind.

The literature revealed that there was a long history of funding as far back as the 1700s. Funding began with the allocation of land and funds, and then expanded into other criteria as illustrated in the Hatch Act. In the 21<sup>st</sup> century, these funding models have evolved to include States goals and objectives. To achieve these goals, many states have begun to use business and industry methodologies as a framework for the models. The inputs → process → output model is the basic framework of the outcomes-based formula. The SIPOC business model tool was the appropriate theoretical framework to critically evaluate, analyze, and interpret data for the research problem.

There is a current trend and phenomenon of states adopting outcomes-based measures for funding higher education. In order to accomplish this, decisions have to be

made at legislature levels. The decisions that have been made, based on the literature, indicate that there has been no evidence to help guide making these decisions. The current trends indicate that there should be evidence-based decision making for funding. This study will provide evidence regarding the elements, metrics, and the rationale for the weights of those metrics in guiding decisions concerning outcomes-based funding for higher education in any state in the nation.

## Chapter III

### RESEARCH METHODOLOGY

#### Introduction

There were four phases that defined the methodology of this study. The first phase involved data collection from the ten states that have been identified by the National Center for Higher Education Management Systems (NCHEMS) as having fully implemented a higher education outcomes-based funding model (see Table 1, States Fully Implementing Outcomes-Based Funding, and the *Implementing* States of Figure 5, Outcomes-Based Funding Implementation Map). These data included the elements, metrics, weights, and definitions for the various funding models.

The second phase of this study involved sending an introduction e-mail with an attached survey questionnaire to a member of the higher education funding commission for each state that was involved in this study. The e-mail and survey questionnaire served as an entrée to introduce the researcher, explain the study, solicit participation in the subsequent comprehensive telephone interview, and to verify the state's funding model.

The third phase of the study involved a follow-up telephone interview with each of the research participants who responded to the survey questionnaire. The follow-up telephone interview focused on in-depth, probing questions that gathered rich narrative for each state's funding model with respect to the four research questions.

The final phase of the research methodology comprised the coding and analysis of the data collected from phase one, and data yielded from the transcribed follow-up telephone interviews in phase three.

#### Statement of the Problem

Currently Georgia, like most states, had not implemented a research-based, data-driven, or empirically supported outcomes-based funding model for funding institutions of higher education. Many states appeared to lack a clear set of articulated parameters needed to develop outcomes-based funding models.

#### Purpose of the Study

The purpose of this study was to provide insight into clearly articulated parameters that might serve as a basis for the development of a generalizable outcomes-based funding model that any state can use.

#### Research Questions

The following questions guided this research study:

1. What are the most commonly shared elements, metrics, and weights of state public higher education outcomes-based funding models that have been fully implemented?
2. What are the unique elements, metrics, and weights of those outcomes-based funding models that have been fully implemented?
3. What are the rationales for the choice of the progression metrics used by funding models that have been fully implemented?
4. If the metrics within the funding model are weighted, what is the nature of and rationale for those weights?

## Significance of the Study

Georgia was the first state in the nation to require college completion plans for all sixty (60) public institutions which comprise the University System of Georgia and the Technical College System of Georgia (Governor Nathan Deal, 2012b). At the time of this research, these college completion plans have not been implemented. Public higher education systems were moving towards outcomes-based funding. The significance of this study is that it provides insight into clearly articulated parameters that could be used as the basis for the development of outcomes-based fundings models for public higher education systems.

## Research Design

The research methodology used in this study consisted of a descriptive qualitative design. The purpose of descriptive research is to document the event, situation, or circumstance of interest (Fraenkel, Wallen, & Hyun, 2012, p. 459), or as stated by Cooper, “What is happening?” (2010, p. 32). According to Cooper (p. 32), descriptive narrative could be used to help with quantitative research. One of the main characteristics of descriptive research is that it is purely descriptive. Descriptive research might answer what, where, when, and how; however, it does not necessarily answer why. Therefore, our understanding of the results may be limited (Fraenkel et al., 2012, p. 76). Fraenkel, Wallen, and Hyun (2012, p. G-2) defined descriptive research as “research to describe existing conditions without analyzing relationships among variables.”

In descriptive research, several variables are examined to describe the group or situation. Variables are not distinguished as independent, dependent, moderator, or control. Descriptive research is conducted to identify variables that can later be studied



in depth. Usually, descriptive research does not involve testing of the hypothesis (Radhakrishna, Yoder, & Ewing, 2007, p. 692). According to Fraenkel, Wallen, and Hyun (2012, p. 459), the kinds of data *described* in a descriptive research study includes data that are collected from participant and nonparticipant observations, interviews, and written questionnaires.

For this study, data was collected from the ten states with fully implemented outcomes-based funding models. These data included the elements, metrics, weights, and definitions for each state's respective funding model that was in place from 2010 - 2015. This time frame allowed for at least 5 years of time to pass for the funding models to gather qualitative data for analysis.

An introduction e-mail with an attached survey questionnaire was sent to a member of each of the ten participating State Higher Education (SHED) Funding Commission's explaining the study and soliciting participation in the study. A follow-up telephone interview was conducted with each research participant yielding narrative data to be used in the analysis.

### Population

The population for this study was the 33 member states (Fain, 2013, para. 4) of the Complete College America (CCA) Alliance (N = 33) that have implemented, were in the process of implementing, under development, or had shown an active interest in developing some form of an outcomes-based funding model (Jones, 2013, p. 1). The ten states selected to participate in this study (n = 10) had fully implemented outcomes-based funding models in place for 2010 - 2015. These ten states were identified by Mr. Dennis P. Jones of the NCHEMS organization (Jones, 2013).

## Data Collection Procedures

The primary phase that began this research study involved collecting qualitative data on each of the selected state's outcomes-based funding models. These data were required before introduction e-mails and survey questionnaires were sent to a member of each State's Higher Education Funding Commission for data verification. Initial funding model data was obtained from each State's Higher Education (SHED) website, Department of Higher Education, Board of Higher Education, Commission for Higher Education, State Regents, or Higher Education Governance Commission website via the open government/public domain/transparency in government initiatives. These documents contained funding model spreadsheets, examples, definitions, and instructions that were downloaded and printed from the respective state's SHED web sites or received via an e-mail request if the information was not posted on line.

Each of the elements, metrics, and weights were organized in a spreadsheet for each state. The introduction e-mail and survey questionnaire was sent to a point of contact for each state involved in this study. The e-mail included an introduction of the researcher, an explanation of the study, and a solicitation for participation in a follow-up telephone interview to include validation of their state's funding formula. The telephone interview was used to probe more deeply, explore, and gather rich narrative data about the states' models with respect to the research questions. A content analysis was conducted based on the results of the data collected for research phase one and the data collected from the transcribed follow-up telephone interview questions in phase three.

## Introduction E-mail and Survey Questionnaire Procedures

A survey questionnaire was attached to the introduction e-mail. The goals of this e-mail were to:

- Introduce the researcher;
- Explain the study;
- Assure anonymity;
- Verify the researcher has contacted the correct person or to obtain correct contact information;
- Solicit their participation in the study;
- Verify the state's funding model via the attached survey questionnaire (to have accurate information concerning the model before conducting the telephone interview); and to
- Schedule a follow-up telephone interview with the intention of asking questions relative to their state's funding model (see Appendix D, Introduction E-mail, and Appendix E, Survey Questionnaire).

To determine the initial points of contact (POC) for the introduction e-mail and survey questionnaire, the researcher contacted Mr. Dennis P. Jones at the National Center for Higher Education Management Systems (NCHEMS). Mr. Jones is the author of the document "Outcomes-Based Funding: The Wave of Implementation" (Jones, 2013) for the CCA organization (<http://completecollege.org/>). Mr. Jones provided the initial points of contact (POC) for the ten states needed for this study. These POCs were members of the higher education funding commissions for their respective state's that have created

the funding models, and these POCs were the selected group for this study. This POC information included the member's name, telephone number, and their e-mail address.

The researcher made up to three e-mail attempts to contact the POCs identified by Mr. Jones. The e-mail sent introduced the researcher, explained the study, assured anonymity, and verified the researcher had contacted correct POC or a request to provide an alternate POC (see Appendix D, Introduction E-mail). The e-mail included the survey questionnaire and data for their state's funding model to verify and return. The e-mail included a request to complete the survey questionnaire by a specified date and solicit their participation in the study. The researcher sent a follow-up e-mail as a reminder after the 10 working days has expired if an e-mail response was not received. The researcher sent a final follow-up e-mail as a reminder after the 5 working days expired if an e-mail response still had not been received. If no response was received after three attempts to get a response from the initial POC, the researcher found another POC for that state.

If the POC agreed to participate in the study and completed and returned the survey questionnaire, the POC was considered a *research participant*. The research participant was sent a thank you note as part of the schedule follow-up interview e-mail (see Appendix F, Thank You Note and Schedule Follow-up Interview E-mail). The researcher sent a courtesy e-mail reminder 3 days prior to the follow-up telephone interview session to each research participant which included sample interview questions to prepare the research participant as a read-ahead (see Appendix G, Reminder E-mail with Sample Questions).

## Follow-up Telephone Interview Procedures

Seidman described why people utilized interviewing for research, “at the heart of interviewing research is an interest in other individuals’ stories because they are of worth,” (2006, p. 9). Seidman (p. 11) promotes the idea that the interview method depends on the purpose of the research and the questions. Example interview questions included questions about feelings, knowledge, sensory, background/demographics, or behaviors (Patton, 2002, p. 351). Briefly, Seidman (2006, p. 12) described the process thus:

- Conceptualize the project;
- Establish access and contact participants;
- Interview them;
- Transcribe the data;
- Work with material (analyze); and
- Share results.

There are different approaches to conducting interviews. Patton (2002, p. 342) described three approaches: informal conversational (unstructured), general, and standardized open-ended interview. Patton also suggested the possibility of combining approaches as needed (p. 347) and to always include a truly open-ended question.

Fraenkel, Wallen, and Hyun (2012, p. 457) suggested using a recording device as well as note taking for collecting interview data as tape recorders did not miss anything (see Appendix H, Follow-up Telephone Interview Questions).

After completion of the interviews, the final data analysis was conducted. Patton described two sources of information from the data collected: the questions generated and insights and interpretations that emerged as data was collected (Patton, 2002, p. 437).

This researcher used Creswell’s (2009, p. 183) interview protocol for the follow-up telephone interview. Creswell’s interview protocol included general steps that lead to more details that are then worked into specific strategies before, during, and after the interviews. Please see Table 3, Creswell’s Interview Protocol.

Table 3

*Creswell’s Interview Protocol*

Step	Protocol	Details/Strategies
1	A Heading	[Before] Determine date, place, time, interviewer, and the interviewee. Further details can include obtaining permissions (Creswell & Plano-Clark, 2011, p. 176) to interview people and access to facilities or locations where interviewees are located.
2	Instructions for the interviewer	[Before] Use same standard procedures for each interviewee.
3	The Questions	[Before] Develop Icebreaker question and then 4-5 interview questions based on the research plan. Possibly conclude with an open-ended question as a catch-all. Further details can include letters of confidentiality and if this is a group or individual interview.
4	Probe	[During] Follow-up, expand, elaborate, or explain details to responses. Document the interviews (notes, questionnaires) as well as a record (audio or video) the interview session.
5	Space	[During] Allow time for the interviewee to respond and time for the interviewer to record the response.
6	Final	[During] A thank-you statement to acknowledge that interviewee spent their time during the interview.

*Note.* Creswell (2009, pp. 182-183).

The research participants for the follow-up telephone interviews were the ten SHED representatives who completed the e-mail survey questionnaire portion of this study. The researcher e-mailed each of the representatives to schedule an appointment

for a time to conduct the follow-up telephone interview. Prior to the interview, the researcher included sample interview questions as part of the survey questionnaire as a read-ahead (see Appendix E, Survey Questionnaire). During the follow-up telephone interview session, the researcher asked for permission to record the telephone interview via an iPod voice recorder for data transcription accuracy, and assured the research participant's anonymity by using codes to represent the states during the coding process instead of research participant or state names.

During the interview, the researcher verified the responses from the research participant's e-mail questionnaire first (see Appendix E, Survey Questionnaire), and then addressed the follow-up telephone interview questions (see Appendix H, Follow-up Telephone Interview Questions). The 1-hour interview session used a semi-scripted format. The researcher was casual, started with general questions, opened the door, set the stage, and then probed for details with a focus on the research questions. The objective of the follow-up telephone interview was to obtain rich narrative information as compared to the simple declarative information from the survey questionnaire. The survey questionnaire was used to verify the elements, metrics and weights related to each state's funding model (see Appendix E, Survey Questionnaire).

Fraenkel, Wallen, and Hyun (2012, p. 13) called sending out questionnaires "survey research" and discussed some concerns and difficulties in collecting data. Some concerns and difficulties include ensuring clear and non-misleading questions, getting thoughtful and honest responses, and getting sufficient quantities of responses to make a meaningful analysis of the results. The questions involved in the follow-up telephone interview were open-ended, meaning that an answer was not presumed or suggested as to

how it should be answered (Fraenkel et al., p. 455). The types of questions that were asked of the research participants were based on finding answers to the research questions. Once the interview session was completed, the researcher reviewed the responses from the research participant for data accuracy, thanked the research participant for their participation and support for the study, and reminded them that all research participants in the study will receive an executive summary report of the research findings. After the telephone interviews were completed, the interviews were transcribed and coding and analysis of data began.

#### Coding and Analysis of Data Procedures

Creswell urged researchers to perform the data analysis process from specific to general steps as outlined in his data analysis process (2009, pp. 184-185). Verifying the accuracy of the information was a key step from the data collection and e-mail survey questionnaire and the follow-up telephone interviews. This process was completed before coding began. This researcher conducted content analysis on the common and unique elements, metrics, and weights that comprised the funding models from those states that have fully implemented outcomes-based models state-wide for the years 2010 - 2015. This analysis identified not only the most commonly shared and unique elements, metrics, and weights that comprised the funding models, but included analysis of the elements, weights, the rationales for the choice of those progression metrics, as well as consideration of the rationales for how metrics were weighted.

Great care was taken to ensure the anonymity of the state research participants in this study. No names or state names were included in the telephone transcripts. The results from the analysis of all of the descriptive data that was collected via the e-mail



survey questionnaire and follow-up telephone interview questions were processed according to Creswell's coding process (2009, p. 186) as shown in Table 4, Creswell's Coding Process.

Table 4

*Creswell's Coding Process*

Step	Process	Details/Strategies
1	Get a sense of the whole	Read everything carefully and make notes while they are fresh in your mind.
2	Start with one document	The most interesting interview or the shortest survey for example. Write thoughts in the margins.
3	Make a list of topics	Cluster similar items into columns, and add columns for major and unique topics.
4	Create and abbreviate codes for topics	Write appropriate codes for topics and determine if new topics or codes are needed.
5	Use descriptive words for topics	Use these topics for categories and codes. Try to reduce the number of codes and categories.
6	Put codes in alphabetical order	Decide on the final list of codes and categories.
7	Put data materials for each category together	Begin preliminary analysis.
8	Recode	If needed, recode data.

*Note.* Creswell (2009, p. 186).

Data was transcribed verbatim, coded, and then organized by frequency based on topics, themes, patterns, and response categories. The researcher then interpreted the data after all of the research questions were answered.

Maxwell (2012, p. 104) suggested data analysis should begin as soon as data was collected instead of waiting to the end and sorting through a mountain of material. Maxwell also discussed grouping data into memos, categorization strategies, and connecting strategies (p. 105). Maxwell also suggested taking notes and making researcher memos at the time of data collection to help make the coding process easier and discussed the use of computers to assist with qualitative data analysis (p. 115).

Fraenkel, Wallen, and Hyun (2012, p. 480) suggested two ways in which categories for content analysis could be derived: the researcher determined categories beforehand, or categories were developed as the researcher analyzed the data. The steps the researcher used in the content analysis involved identifying words, phrases or sentences, counting their occurrences (p. 488), and how they fit into categories. Creswell (2009, p. 185) suggested multiple levels of analysis to ensure the data were correctly interpreted.

#### Instrumentation

Data was collected from the 10 states that have fully implemented outcomes-based funding models for at least 5 fiscal years (2010 – 2015). The various model elements, metrics, and weights were entered into their respective tabs in a spreadsheet. This data was then verified by the responses to the e-mail survey questionnaires and then clarified and verified during the follow-up telephone interview transcripts. The same survey questionnaire and interview questions were used for all research participants to ensure consistency and accuracy. The survey questionnaires and interview questions were designed to gather specific information focused on the elements, metrics, and weights used by each state's outcomes-based funding model with respect to gathering rich narrative data for the research questions.

#### Data Gathering Instrumentation Validation

To ensure the content validity of both the written survey questionnaire and the follow-up telephone interview questions, the researcher sent a copy of these questions to the president Emeritus of the National Center for Higher Education Management Systems (NCHEMS). As written on the NCHEMS information website, the mission of NCHEMS

is “To provide state policymakers and analysts timely and accurate data and information that are useful in making sound higher education policy decisions” (NCHEMS Information Center, 2015, para. 1).

In 2016, the president emeritus of NCHEMS was Mr. Dennis P. Jones. Mr. Jones had been with NCHEMS since 1969, and had agreed to pilot-test the written survey questionnaire and the follow-up telephone interview questions. The intent of pilot-testing was to obtain feedback from a funding official with many years of experience gathering education-related data to ensure content validity of the e-mails, survey questionnaire, and interview questions. All changes Mr. Jones suggested to the survey questionnaire or interview questions were submitted to the dissertation committee and the Valdosta State University Institutional Review Board (IRB) prior to implementation (see Appendix N).

#### Instrumentation Pilot Testing and Results

For this research study, *pilot testing* was defined as: validating the instruments and content via someone with knowledge and experience that can operationally define, and refine the design and intent of the data collection instruments. Please see Table 5, Instrumentation Pilot Testing and Results for a timeline with respect to the instrumentation pilot test and results.

Table 5

*Instrumentation Pilot Testing and Results*

Date	Feedback Description
10/8/2015	Researcher sent e-mail request to Mr. Dennis Jones of NCHEMS ( <a href="http://nchems.org/about/staff.php?name=dennis">http://nchems.org/about/staff.php?name=dennis</a> ) to assist with pilot test for dissertation research, and Mr. Jones agreed to support the research study.
1/29/2016	Dissertation committee approved dissertation proposal.
2/1/2016	Researcher sent e-mail with a copy of interview questions, and a copy of the dissertation proposal to Mr. Jones for pilot test questions review.
2/16/2016	Mr. Jones reviewed the introduction e-mail, Survey Questionnaire, Reminder E-mail with Sample Questions, and Follow-up Telephone Interview Questions. Mr. Jones stated they were okay with no problems, and the questions focused on the topics. Mr. Jones made one recommended change to interview question number five: <i>Change Interview Question five from this:</i> Question 5: Do you feel like this funding formula is achieving what it was intended to achieve? Why or why not? <i>To this:</i> Question 5: Do you have any data or evidence that this funding formula is achieving what it was intended to achieve? If Q5 = No, follow up question: What is your perception with regards to the funding formula achieving what it was intended to achieve?

*Note.* See Appendix H, Follow-up Telephone Interview Questions.

Interview Pilot Testing and Results

Mr. Jones recommended that the researcher contact Dr. Marianne F. Boeke as the interview pilot participant. Mr. Jones stated that she was their qualitative research specialist!

For the pilot test interview, there was no data collected that was used in the study. The intent of the interview pilot participant was a person that the researcher could send all e-mails, the survey questionnaire, and conduct a telephone interview with. The goals of the pilot test interviews were: the researcher could practice interview techniques, get feedback and input on how the researcher's interview skills were, get a sense of the

interview timing before data collection and interviews began, and review all personal communication documents (e-mails and forms). The pilot interview participant was Dr. Marianne F. Boeke (<http://nchems.org/about/staff.php?name=Marianne>). Please see Table 6, Interview Pilot Testing and Results for a timeline with respect to the interview pilot test and results.

Table 6

*Interview Pilot Testing and Results*

Date	Feedback Description
2/16/2016	Researcher sent pilot study request e-mail to Dr. Boeke, and she agreed to participate in the pilot test interview <i>as well as</i> review all research study communications and questions.
2/17/2016	Researcher sent pilot test introduction e-mail, Survey Questionnaire, Sample funding model for Tennessee, and sample model definitions for Tennessee to Dr. Boeke.
2/24/2016	<p>The researcher called Dr. Boeke. The following are Dr. Boeke’s recommendations and comments in () concerning the introduction e-mail and survey questionnaire:</p> <ul style="list-style-type: none"> <li>• Introduction e-mail – (Smaller paragraphs), talk about why their state was selected to participate (they like to hear good things why they were selected – gives them a context and frame of reference for why they were selected, and if it’s positive, it would most likely facilitate participation), add executive summary report of findings as deliverable for participation (what’s in it for them), add the researcher’s estimated graduation date (time-lines the researcher have to work with), provide questionnaire response <i>due date</i> in bold vs. stating <i>return within 10 working days</i> (the research participant can see when its due vs. calculating in their heads), add estimated time to complete survey questionnaire (they know how long it will take), <i>ask</i> to coordinate time for follow-up telephone interview, send out emails on Tuesday or Wednesday (Mondays are usually busy), and desired responses on the 2<sup>nd</sup> Friday week (based on her experiences, most check e-mails from home). E-mail tone: very collegial and thankful. All of Dr. Boeke’s recommendations and changes were incorporated into the introduction e-mail. Everything else was fine.</li> <li>• Survey Questionnaire – (Survey is just a survey), so introduction</li> </ul>

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paragraph and signature lines are not needed. Bold Questionnaire at top, and center bold Thank you at the bottom. Add response (b.) to question 2: If Yes, please tell me the nature of the change(s). All of Dr. Boeke's recommendations and changes were incorporated into the questionnaire. Everything else was fine.

- Add a new: Survey response thank you note and schedule a date and time for a telephone interview - setup e-mail (lets them know the researcher got their response, and move on to next phase of the data collection process).
- Researcher scheduled the follow-up telephone interview with Dr. Boeke for 10:00 AM (CST) on March 1, 2016.
- Researcher received verbal permission to use Dr. Boeke as a reference with the pilot test.

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2/24/2016 Researcher sent Dr. Boeke the Interview Reminder e-mail with Sample Questions. Researcher also sent Dr. Boeke copies of the updated introduction email, survey questionnaire, new thank you with schedule follow-up interview e-mail, follow-up reminder e-mail, and the telephone interview questions review.

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3/1/2016 Follow-up Telephone Interview conducted. The updated introduction email, survey questionnaire, new thank you with schedule follow-up interview e-mail, and follow-up reminder e-mail documents were good to go.

- Only very minor edits were needed on the interview e-mail reminder to indicate that the researcher would be calling them at the included phone number. The telephone interview questions protocol was good, and only needed minor edits. The researcher included a question for the research participant if they had any questions for the researcher before the interview began.
- The researcher removed all template blanks that would have actual contact information such as names and phone numbers. Dr. Boeke stated that these were good interview questions and they would gather good contextual information from policy workers at the higher education office worker levels.
- On the last page of the protocol next to the thank you statement, Dr. Boeke suggested the researcher include a statement requesting permission to e-mail them if the researcher needed clarification or missed something.
- Interview Techniques – Be approachable, congenial. Don't be afraid to let them chit-chat. This is relationship building, they are helping the researcher. Have a card of interesting tid-bits about their state or the funding model to draw them into conversation if they only offer yes/no replies. Know who they are, where they are in

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their position, how they can help with the research (in case they ask how they are helping the researcher). Consider the audience: academic vs. policy people. Do not be afraid to veer off protocol for a bit to come back to the question and get more information later.

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*Note.* See Appendix items D – H.

While the researcher had Dr. Boeke on the phone, the researcher asked Dr. Boeke about some details concerning her experiences with data transcribing and the executive summary document format. The following are Dr. Boeke's comments:

- Data Transcribing – Do not send it off, transcribe it yourself. You will know your data more than anyone else. Write everything: chough, mumbles, hesitations to answer, etc. (Any ah-ha! moments?) Keep another open document as you transcribe to record thoughts, patterns, trends, categories, issues, highlights, etc.
- Executive Summary Document – Keep it high level, paper-like. Why the researcher did this, what the methodology was, and the big take-away's (the executive summary document should be focused on a particular audience – state policy people).

The researcher thanked Dr. Marianne Boeke and Mr. Dennis P. Jones for helping with the pilot test. The researcher felt this exercise was a complete success and of great benefit to the research. The researcher was excited to get to use their excellent suggestions and make all of the interviews, protocols, and communications with prospective research participants as pleasant, professional, and enriching as possible. The researcher was delighted to be able to send Mr. Jones and Dr. Boeke copies of the results

of the research: final (signed) approved dissertation and the executive summary report of findings for the research participants.

Approval from Valdosta State University's (VSU) Institutional Review Board (IRB) was obtained to begin conducting research (see Appendix N, Institutional Review Board (IRB) Exemption Report). The time frame for collecting the research data was from April 2016 to October 2016.



## Chapter IV

### FINDINGS

#### Introduction

This chapter will begin by reviewing the purpose and research questions that guided this study. Next, the research methodology will be described. The next section of the chapter will include a report of the results from the funding model data that was obtained from the funding models and e-mail survey questionnaires. The chapter will then conclude with the reporting of the funding model findings relative to the research questions followed by findings relative to the responses based on the follow-up telephone interviews.

The purpose of this study was to provide insight into clearly articulated parameters that might serve as a basis for the development of a generalizable outcomes-based funding model for public higher education institutions that any state could utilize. The following research questions guided this research study:

1. What are the most commonly shared elements, metrics, and weights of state public higher education outcomes-based funding models that have been fully implemented?
2. What are the unique elements, metrics, and weights of those outcomes-based funding models that have been fully implemented?
3. What are the rationales for the choice of the progression metrics used by funding models that have been fully implemented?

4. If the metrics within the funding model are weighted, what is the nature of and rationale for those weights?

The population for this study was the thirty-three member states of the Complete College America (CCA) Alliance (N = 33) that have implemented, were in the process of implementing, under development, or had shown an active interest in developing some form of an outcomes-based funding model for state supported colleges and/or universities. The ten states selected to participate in this study (n = 10) had fully implemented outcomes-based funding models in place for the time period of 2010 - 2015. The researcher had initially planned to study the 2010 to 2014 fiscal years (FY); however, the models obtained and interview discussions included the most recent funding models that were in use as of FY 2015. Once the researcher identified the ten states, qualitative descriptive data was collected from each of the selected state's outcomes-based funding models.

Before the researcher presents the findings and reporting of the data, the following findings were based on documents, reports, or models that were provided from web-based sources, by the different states that participated in this research study, and by survey questionnaire responses. In some cases, the funding models and documents were very clear concerning what the elements, metrics, and weights were. In other cases the elements, metrics, and weights were distilled or taken from reports, funding model instructions, or model templates. Data was also collected and transcribed from follow-up telephone interviews.

## Funding Model Data Collection and Analysis Results

The initial phase of this research study involved collecting each of the selected state's outcomes-based funding models and associated information. This phase took place between April 6 and October 4, 2016. The funding models were obtained from each state's open government, transparency in government public domain web sites, or by request from the state higher education office (see Appendix I, Funding Model Sources and Links). These documents comprised instructions for using the models, in some cases spreadsheets of the actual models used, and spreadsheet reports detailing calculations and funding allocations. In some cases, the researcher was not provided information for funding models down to the weight detail level. The detail level of a weight was a number (#), percent (%), or dollar (\$), and the value of the weight was a number (.50), percentage (15%), or dollar amount (\$300). This is not a limitation for this study, as the data analyzed from the remaining funding models did reveal how most of these states used weights to apply value to their metrics. The objective for obtaining copies of the actual funding models used was to answer research questions one and two, and the funding model metrics *nature* portion of Research Question 4.

From April 12 to April 14, 2016, an introductory e-mail message with attached survey questionnaire was sent to a point of contact for each state involved in this study (see Appendix D, Introduction E-mail, and Appendix E, Survey Questionnaire). The e-mails included an introduction of the researcher, an explanation of the study, a short survey questionnaire, and a solicitation for participation in a follow-up telephone interview. Follow-up and reminder e-mails were sent from April 27 to May 31, 2016 every 5 to 10 working days until the survey response was received from each of the ten

states (see Appendix F, Thank You Note and Schedule Follow-up Interview E-mail, and Appendix G, Reminder E-mail with Sample Questions). In two instances, the researcher had to call a point of contact listed on the state's web site to obtain a participant before the survey was returned and follow-up telephone interview could be scheduled.

Many of the states that were required for this research were undergoing budget recommendations and legislative meetings at the time the introduction e-mails were sent. These circumstances caused some delays in responses from some states. The ten telephone interviews were scheduled and conducted from April 21 to May 31, 2016 (see Appendix H, Follow-Up Telephone Interview Questions), recorded, and transcribed verbatim (see Appendix M, Transcription of Telephone Interviews). The researcher asked the research participants the same interview questions, and followed up with additional questions for clarification or to repeat a response if needed. The primary objectives for conducting the follow-up telephone interviews were to obtain data, justifications, rationales, history, experiences, and background information in order to answer Research Questions 3 and 4.

A content analysis was conducted based on the results of the data collected from the funding models, and the data collected and transcribed from the follow-up telephone interview questions. All of the elements, metrics, and weights from each of the states' funding models were entered into a separate tab in a Microsoft Excel Edition 2013 (Microsoft Inc., 2013) Spreadsheet labeled: Elements, Metrics, or Weights in order to specifically answer Research Questions 1 and 2. As the researcher analyzed each funding model, the separate elements, metrics and weights were entered into their respective tabs and cells, and grouped where appropriate. If an item was new it was added, if an item

was already in the tab, the item received a count of one for that state. The results were then sorted by frequency from highest to lowest, and are reported in the tables below.

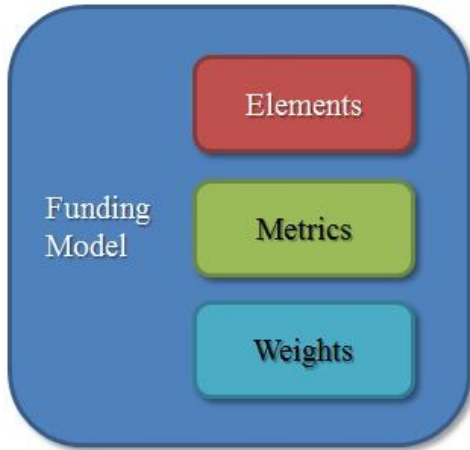
The coding and analysis of the funding models revealed some interesting facts concerning the funding models. Before the researcher begins to describe the results of the analysis of the funding models, a review of the definitions for elements, metrics, and weights will be given. This will be followed by an explanation and description of the findings with respect to the funding models.

### Key Terms Review

*Elements* (principles) of funding models are items used to calculate funding for public institutions such as degrees granted or successful transfers for a metric. *Metrics* are the data and information by which progress is measured (Southern Regional Education Board, 2012, p. 5). *Weight* is the importance attached to something (Oxford Dictionaries, n.d.). For the purposes of this research study, weight is defined as the *value* a state placed on a metric.

### Funding Models: Preconceptions

Based on the literature review, the researcher was informed that a performance-based or outcomes-based funding model included elements, metrics, and weights. The researcher began the coding and analysis of the funding models with a basic idea of what a funding model should look like. Please see Figure 8 for a graphic representation of a basic funding model based on this preconception. Through the coding and analysis of the funding models, the connections and relationships of these elements, metrics, and weights became much clearer.



*Figure 8.* Basic Funding Model Concept.

What the researcher found from the coding and analysis of the funding models was that the models were not only more complex, but there were multiple models with multiple formulas for most states. The researcher also found that the metrics and weights in the states' models also varied depending on the element or type of institution. Figure 9 is a graphic representation of a combination of the funding models analyzed (*the big picture*), and the discussion that follows will explain these findings.

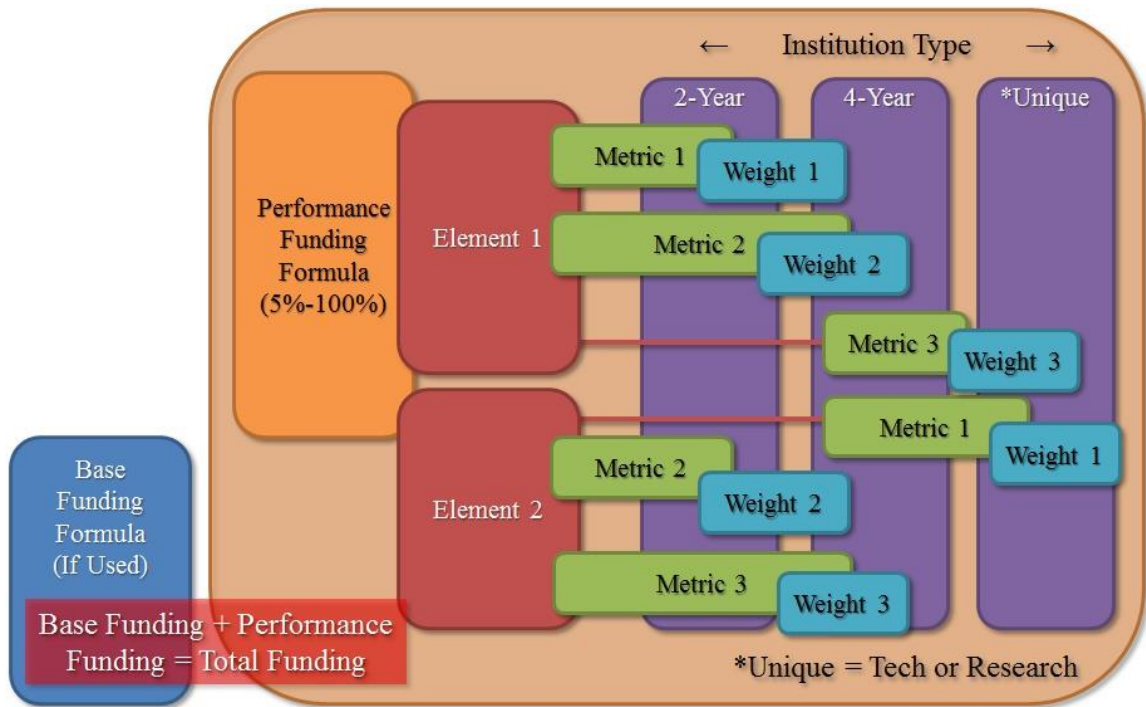


Figure 9. Combined Funding Models Example.

There is a *base funding formula* portion (in blue on the left-side bottom), and a *performance/outcomes formula* portion (in orange). The base funding formula *does not include* any performance or outcomes calculations or components. If a particular state used a 100% performance/outcomes-based funding formula, the base funding formula was *not* used or needed. If the state used the performance funding model for 5% to 95% of the allocated performance/outcomes funding, then the base funding formula was also used to provide base funding; therefore,  $\text{Base Funding} + \text{Performance Funding} = \text{Total Funding}$ . Additionally, elements had metrics, and weights were applied to all metrics that were used. For example, an element could be Degree/Credential, a metric could be Associates Degree, and a weight could be (30% or .3), or in one case \$4,000.

The weight indicated the *value* of the particular metric in the funding formula. For example: a weight for Associate’s Degrees of 25% would indicate that metric had

more value than a weight for Research of 15%. Other findings included the fact that some metrics were applied to some formula elements but not included in other formulas. For example, a metric for Associate's Degrees could apply to 2-year and 4-year institutions weights (see Figure 9, Element 1, Metric 2, Weight 2 for example); however, Bachelors and higher degree metrics would *not* apply to a 2-year institutions' formula (see Figure 9, Element 1, Metric 3 for example). In addition, some states had separate/unique institutional funding models for Technology or Research institutions that would not apply to a 2-year institution and select 4-year institutions.

These formula findings were unexpected as this researcher thought of metrics and weights as being separate calculations in the funding models based on the literature review. There were some instances where the weights were calculated by external systems and methods such as the Integrated Postsecondary Education Data System (IPEDS), calculated based on cost or institutional studies, or the Complete College America (CCA) degree targets. In addition to having performance-based funding formulas, these formulas were applied to various *Institution Funding Models* as indicated by the purple columns (← Institution Type →) in Figure 9.

Most states had 2-year and 4-year funding models, and some states had an additional unique funding formula for "Technical" or "Research" goals. Two-year and 4-year institutions were sometimes referred to as College/lower division or University/upper division institutions within some models. Two of the states studied had just *one* funding model. These models had separate sections based on *mission differentiation*. Two states had *optional* metrics/performance measures that an institution could choose from; however, the optional metrics were *locked-in* for 3 fiscal years.



## Findings from Analysis of Funding Models

For Research Question 1, the most commonly shared elements and metrics of state public higher education outcomes-based funding models that have been fully implemented are shown in Tables 8 and 9. The research revealed that there were no common or unique weights. Weights were aligned with a metric and it represented the value of that metric for the respective element. This will become more apparent in the analysis that follows in Tables 10 – 13. For the purposes of this research study, the researcher defined *most common* as five or more, and *unique* as one or two. Table 7 shows *all* funding model elements coded from the analysis of the funding models, and Table 8 identifies the most common funding model elements.

Table 7

### *All Funding Model Elements*

Elements	Frequency	Percentage
Degree/Credential/Performance	9	90%
Region/Mission	6	60%
Sub-Populations	4	40%
Compensatory	1	10%

*Note.* Percentage of states that participated in the study.

Table 8

### *Most Common Funding Model Elements*

Elements	Frequency	Percentage
Degree/Credential/Performance	9	90%
Region/Mission	6	60%

*Note.* Percentage of states that participated in the study.

The most common elements found were Degree/Credential/Performance and Region/Mission. The narrative that follows will cover all four elements found in order to provide a better understanding of the elements and their relationships in the funding

models. The analysis showed that 90% of the states had the Degree/Credential/Performance element in common, and 60% of the states had the Region/Mission element in common. The Degree/Credential/Performance elements were clearly focused on outputs or ensuring that when a student started a program, they completed the program. Research participant P14 summarized: “It provides resources for course completion, degree completion, and other (um), criteria that indicated that a student is successfully progressing towards a credential.”

Some of the states defined Region/Mission differently based on states’ goals or institution missions. For example, the Region element could have Agriculture (AG) as a focus for states that had more land but were less populated, or the Mission could include Science, Technology, Engineering, or Math (STEM) in the funding formula for this element. According to research participant P47: “(P47) is geographically the fifth largest state, and has only about 2 million people, so there are areas where there are very few people, and so the programs are small.” The Mission element could have Workforce Training, High-Impact Degrees, or STEM/STEM-H (Health) as an elements’ focus for institutions whose mission was to get more people into the workforce as indicated by research participant P32,

They are very focused on high-impact degrees, which are STEM degrees. (Uh), the at-risk population in (P32) - where the, we have the highest student aid in the mid-west, we have \$350M in needs-based student financial aid that we distribute to 120,000 students a year.

The Sub-Populations element comprised 40% of the responses. Sub-populations for the states that used this element were identified as STEM, Adult, Pell, Hispanic, and Black.

This element was reiterated by the response from research participant P21,

The missions are clearly different and unique (um), so that was the original task under the 2010 legislation that we had to do (uh), incorporate (uh), as to include the differences in mission, so with that was when we came up with the, the Pell eligibility, the adult Hispanic, and the African American (uh), sub-populations (uh), so that was important to help identify student profiles within each different campus.

Based on the findings above, STEM was an example of how an element was treated differently by the various state funding models. Table 7 showed the one unique element identified: *Compensatory*. The state that used this element defined Compensatory as having “Low-income” and “Under-prepared” metrics. Low-income was defined as Pell recipients, and Under-prepared was defined as American College Testing (ACT) results of 15 or less. As mentioned previously, these particular metrics fell under different elements in other states models such as in the Sub-Populations element.

Table 9

*Most Common Funding Model Metrics*

Most Common Metrics	Frequency	Percentage
Progression/Course Completion (Hours)	8	80%
Associates/Undergraduate Degree	8	80%
Technical Certification/Credentials/Diploma	7	70%
Progression/Course Completion (FTEs)	7	70%
Bachelor’s Degree	6	60%
Graduation Rates	6	60%
Masters/Specialist Degree	5	50%
Transfer Students Credentials	5	50%
Research	5	50%

*Note.* Percentage of states that participated in the study. See Appendix J, for a list of all funding model metrics identified from the coding and analysis of the funding models.

Analysis of the models revealed the most common funding model metrics as shown in Table 9. These metrics focused on progression and completion of academic credentials. A vast majority of states in this study (80%) utilized progression in courses as a common metric. Completion of various degrees was also a common metric with undergraduate and graduate degree completion appearing at almost equal frequencies and percentages. Graduation Rates were typically defined as freshmen completing a degree program (at the same institution) as opposed to the Transfer Student Credentials metric. Research participant P21 explained their model,

So in terms of just the general (um), measurements we have degree completion, which is a, I think most states probably would use. That’s a measurement of actual completion, production, potential (uh), completion production of actual degrees. In our state, we separate by bachelors, masters, and doctoral. Then we also look at the (uh), graduation rates, and also persistence rates.

Research participant P14 explained why they selected the completion metric for their funding model,

The feeling very strongly was that degrees are what we want to incentivize. We want to incentivize getting a student a degree (um), as quickly as possible, at the lowest possible cost and so, 50% of the 4-year funding formula is, is allocated for degrees, (um), right off the top, and that was really the focus of the conversations. That was really the highlight that most people picked up on was the universities are, are literally allocating half of their state resources for degree completion.

In addition, the Research metric was used in half of the funding models analyzed. Of those states, the majority defined their Research metric as ‘research expenditures’, and one state referred to it as Research Dollars (grant money) received. The following quote from research participant P58 discussed research expenditures,

University of (P58) has (uh), research expenditures as an institutional measure now, so I think there’s a piece there that, you know, there are some general, you know, success criteria within it, and things everybody should be focused on such as graduation retention obviously, but there are some other things that do vary by mission.

In funding models, a weight was the value attached to a metric. In the analysis of the funding models, there were different types of weights found, and a range of distributions of those weights. Weights were numbers (Points/Factors/Multipliers), percentages, or dollars (Per Unit Value), and the findings from the analysis are shown in Table 10. In the category of number weights, the range of numbers was from 0.10 to 2.

In the category of percentage weights, the range of percentages was from 1% to 30%, and in the dollars weight category, the range of dollar values was from \$300 to \$23,000.

Table 10

*Types of Funding Weights Found*

Model Weighted Metric Types	Category	Frequency	Percentage
Points/Factors/Multipliers	Number (#)	6	60%
Percentages	Percent (%)	3	30%
Per Unit Value	Dollar (\$)	1	10%

*Note.* Percentage of states that participated in the study.

Because Research Question 4 asked to describe the nature of the weights, the researcher developed a scale of value for each of these weight categories based only on the nine most common weights found in from Table 9, and are shown in Table 11. The scale of values will be High, Medium, and Low. The ranges for this scale of values were calculated using Microsoft Excel cell math: highest number, percentage, or dollar minus (-) the lowest number, percentage, or dollar, and then divided by three (3) to get a base number (H-L/3) for the range calculations used to determine the High, Medium, and Low ranges for the respective weight categories.

Table 11

*Weight Nature Scale of Values*

Weight Category	Ranges		
	Low (L)	Medium (M)	High (H)
Number (#)	0.1 - .6	.7 - 1.3	1.4 - 2
Percent (%)	1% - 9.7%	9.8% - 19.3%	19.4% - 30%
Dollar (\$)	\$300 - \$2,567	\$2,568 - \$5,133	\$5,134 - \$8,000

*Note.* Range calculations were based on the most common metrics found in Table 9 only.

For the types of weights found from the ten funding models analyzed, 60% of the states used points, factors, or multipliers (#), 30% of the states used percentages (%), and

one state used Per Unit Value (\$) for their weights. Research participants P79 and P47 described how weights worked in their funding models. Figure 10 is a simplified funding model representation based on these descriptions. This figure gives an idea of how weights factor in funding allocations based on Outcomes and Cost.

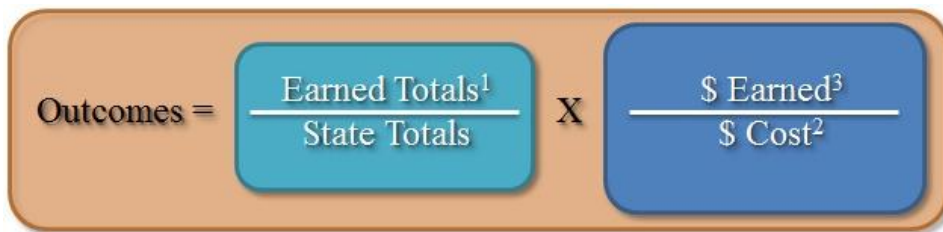


Figure 10. Simplified Funding Model Representation.

*Note.* <sup>1</sup> Earned Totals are the institution's total earned weights, and can be the total #'s or total %'s. The Earned Totals are divided by all State Totals (#'s or %'s), or other 2-year or 4-year Institution State Totals - depending on the state's funding model. This is then multiplied by the \$ Cost. <sup>2</sup> \$ Cost is the total available funding allocation. It can be from a single pool, or from separate 2-year or 4-year pools - depending on the state's funding model. The total available funding allocation may change. If this occurs, there is an adjustment called pro-rata, or a different amount based on legislative action. The institution will still get their portion; the amount will be adjusted based on the new available total \$ Cost. <sup>3</sup> Institution funding allocation received is their \$ Earned portion (personal communication, October 4, 2016).

According to research participant P32 concerning Per Unit Value,

This is voted on early in the budget process which allows the Commission to pay for what we value, and provides the institutions clarity and transparency necessary for planning. After these values are set, the student level data from the institutions is received and the total units for each metric are multiplied by the Per-Unit Value. (Personal communication, September 12, 2016)

Before the researcher continues to report more findings, the following narrative will explain the relationships and connections of elements, metrics, and weights. The weights associated with a metric might be different based upon the metric's value to the

missions of the different institutions, or the goals and objectives of the desired outcomes. A graphic representation of an example of weights is depicted in Figure 11. In this example, the element: *Completions* and its metric: *Associates Degrees*, the weights were the same across the different (institution) funding models for each respective state. The 4-year and Research models placed more value on *Bachelor's Degrees* than *Associates Degrees* in this example.

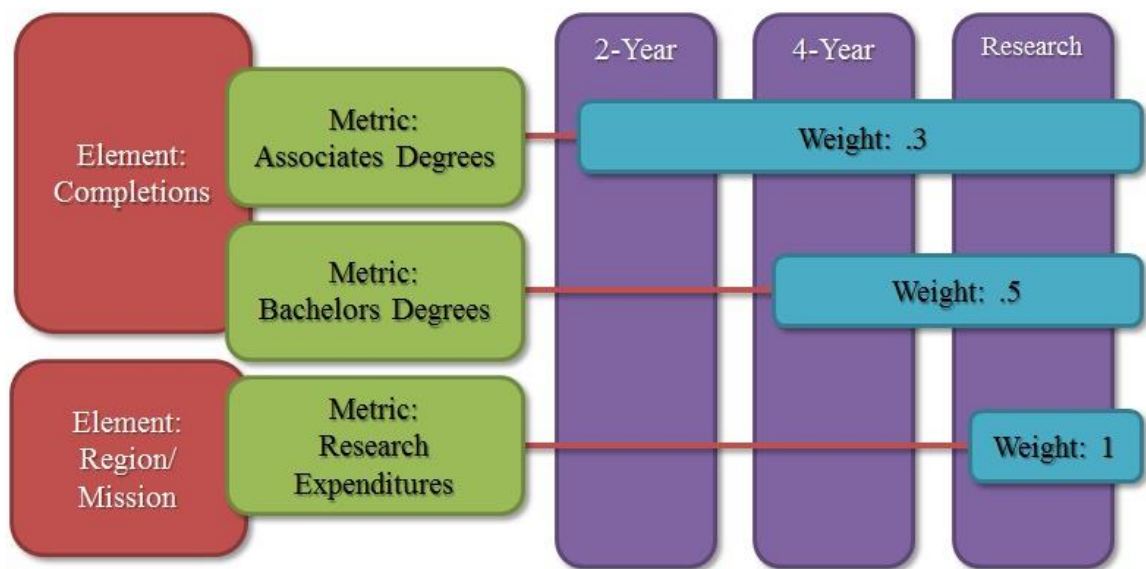


Figure 11. Funding Model Weights Example.

The Research model (right side purple column) in this example had the *Region/Mission* Element with the metric: *Research Expenditures* that was very important (had more value) in that model (weight = 1). The analysis of the funding models found that based on the desired outcomes (elements and metrics), these weights might vary based on the institution and value of the desired outcome in the various funding models that the states used for determining allocation of funds. This preceding concept was verified by research participant P73,



For (P73) system of higher Ed, we have a 2-year institutions and 4-year institutions in the same system. So, (uh), basically is it 100 and 200 level courses at all the institutions, and then 300 and 400 level courses at the (uh), university. So English, English 101 at the university is reimbursed the same as English 101 at the community college.

To explain the *nature* of weights, and with respect to the *nature* portion of research question four: *If the metrics within the funding model are weighted, what is the nature of and rationale for those weights?*, Tables 12 and 13 in the following pages will show the relationship and connections of weights to metrics based on the two most common elements identified by this study in Table 8. The metrics listed in Tables 12 and 13 are from the nine most common metrics identified in Table 9 (that are applicable for the two most common elements), and the nature of the weights is based on the ranges from the scale of values calculated in Table 11.

Table 12

*Metrics and Nature of Weights for Element: Degree/Credential/Performance*

Element: Degree/Credential/Performance Metrics	State Code				
	P89	P32	P73	P38	P11
Progression/Course Completion (Hours)	L	L		M	L
Associates/Undergraduate Degree Technical		M	L	M	M – H
Certification/Credentials/Diploma	M	L	L	M	
Progression/Course Completion (FTEs)			L		L – M
Bachelor’s Degree	M	H	L		M – H
Graduation Rates				M	M – H
Masters/Specialist Degree		M	L		M – H
Transfer Students Credentials	O M		L	M	L – M
Research			L		M

*Note.* State Code P89 can select Optional (O) metrics for a total of 4, and are variable. Weights for State Code P11 were determined by institution or mission. See Appendix K, for a list of the actual metric values for this element.

Table 12 shows the most common metrics and the nature of the weights for the element: Degree/Credential/Performance. The State Codes shown were from the states that used this element and these weights in their funding models, and had provided data to the weight detail level. The nature of the Progression/Course Completion (Hours) metric was Low in three of the four states as compared to the Graduation Rates metric which was valued Medium to High in State Codes P38 and P11. Most states had the Bachelor’s Degrees metric valued as Medium to High, while State Code P73 valued it as Low. The nature of the metrics Transfer Students Credentials and Masters/Specialist Degrees were valued from Low to High across the various states. State Code P11 had variability in the value they placed on metrics that were based on the institution or mission.

Table 13

*Metrics and Nature of Weights for Element: Region/Mission*

Element: Region/Mission	State Code			
	P89	P32	P58	P11
Metrics	Weights			
Progression/Course Completion (Hours)			M	
Associates/Undergraduate Degree		M	M	
Technical Certification/Credentials/Diploma		L	M	L - M
Progression/Course Completion (FTEs)			M	
Graduation Rates		H	M	
Transfer Students Credentials	L - H	L		

*Note.* State Code P89 can select optional metrics for a total of 4, and are variable. State Code P58 reported that all metrics are weighted equally. Weights for State Code P11 were determined by institution or mission. See Appendix L, for a list of the actual metric values for this element.

Table 13 shows the most common metrics and the nature of the weights for the element: Region/Mission. The State Codes shown were from the states that used this element and these weights in their funding models, and had provided data to the weight detail level. The Transfer Student Credentials metric used by State Code P89 was an optional metric which could be valued from Low to High, and State Code P32 had a low value for this metric. State Code P89 used Transfer Student Credentials as an optional metric with values that could range from Low to High that an institution could select. The Associates/Undergraduate Degree metric had a Medium value in State Codes P32 and P58. For State Code P32, the Technical Certification/Credentials/Diploma and Transfer Students Credentials metrics had a Low value while the Graduation Rates metric had a High value, and State Code P58 had a Medium value for the Graduation Rates metric.

For Research Question 2, the unique elements and metrics of those outcomes-based funding models that have been fully implemented are shown in Tables 7 and 14.

The findings revealed that there were no common or unique weights. Weights were aligned with a metric and it represented the value of that metric for the respective element.

Table 14

*Unique Funding Model Metrics*

Unique Metrics	Frequency	Percentage
High Demand Credentials	2	20%
External Grants and Awards	2	20%
Credentials	2	20%
Cost per Completion	2	20%
Cross/Dual Enrolled 2 & 4 Yr. Institutions	2	20%
Minority Credential	1	10%
Program Certification/Accreditation	1	10%
Compensatory	1	10%
Workforce Training	1	10%
Hispanic	1	10%
Black, Non-Hispanic	1	10%
Underprepared	1	10%
Cost per Credit Hour	1	10%
Quality of Student Learning	1	10%
Minority Bachelors	1	10%
Minority Masters +	1	10%
First-Time Entry Students	1	10%
CCA Degree Target Completion	1	10%

*Note.* Percentage of states that participated in the study.

The unique funding model metrics are shown in Table 14. These metrics were selected based on a states' goals, institution missions, or desired outcomes; however, the inclusion of select populations and outcomes in these findings indicated a very different focus, goal, or objective for some states. For example, such metrics could include ethnic related metrics or particular credential related metrics. See Appendix J, for a list of all funding model metrics identified from the coding and analysis of the funding models.

## Funding Model Findings from Analysis of Interview Responses

The findings related to research questions three and four are shown below. These findings were obtained via the content analysis of the transcribed telephone interview data (see Appendix M), and coding and analysis of the funding models.

Research Question 3 was: *What are the rationales for the choice of the progression metrics used by funding models that have been fully implemented?* Coding and analysis were performed on the transcripts of the follow-up telephone interview question: *What was the rationale for selecting these elements, progression metrics, and weights?* All of the research participants were in high level state regent's offices, boards of higher education, or higher education commissions (see Appendix I). As a result, many of the research participants used similar 'corporate' terminology.

Table 15

### *Funding Model Progression Metrics Rationales*

Interview Responses	Frequency	Percentage
States Goals and Objectives/Performance Targets	7	70%
Increase Education Attainment	5	50%
Encompass Unique Missions of the Campuses	5	50%
Incentivize Economic and Workforce Development	4	40%
Incentivize Outcomes that are Important to Higher Education	4	40%

*Note.* Percentage of states that participated in the study.

For Research Question 3, the rationales for the choice of the progression metrics used by funding models that have been fully implemented are shown in Table 15. Based on the responses from the research participants, the majority (70%) of the rationales for the choice of the progression metrics used in their funding models were based on States Goals and Objectives/Performance Targets. As stated by research participant P11,

The thought process was what are the states goals, and what do we want to incentivize? What are the outcomes that are important to higher education, and so you have seen our model, and have done that research, I mean the outcomes are pretty intuitive.

According to research participant P47,

Each of those metrics is weighted equally, and we've also added another which is: did the program (uh), reach the state's performance targets or not, and then they get an extra credit.

Other rationales included Increase Education Attainment (50%), Unique Missions of the Campuses (50%), and incentivizing certain desired outcomes such as Economic and Workforce Development, and Outcomes that are Important to Higher Education at (40%) each. Research participant P11 summarized their rationale for the selecting of the education attainment progression metric,

For the last, I guess six years or so, has emphasized (um), degree attainment, improving retention and graduation rates, more degrees from more types of students, (um), that's been a policy goal for several years now, and the outcomes formula aligns the financial policy to the overall policy goals.

Research participant P21 discussed their rationale for selecting unique missions as a progression metric,

We also instituted a performance funding refinement committee on top of the steering committee, and that extensive which (um), throughout the spring and summer (um), 2014, 2013 and 2014 in order to modify and strengthen the model as well, so the initial (um), scaling and the weighting and all of that basically goes

back to (um), encompassing the unique missions of the campuses and each school.

Research participant P14 discussed their need for a workforce development progression metric,

It was really a recognition that higher education as a whole is changing, and that as a state we have a workforce need that is not being met. We have a need both currently projected and in the future, and there was really a strong feeling that the status quo from a higher education funding perspective was not achieving desirable outcomes, and that we needed to go in a different direction.

In discussing their thought process in selecting progression metrics, research participant P11 also made the following statement,

The thought process was what are the states goals, and what do we want to incentivize? What are the outcomes that are important to higher education, and so you have seen our model, and have done that research, I mean the outcomes are pretty intuitive. I mean the graduation rates, its degrees, a count of the degrees, retention, research, workforce training, it's those things, so they, the process was really asking, we had a large group of people that, that worked through the details of this, and (um), they started with the question what is it we want to incentivize? What is it that we want our higher education institutions to produce? And, and from those conversations the list was developed. So, and it was, it was, in that sense, it was fairly straight forward. It started out with the question what would we want our higher education system to produce, and (uh), what elements are common in the model that we all incentivize?

To determine the *rationale* portion of Research Question 4, coding and content analysis were performed on the transcripts of the responses to the follow-up telephone interview question: *If the metrics are weighted, how and why were the various metrics weighted, ordered, or prioritized?* The results of the coding and analysis of the responses to the follow-up telephone interview question is shown in Table 16.

Table 16

*Funding Model Weighted Metrics Rationales*

Interview Responses	Frequency	Percentage
Completions/Degree Completions	7	70%
Increase Education Attainment	5	50%
Alignment with State Workforce Goals	3	30%
Unique Missions of Campuses and Schools	2	20%

*Note.* Percentage of states that participated in the study.

The majority (70%) of the rationales stated by the research participants was Completions/Degree Completions. As stated by research participant P32, “The metrics moved on to really start to focus on the change on degree completions - to get more degree completions through the system.” Research participant P89 summarized their rationale for selecting completions,

Ultimately the goal was completions. (Um), so, our governor, like I said, our governor had (um), challenged the institutions to double the degrees by 2025. So if you look at the metrics (um), most of the metrics are geared towards credential completion.

Half of the research participants indicated Increased Education Attainment (50%) was a factor in their rationale for weighting their metrics. According to research participant P79,



There is the workforce and economic development, adult learners, and grant funded research. The last thing is proficiency, accountability, and time to award.

We have addition time to award for student earning degrees (uh), and the including of students on Pell, so those two things we go after in all those things.

The big aim is to increase the education attainment of (P79) citizens.

These findings fell in line with many states' goals and objectives such as

Alignment with State Workforce Goals (30%) for increasing the number of citizens with higher education. Research participant P11 provided this response,

We've heard from presidents, from governors, board heads, from campus personnel, that is has just dramatically changed the way about how they spend the money, and what they are trying to get out of this policy. And that has been exactly what state policy makers had hoped it would do. Which is (um), you know again, to get campuses to rethink how they reinvest their money, and how they spend it in ways that are promoting the common goal which is more completions. (Um), so in that sense, it's done what economic incentives do which involves human activities, it has changed the way people think about (um), the way they spend money, because now it's tied to the goals of, of the state and of the campus. So in that sense it's working.

Other rationales included Alignment with State Workforce Goals, and the Unique Missions of Campuses and Schools. Research participant P21 provided this response which included their rationale for selecting unique missions,

When our, the legislature and then following that and our board and steering committee, (um), started piecing the model together they wanted to make sure

that, (uh), they recognized and accounted for each universities' unique mission, and set of circumstances, and they wanted the model to be able to adapt to changes in (um), state policies and priorities, and I think it's a piece is that it would be representative of our public agenda, our college careers and success.

#### Funding Model Findings

The researcher found that based on the desired outcomes (elements and metrics), the weights that were aligned with a metric might vary based on the institution and value of the desired outcome in the various funding models that the states used for determining allocation of funds. Please see Figure 12 for a graphic representation of this concept. These elements, metrics, and weights might be changed as state goals and objectives were met, or if the state goals and objectives changed. As indicated by the findings, the researcher had realized that there was no '*one-size-fits all*' funding model, and that each funding model was unique based on states' goals and objectives, which might include unique missions for various institutions.

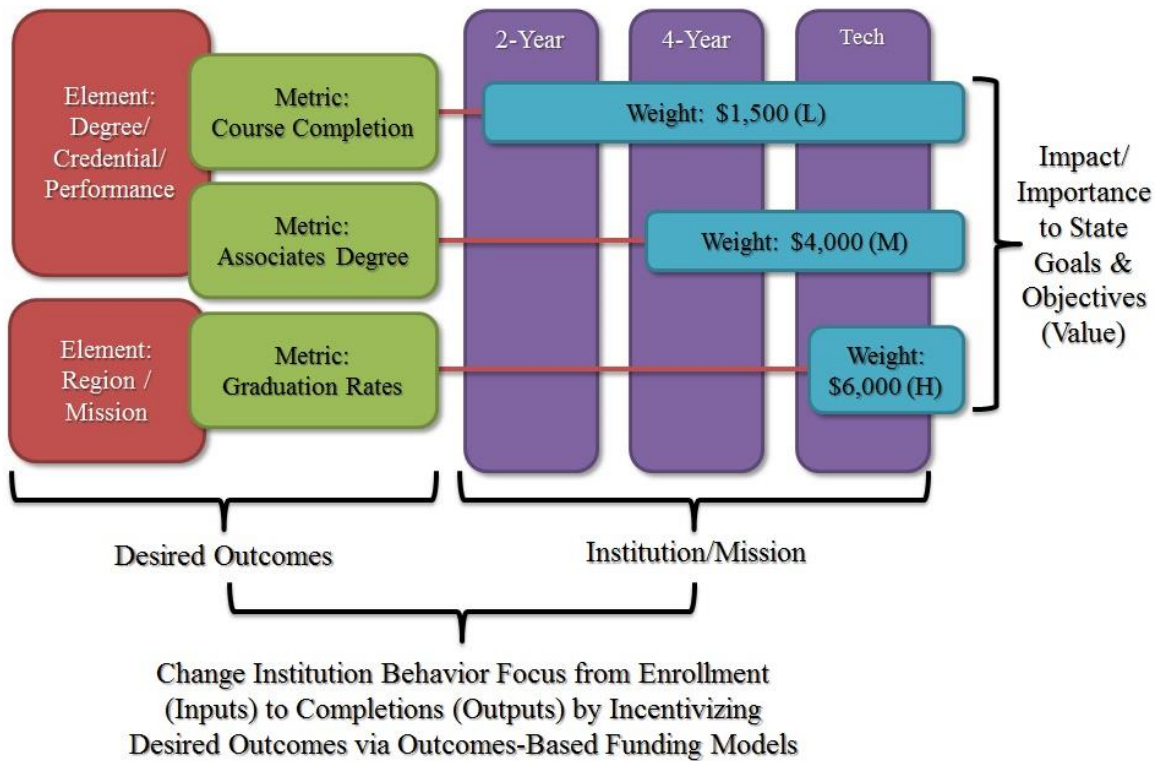


Figure 12. Desired Outcomes Funding Model Concept.

#### Unexpected Findings from Follow-up Telephone Interviews

As mentioned in the chapter introduction, there were some interesting findings with regards to the interview question responses that were not directly connected to the research questions; however, these discoveries provided some insight into performance-based or outcomes-based funding that many states were implementing at the time of this research study. These discoveries could be explored in depth with further research, and will be discussed in more detail in Chapter 5. The following is a list of some of the thoughts, concerns, and experiences discussed by the research participants:

- *Buy-in.* Some research participants discussed various institutions being involved with teams or committees that created the funding models (institution contribution). According to research participant P32,

In (P32) we are our coordinating board, so we are making a recommendation, and then we're getting buy-in for the model. Whereas in (P11) and other states their boards of regents, and whatever model they want to use that's what they are doing. So it's very different in (P32). We have to always be very cognizant of the fact that we're getting buy-in, and if people do not buy-in into the model, it does not work and it will not happen;

- *Complexity.* Some research participants discussed ease-of-use or logical design with respect to the funding models with clearly defined elements, metrics, and weights as being easier to implement and provide increased buy-in. Research participant P73 discussed their experiences,

Well I think (uh), here in (P73), funding formulas seem to have about a ten year life expectancy. So, (um), it was due for a revisit and an overhaul. (Um), the old formula was very complex; it was an inch thick book full of formulas and spreadsheets. You know, you see the new formula is only 10 or 11 pages total. So the old formula just was due, it was really complex, and nobody understood it;

- *Metric Comparisons.* Some research participants discussed metrics that were based on past performance or metrics that were measured against other institutions or state targets and standards. They felt that metrics should be based on *their* past performance in order to accurately reflect self-improvement as a measure. Research participant P47 explained their experiences with program performance targets,

The major change in that period you're looking at was, we introduced, was during the performance models. At first we compared program performance to state targets, but that was not an incentive to, (uh), was not a reasonable incentive because some programs were very far beneath the state target, and some were performing very well without it. Right, so that the ones very low had no hope of meeting that target in any given year, and the ones above it had no incentive to improve. So that's why we changed it to comparing them with their own past performance - to see if they were continuously improving. So that's the reason for that change;

- *Punitive or Incentive?* Some research participants indicated they felt their funding models were punitive. In other words, if the institution did not meet a performance target, they would *not receive* funding. Incentive models would provide *more* funding for meeting or surpassing goals. Research Participant P89 related some of their experiences with funding models,

That the two year colleges at the time of the recession they were, you know, at enrollment highs, and now it is leveling off, and some of our institutions are seeing a pretty significant enrollment decline. (Um), I also think that is more of a punishing model instead of an incentivizing model. Because it is you know, basically set up, well here is your money, but we are going to take some of this away if you don't meet the performance standards. (Um), I believe that a performance model would ideally it would be more, its, work better, and (uh), behavior

more if you incentivize meaning, here is your funding, if you do this, this, and this, and you can receive you know, funding from this pot for improvement funds or performance funds; and

- *Timing.* Some models were calculated based on the previous FY or previous three FY's to calculate funding allocations. There were concerns that new program start-ups and recessions or decreased enrollments due to economic recovery could impact funding. These were factors they considered outside of the institution's control. According to research participant P73,

Probably the (uh), biggest mechanical issue with it is that it's based on most recent actuals. So there is always a time delay between an institution completing the work and getting state funding. . . . We look at the most recent actuals going into the legislative session. But our legislature only meets every-other year. So for instance, fiscal 16 that we are in now, and fiscal 17 are based on fiscal 14 - which was the most recent that we have during the legislative session.

Research participant P58 related their concerns,

Some things are not completely controllable by the schools. But you know, it's something that the legislature really wants to see, so we really had to kind of figure out how operationally we wanted to align with that. We also do have a fail-safe in that measure too, that basically says that (uh), any year, for any cycle in which the previous year June to June, unemployment increased in the state, we won't

collect it. So by at least that measure, it's something we're only going to do when the economy is growing.

### Chapter Summary

Chapter 4 presented the results from the analysis of the funding models and follow-up telephone interviews with respect to the four research questions that guided this study. A description of the research methodology was discussed. The participants for this research study were from the ten states identified as having implemented fully-funded performance funding models by the National Center for Higher Education Management Systems (NCHEMS). Funding models and related documents were obtained from each of the ten states that participated in the study. The funding models analyzed were the funding models that were in use during fiscal years (FY) 2010 – 2015. The research participants were each sent an introduction e-mail with survey questionnaire, follow-up telephone interviews were scheduled, conducted, and then transcribed.

Coding and analysis were performed on each funding model and formula, as well as all ten transcribed follow-up telephone interviews. These data were analyzed and coded, then listed by frequency in their respective tabs of an Excel spreadsheet, and a report of the results was presented in this chapter.

The most commonly shared and unique elements, metrics, and weights of state public higher education outcomes-based funding models that have been fully implemented were identified. The research had revealed that there were no common or unique weights. Weights were aligned with a metric, and it represented the value of that metric for the respective element. Weights were either a number, a percentage, or in a

dollar category, and represented a value (Low, Medium, or High) for its associated metric. The rationales for the choice of the progression metrics used by funding models were identified, and the nature and rationales for selection of those weighted metrics were identified.

The most commonly shared Elements of state public higher education outcomes-based funding models that had been fully implemented were:

Degree/Credential/Performance; Region/Mission; and Sub-Populations. The most commonly shared Metrics of state public higher education outcomes-based funding models that had been fully implemented were: Progression/Course Completion (Hours); Associates/Undergraduate Degree; Technical Certification/Credentials/Diploma; Progression/Course Completion (FTEs); Bachelor's Degree; Graduation Rates; Masters/Specialist Degree; Transfer Students Credentials; and Research. Weights were aligned with an associated metric. Weights were either a number, a percentage, or in a dollar category, and represented a value (Low, Medium, or High) for its associated metric.

There was one unique Element from the outcomes-based funding models that had been fully implemented, and that Element was: Compensatory. The unique Metrics of those outcomes-based funding models that had been fully implemented were: High Demand Credentials; External Grants and Awards; Credentials; Cost per Completion; Cross/Dual Enrolled 2 and 4 Yr. Institutions; Minority Credential; Program Certification/Accreditation; Compensatory; Workforce Training; Hispanic; Black, Non-Hispanic; Underprepared; Cost per Credit Hour; Quality of Student Learning; Minority Bachelors; Minority Masters +; First-Time Entry Students; and CCA Degree Target



Completion. Weights were aligned with an associated metric. Weights were either a number, a percentage, or in a dollar category, and represented a value (Low, Medium, or High) for its associated metric.

The rationales for the choice of the Progression Metrics used by funding models that had been fully implemented were: States Goals and Objectives/Performance Targets; Increase Education Attainment; Encompass Unique Missions of the Campuses; Incentivize Economic and Workforce Development; and Incentivize Outcomes that are Important to Higher Education. The nature of the weights was based on a High, Medium, or Low scale of values calculated from the range of numbers, percentages, or dollars from these categories: Points/Factors/Multipliers (#); Percentages (%); and Per Unit value (\$). The rationales for Weights were: Completions/Degree Completions; Increase Education Attainment; Alignment with State Workforce Goals; and Unique Missions of Campuses and Schools.

## Chapter V

### CONCLUSIONS

Due to the recent recession and other economic issues, there was less funding available for state colleges to support the need for more graduates (see Figure 1). States understood the need for more graduates in a climate of less available tax revenues for funding, and as a result some states had adopted initiatives which included tying funding to progress and success for colleges and universities. The purpose of this study was to provide insight into clearly articulated parameters that might serve as a basis for the development of a generalizable outcomes-based funding model that any state could use to help with these initiatives.

There were four phases that composed the methodology of this study. The first phase involved data collection from the ten states that had been identified by the National Center for Higher Education Management Systems (NCHEMS) as having fully implemented a higher education outcomes-based funding model. These data included the elements, metrics, weights, and definitions for the various funding models.

The second phase of this study involved sending an introductory e-mail message with an attached survey questionnaire to a member of the higher education funding commission for each state that was involved in this study. The message and survey questionnaire served as an entrée to introduce the researcher, explain the study, solicit participation in the subsequent comprehensive telephone interview, and to verify the state's funding model.

The third phase of the study was a follow-up telephone interview with each of the research participants who responded to the survey questionnaire. The interview focused on in-depth, probing questions that gathered rich narrative for each state's funding model with respect to the four research questions.

The final phase of the research methodology comprised the coding and analysis of the data collected from phase one, and data yielded from the transcribed follow-up telephone interviews in phase three.

### Conclusions

After a careful and thoughtful analysis of the findings from the analysis of the funding models and telephone interviews, the researcher came to several conclusions.

1. Many states were focusing their progression metrics on outputs (completions) instead of inputs (enrollments) by using business practices in their performance-based or outcomes-based funding models. This conclusion was based on the findings from the rationales given for the progression metrics which were states goals and objectives/performance targets. This conclusion is congruent with the theoretical framework of the SIPOC business model (Suppliers, Inputs, Process, Outputs, and Customers) discussed in Chapter 1. The Supplier is the regents funding from the state, the Inputs are the elements, metrics, and weights into the funding model, the funding model is the Process, Outputs are the earned allocation funding portion, and the Customer is the state college or university receiving their portion of the available funding based on their performance. This conclusion about business models moving into academia was discussed in Chapter 2 of the literature review as a concern. Because higher education was moving to a business model to allocate funding, there

was concern that the focus of higher education would shift from enrolling students to receiving funding. The researcher concluded that this was not the case, and in this instance contradicts with some of the concerns discussed in the literature review in Chapter 2. As indicated by the most common element identified:

Degree/Credential/Performance, there still has to be students entering programs in order to have completions, progression, certifications, and transfer metrics. The states understood this concern, and it was accounted for by the elements and metrics the states used to determine funding allocations as discussed in the following paragraph.

2. Each state had different goals and objectives; however, the nature of all of the metrics was based on workforce and human resources capacity building. From the nature of these metrics, it appeared that states were interested in rewarding institutions that could produce college graduates who will increase the state workforce capital which will also make the state more economically competitive. This conclusion was based on the findings of the most commonly shared elements and metrics where the focus of the funding models was on Completions, Institution Missions, and Sub-Populations. There were no common or unique weights, as the research revealed that weights were aligned with a corresponding metric; however, there was variability in the types of weights used in the funding model calculations. Weights were either a number, a percentage, or in a dollar category and they represented a value (Low, Medium, or High) for its associated metric. Degree Completions included Credentials and Performance, and Institution Missions included STEM, Workforce, and Employment metrics. Sub-Populations included Pell Recipients, Minorities, and Low Income.

The states goals and objectives for increasing educational attainment as well as economic and workforce development were being placed on higher education by policy, and were enforced with funding allocation practices within the funding models. Please see Figure 13, State Goals Model. In Figure 13, the elements and metrics of the funding model were the tools used to drive the desired outcomes (State Goals). The weights aligned with the metrics determine the value of the metric in the funding formula. There were common and unique elements and metrics. All elements and metrics were designed to incentivize and influence higher education to help the state achieve their state goals. There were unique elements and metrics that provided an additional focus on social justice, socio-demographic variables, and employment outcomes. These goals were unique to the various funding models that the states used.

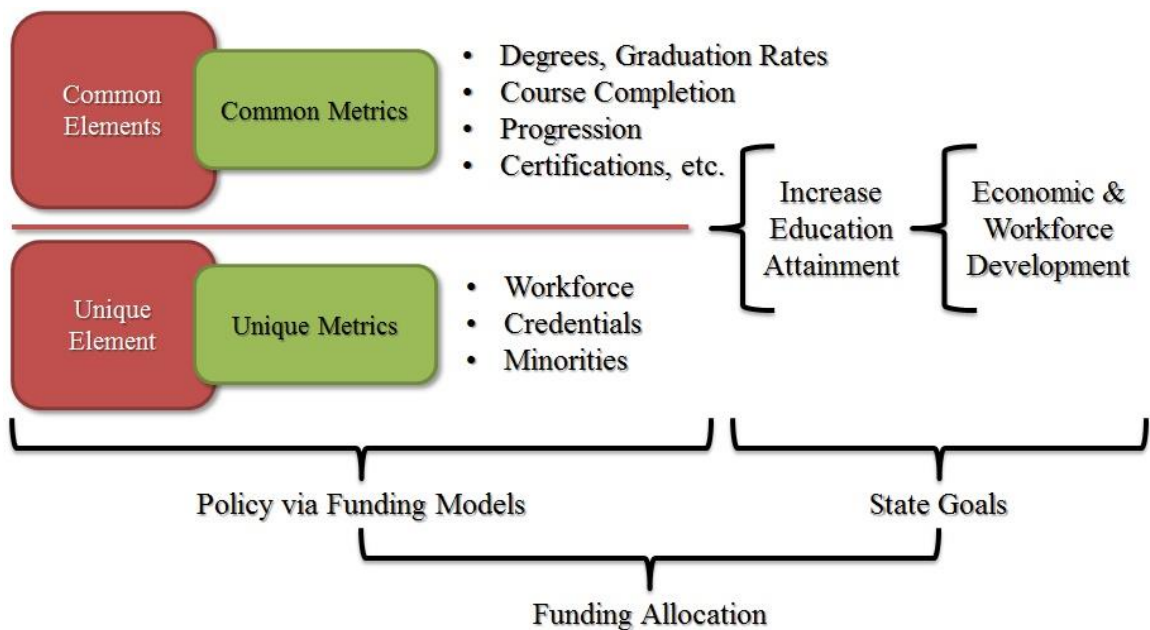


Figure 13. State Goals Model.

3. The unique elements of the funding models show evidence that states had a social justice agenda while keeping in mind that higher education must be held fiscally accountable for the funds it received. This conclusion is based on the findings of the unique elements and metrics, which included Cost per Credit Hour, Minority Credentials, Workforce Training, Grants, and Underprepared Students. It can be concluded that these unique items indicate specialized areas that states focused on and incentivized to determine funding allocations. Funding models from a majority of the states involved in this study were aligned with state goals and objectives such as increasing completions, institution missions such as STEM, and sub-populations to include Pell recipients and minorities. These unique elements and metrics were looking at return on investment, graduates who will qualify for employment and graduates who were of ethnic and/or underserved status.
4. There were economic and political implications involved in the funding models. The economic implications were discussed in the paragraphs above. The researcher looked at the political party makeup of the ten states that were involved in this study. Please see Table 17, Legislative Party Composition. The information in Table 17 was obtained from the National Conference of State Legislatures (NCSL.org) website. It was interesting to see that the Republican Party had the majority of seats in these state legislatures (except Illinois, Nevada, and New Mexico) during the timeframe for this study while noting that back in 2010, the majority in these legislatures were dispersed more evenly. There were no significant changes to the funding models during this time. With the upcoming elections and the chances of political majorities to change,

it would be interesting to see what, if any, changes would be made in the funding models.

Table 17

*Legislative Partisan Composition*

State	Year/Party						
	2016	2015	2014	2013	2012	2011	2010
Arkansas (AR)	R	R	R	R	D	D	D
Illinois (IL)	D	D	D	D	D	D	D
Indiana (IN)	R	R	R	R	R	R	S
Louisiana (LA)	R	R	R	R	R	S	D
Missouri (MO)	R	R	R	R	R	R	R
Nevada (NV)	R	R	D	D	D	D	D
New Mexico (NM)	S	S	D	D	D	D	D
Ohio (OH)	R	R	R	R	R	R	S
Oklahoma (OK)	R	R	R	R	R	R	R
Tennessee (TN)	R	R	R	R	R	R	R

*Note.* Retrieved from <http://www.ncsl.org/research/about-state-legislatures/partisan-composition.aspx>. D = Democrat, R = Republican, and S = Split.

Discussion of Research Questions

The researcher carefully considered the theoretical framework while interpreting the data. As a result, the researcher adjusted the framework slightly. Initially the researcher believed the findings would fit under the Outputs process of the SIPOC model as discussed in Chapter 2. Based on the analysis of the funding models and interviews, the researcher realized that the ‘Process’ process of the SIPOC model was the correct choice for use when interpreting the data, not the Outputs process. The funding models analyzed in this research study executed the budget (Process) based on available funds (Inputs) from the Regents (Suppliers). The ‘Outputs’ would be the earned funding allocation portion to the institution (Customers).

*Research Question 1. What are the most commonly shared elements, metrics, and weights of state public higher education outcomes-based funding models that have been fully implemented?* The most commonly shared elements were Degree/Credential/Performance and Region/Mission. The most common metrics included Progression/Course Completion (Hours), Associates/Undergraduate Degree, Technical Certification/Credentials/Diploma, and Progression/Course Completion (FTEs). The research revealed that weights were aligned with a metric to give a value to the metric, and not a separate item in the formula such as elements or metrics. The data showed that the most common theme among these elements and metrics was *completions* as a priority for many of these states in this study. As stated by research participant P32, “The metrics moved on to really start to focus on the change in degree completions and that this was a priority for many of the states.”

The reason completions was a priority for many of the states is because it is one of the critical data points of the Complete College America (CCA) initiative as discussed in Chapter 1, and is supported by the literature review with Jones’ discussion on implementing outcomes-based funding. This is a reflection of what is going on in the country and the world as shown in Figure 2. The continued improvement of the national workforce and the nation’s economy are tied to higher education, and will require more college completions to be more competitive in the future.

The researcher also recognized that these priorities were tied directly to states goals as indicated by research participant P47, “We meet every year and talk about how it is and isn’t working to meet our state goals, and the continuous program improvement.”



*Research Question 2. What are the unique elements, metrics, and weights of those outcomes-based funding models that have been fully implemented?* There was only one unique element identified in this study: Compensatory. The state that used this element identified it as low income or underprepared students, and could represent a social justice objective. The researcher had found that other states used similar metrics to measure low income or underprepared students under other elements. The researcher realized that the way some states grouped the metrics under the various elements were determined by their goals and objectives for performance funding, or the type of desired behaviors and outcomes they want to incentivize from the various institutions. As stated by research participant P79, “Basically we are incentivizing and able to impact behavior (uh), in a positive way all the way down to the campus level.”

Some of the unique metrics identified included High Demand Credentials, External Grants and Awards, Cost per Completion, Minority Credentials, Workforce Training, Hispanic, and Black, Non-Hispanic. This is reflected in the bottom half of Figure 13, which shows that states were sensitive to human capital development, social justice, and return on investment. By offering opportunities to historically disenfranchised ethnic minority groups, states hoped that a higher skilled and educated workforce would not only increase the states’ competitiveness in the global market, but it would be better for the entire society as well. As mentioned previously, there were no unique weights identified by this research study.

The researcher took this opportunity to look deeper into the relationship among the elements and metrics to see the relationships and connections weights played in the funding models. An analysis of the metrics and weights was performed using the two

most common elements identified: Degree/Credential/Performance and Region/Mission. Each state that provided funding model data to the weight detail level, and that used the selected element in their funding models was analyzed. The results were shown in Tables 12 and 13 in Chapter 4. The themes that emerged from the analysis of the data were that the majority of the states focused their models on the Degree/Credential/Performance and Region/Mission elements. It can also be concluded that not only was there variability in the metrics they used in the various elements, but there was variability in the type and nature of weights they used to show value for a metric in their formulas.

For this research study, the nature of the weights was based on a High, Medium, or Low scale of values calculated from the range of numbers, percentages, or dollars from these categories: points/factors/multipliers (#), percentages (%), or per unit value (\$). The data showed that some states had goals and objectives that included completions for minorities, a focus on workforce development, and research grants as priorities not only for the state, but to include considerations for the unique missions of some institutions as indicated by research participant P11,

So the weights came about to try and reflect back, (um), we looked at missions by campuses so each outcome was weighted based on how we thought through the questions of what was important at a particular campus.

As mentioned previously in the discussion of Research Question 1, states were sensitive to ethnicity, socio-demographic variables, and employment outcomes, and this is reflected in their selection of elements and metrics. This is also supported by the literature review in Chapter 2, the National Center for Higher Education Management

Systems (NCHEMS) guideline number 5: Include provisions that reward success in serving underrepresented populations.

*Research Question 3. What are the rationales for the choice of the progression metrics used by funding models that have been fully implemented?* Themes noted from the analysis of the interview responses concerning rationales were States Goals and Objectives/Performance Targets, Increase Education Attainment, Encompass Unique Missions of the Campuses, Incentivize Economic and Workforce Development, and to Incentivize Outcomes that were Important to Higher Education. The researcher recognized that a majority of the states had performance targets, increased education attainment (student success), and unique missions of the campuses in mind when creating their funding models.

These observations indicated that states were aligning their goals with the Complete College America (CCA) initiatives discussed in the Chapter 2 literature review, while keeping in mind the unique missions of the institutions in their state. The outcomes-based funding model was the tool that states were using in order to change the higher education system from enrollment to completions. This activity by the states showed that they were aware that student success can include underrepresented populations and unique missions of campuses such as technical or research institutions. As discussed in Research Question 2, states hoped that a higher skilled and educated workforce would not only increase the states' competitiveness in the global market, but it would be better for the entire society as well. As stated by research participant P32,

So they want to focus on certificates, and associates degrees, and bachelors, and masters, doctors, and the whole gamut of every kind of degree. They want more completers to get to that 60%.

*Research Question 4. If the metrics within the funding model are weighted, what is the nature of and rationale for those weights?* Analysis of the funding models revealed that weights were aligned with an associated metric. Weights were either a number, a percentage, or in a dollar category, and represented a value (Low, Medium, or High) for its associated metric. These weights were based on a High, Medium, or Low scale of values calculated from the range of numbers, percentages, or dollars. Points/Factors/Multipliers (#) were used by 60% of the states, 40% of the states that participated in this research study used Percentages (%), and 10% used Per Unit Value (\$) when calculating funding allocations.

The researcher believes that the type of weight (#, %, or \$) generally had no impact on how the allocations were calculated whether it was by multiplying a point, factor, multiplier, by multiplying a percentage, or by per unit value. The value of the weight (Low, Medium, or High) is what had an impact in the funding formula. For example, the Element: Degree/Credential/Performance, the nature of the Progression/Course Completion (Hours) metric was Low in three of the four states as compared to the Graduation Rates metric which was valued Medium to High in State Codes P38 and P11. Most states had the Bachelor's Degrees metric valued as Medium to High, while State Code P73 valued it as Low. For the Element: Region/Mission, State Code P89 used Transfer Student Credentials as an optional metric with values that can

range from Low to High that an institution could select. The Associates/Undergraduate Degree metric had a Medium value in State Codes P32 and P58 for example.

Themes noted from the analysis of the interview responses concerning rationales for selecting the weights used in the funding models included Completions/Degree Completions, Increase Education Attainment, Alignment with State Workforce Goals, and the Unique Missions of Campuses and Schools. The majority of these interview responses indicated a focus on completions instead of enrollment in their performance-based or outcomes-based funding models.

The researcher realized that the metrics had corresponding weights that indicated the value of a particular metric within the states' funding formula. As an example, if the state goals were to increase Associate and Bachelor's degrees, these metrics would get a higher weight (importance or value) than certificates or transfers. This would most likely be decided at the legislative level with institutional contribution (hopefully). This type of business model indicates a state's willingness to pay more or to incentivize certain types of graduates. Activity of this nature could be interpreted as a state's manipulation of the higher education system which was a concern as discussed in Chapter 2 of the literature review. On the flip side of this coin is the issue of reduced funding from the state as shown by Figure 1, GA. Tax vs. Allocations, in Chapter 1. If the state reduces funding, and the percentage of funding that is allocated to performance funding is small (5% - 15%), how much influence does this have on institutions to change their behaviors in favor of outcomes-based funding? What if the state reduced the funding to the point that institutions obtained their funding from other sources? If this was the case, then the funding model would not work or achieve the desired outcomes.

The researcher realized that not only were there elements, metrics, and weights for incentivizing a particular states' goals, there were different formulas for 2-year institutions, 4-year institutions, as well as different formulas for community colleges and other institutions with unique missions. The analysis of the funding models showed that two of the states studied had just one funding model. These models had separate sections based on *mission differentiation*. Two states had *optional* metrics/performance measures that an institution could choose from; however, these metrics were *locked-in* for 3 fiscal years.

The researcher has identified common elements, common metrics, and provided a sense for how they were weighted within a funding formula. The states researched in this study had a fairly common approach to funding models that varies in terms of elements, metrics, and weights. This information provides the foundations for a research-based funding model that can help someone understand how the phenomenon of performance-based or outcomes-based funding for higher education is being actualized, but there is still more to learn.

#### Recommendations for Further Research

Findings and conclusions from the study, and discoveries during the interview process lead into the following list of recommendations for further research with respect to outcomes-based funding models.

1. Some research participants discussed various institutions being involved with teams or committees that helped to create the funding models (buy-in or institution contribution). Further research is recommended to determine if institutional buy-in or

- institutional contribution had an impact on the desired successful outcomes or increased completions of funding models.
2. Some research participants discussed ease-of-use or having a logical design with respect to a funding model with clearly defined elements, metrics, and weights as being easier to implement and provide increased buy-in. It is recommended to conduct a research study to determine if having an easier to implement or use funding model produces a successful outcomes-based funding implementation.
  3. Some research participants discussed metrics that were based on past performance or metrics that were measured against other institutions or on pre-determined state targets and standards. Recommended study should be conducted to determine if there is a difference in a successful implementation being measured against self-past performance as compared to being measured against other (similar) institutions or state-created performance targets.
  4. Some research participants indicated they felt their funding models were punitive. In other words, if the institution did not meet a performance target, they would not receive funding (all or nothing). Incentivizing funding models would provide additional funding for meeting or surpassing goals. Further research is recommended to determine if there is a difference in a successful implementation based on the type of funding model (punitive vs. incentive) used.
  5. Some funding model allocations were calculated based on the previous fiscal year (FY) or previous three FY's performance targets. Research participants expressed concerns that new program start-ups, recessions, mergers, or decreased enrollments due to economic recovery or other factors outside an institution's control could

- impact funding. It is recommended to conduct a research study to determine if there is a measurable difference in success rates for states that use one FY or year-to-year, as compared to three FY's for calculating funding allocations.
6. Further research is recommended to determine if a relationship exists among the research topics below, or any of the aforementioned research topic ideas. Figure 14 shows an example Desired Outcomes Model based on a hypothetical relationship between items a and b from the following list of research topic ideas:
- a. Punitive vs. Incentive Funding Model Style;
  - b. Percentage of Funding Allocation (5%-100%);
  - c. Institution Contribution (Buy-In);
  - d. Compare Self/Trends vs. Other Institutions/State Targets; or
  - e. Funding Model Ease of Use/Logical Design.

Figure 14 compared the funding model's enforcement style (punitive vs. incentive - item a above) with the percentage of funding allocation that is outcomes-based (item b above). In this hypothetical example, state ⑤'s funding model is seen as an Incentivizing model, and the percentage of performance funding is over 50%. This funding model would be seen as (most likely) having successful desired outcomes. If the funding allocation percentage is less than 50% (the model still *leans* towards enrollment-based funding), and the funding model is seen as punitive, this type of funding model should be avoided (states ① and ② in the Red area). If the state fell in any Yellow area (states ③ and ④), the funding model needs work. This is just an example of how two topics could be researched and compared to see if there is a relationship or impact with each other.



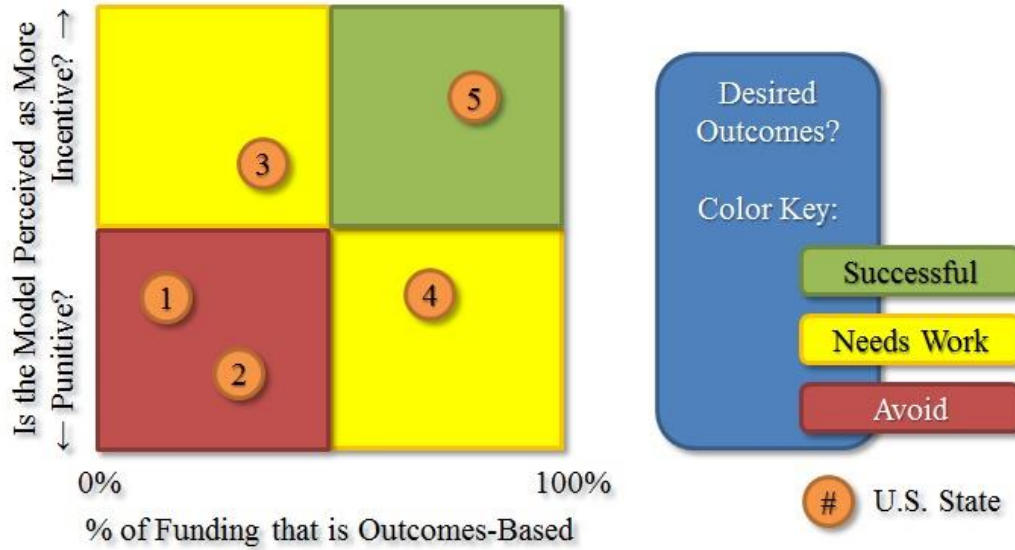


Figure 14. Example Desired Outcomes Model.

7. Some research participants indicated that a larger percentage of funding that is allocated to outcomes-based funding could produce outcomes that could in fact be attributed to outcomes-based funding. Further research is recommended to determine if states with a larger percentage of funding that is allocated to outcomes-based funding are achieving or exceeding their CCA or State targets.
8. The focus of this study was on the states that had implemented outcomes-based funding. It is recommended to conduct a research study to determine why the remaining states had not, or are delaying implementation of outcomes-based funding.
9. Most states used multiple funding models, and two states used a single model with sections based on mission differentiation, and two other states used optional metrics. Further research is recommended to determine why the states chose this approach to implement their funding model(s).
10. Most states used points/factors/multipliers (#), others used percentages (%), and one state chose to use per unit value (\$) weights for calculating value for a metric.

- Recommended study should be conducted to determine why the states chose this approach to implement a particular type of weight for their current funding model.
11. The focus of this research study was on funding models that were already in place. Further research is recommended to determine their approaches on how the states went about implementing funding models in their state, their mechanisms for determining the value of weights for the selected metrics, how weights are used to calculate value in the formula, and how the funding models perform the funding allocation calculations.
  12. The focus of this research study was on funding models that were already in place with a focus on quantity with respect to completions and progressions. It is recommended to conduct a research study to determine how to measure quality in the graduates to see if states are achieving desired outcomes while maintaining quality.
  13. The Nature of weights was described and provided in Tables 12 and 13. Further research is recommended to validate the nature of the weights by the states that participated in this study.

### Final Significance

The purpose of this study was to provide insight into clearly articulated parameters that might serve as a basis for the development of a generalizable outcomes-based funding model that any state can use. Research Question 1 identified the most commonly shared elements and metrics, and Research Question 2 identified the unique elements and metrics of those funding models. The research also revealed that weights were aligned with a metric. Research Questions 3 and 4 identified the rationales for the

choice of the progression metrics, and the nature and rationale as to why those metrics were weighted for the states selected to participate in this study.

The researcher believes that the larger the percentage of available funding that was allocated to outcomes (50% or more); the more likely outcomes can be tied to outcomes-based funding. States that had a funding model with 5% to 15% of funding tied to performance (which means 85% to 95% of the funding was *still* technically enrollment-based), will have a more difficult time showing that any changes in performance can be attributed to the funding model. The researcher understands that any state implementing performance funding will most likely start out gradually, and methodically increase the amount of funding tied to performance until behaviors are changed and desired outcomes are achieved for their state.

The researcher was impressed with some of the responses from the research participants, and their experiences can assist other states in developing their funding models. The following are some quotes from some research participants to keep in mind when developing outcomes-based funding models. Research participant P89 proposed,

...Ensuring that we don't get away from remembering that this is all about the students, and build a model that would encourage funding to support (um), initiatives that would be beneficial to the needs of the student, getting to the completion point in an affordable way.

Research participant P14 observed,

It's choosing the, the buckets that you want to incentivize, whether it's courses, degrees, certificates, (um), and then subsidizing in those buckets based upon the

cost, to provide instruction in various subject levels, and then making sure that at-risk students are not left behind.

As a result of conducting this research study, the researcher has a much greater insight into the phenomenon of outcomes-based funding, the forces that are driving and composing it, and how it is being implemented by the various states that participated in this study. While the researcher was analyzing the funding models, there were a couple of moments of clarity that resulted in the creation of the two key figures in this study that the researcher hopes will be of benefit to anyone that desires to understand outcomes-based funding. These figures are: Figure 9, Combined Funding Models Example, and Figure 13, State Goals Model. Figure 9 is the big picture with respect to the funding models analyzed in this study. It not only shows that a majority of states still had a base funding portion, but many states still had an enrollment portion. The figure goes deep into the models and shows how the metrics aligned with an element, and the weights that provided value to the metrics across the various models based on institution types. Figure 13 was based on the funding model concept at a higher level view. From this view, the researcher realized how the states were using funding models as a tool to drive the desired outcomes by incentivizing and influencing higher education in order to help the state achieve their goals. The researcher does not see this realization as negative, since it is in alignment with the Complete College America mission which was: “To work with states to significantly increase the number of Americans with quality career certificates or college degrees and to close attainment gaps for traditionally underrepresented populations” (Complete College America: About CCA, 2014, para. 1) by a system of proposed game changers which included *performance funding*.

The statement of the problem for this study was: currently Georgia, like most states, had not implemented a research-based, data-driven, or empirically supported outcomes-based funding model for funding institutions of higher education. Many states appeared to lack a clear set of articulated parameters needed to develop outcomes-based funding models. This study informs states that are in the development process of these parameters, and the natures and connections of the various metrics and weights to the elements with respect to the articulated parameters needed to develop outcomes-based funding models.

## REFERENCES

- Alm, J. & Sjoquist, D. L. (2014, September). *Center for state and local finance policy brief: Georgia's post great recession revenue recovery*. Retrieved July 14, 2015, from [http://cslf.gsu.edu/files/2014/09/CSLF3\\_GA-Tax-Rev.pdf](http://cslf.gsu.edu/files/2014/09/CSLF3_GA-Tax-Rev.pdf)
- America works: The benefit of a more educated workforce to individuals and the economy*. (2014). Retrieved November 9, 2016, from [https://www.nga.org/files/live/sites/NGA/files/pdf/2014/1402-Moodys-AmericaWorks\\_35f.pdf](https://www.nga.org/files/live/sites/NGA/files/pdf/2014/1402-Moodys-AmericaWorks_35f.pdf)
- Board of Regents policy manual: Allocation of funds*. (2015). Retrieved October 10, 2015, from [http://www.usg.edu/policymanual/section7/C444/#p7.1.1\\_allocation\\_of\\_funds](http://www.usg.edu/policymanual/section7/C444/#p7.1.1_allocation_of_funds)
- Board of Regents policy manual: USG Budget*. (2015). Retrieved October 10, 2015, from <http://www.usg.edu/policymanual/section7/C447>
- Brief history*. (2012, January 12). Retrieved June 8, 2015, from <http://www.usg.edu/research/digest/2001/history/1.phtml>
- Business procedures manual: Section 8.0 budget process*. (2015). Retrieved October 10, 2015, from [http://www.usg.edu/business\\_procedures\\_manual/print/section8](http://www.usg.edu/business_procedures_manual/print/section8)
- Complete college america alliance of states: Reduce time & accelerate success*. (2011). Retrieved September 15, 2013, from <http://mus.edu/CCM/CCA%20Policy%20Deck%20Performance%20Funding%20Final.pdf>
- Complete college america: About cca*. (2014). Retrieved March 1, 2016, from <http://completecollege.org/about-cca/>

- Complete college america: Common college completion metrics technical guide.* (2014, April 4). Retrieved October 29, 2015, from <http://completecollege.org/wp-content/uploads/2014/11/2014-Metrics-Technical-Guide-Final-04022014.pdf>
- Complete college america: Essential steps for states shift to performance funding.* (2011). Retrieved September 15, 2013, from <http://www.completecollege.org/docs/CCA%20Essential%20Steps%20Shift%20to%20Performance%20Funding.pdf>
- Complete college georgia: An overview.* (2011, December 11). Retrieved October 29, 2013, from <http://gosa.georgia.gov/complete-college-georgia-overview>
- Cooper, H. (2010). *Research Synthesis and Meta-analysis: A Step-by-step Approach* (4th ed.). Thousand Oaks, CA: SAGE Publications, Inc.
- Creswell, J. W. (2009). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (3rd ed.). Thousand Oaks, CA: SAGE Publications, Inc.
- Creswell, J. W., & Plano-Clark, V. L. (2011). *Designing and Conducting Mixed Methods Research* (2nd ed.). Thousand Oaks, CA: SAGE Publications, Inc.
- DMAIC. (2015a). In *iSixSigma.com*. Retrieved June 8, 2015 from <http://www.isixsigma.com/dictionary/dmaic>
- Fain, P. (2013). Inside higher ed: Scorecard for scorecards [Press Release]. Retrieved December 11, 2013, from <http://www.insidehighered.com/news/2013/10/29/complete-college-america-report-tracks-state-approaches-performance-based-funding#.Um-zUgQIv10.email>
- Finance diagram.* (2015). Retrieved October 7, 2015, from <http://www.higheredinfo.org/catcontent/cat8.php>

Fraenkel, J. R, Wallen, N. E., & Hyun H. H. (2012). *How to Design and Evaluate Research in Education* (8th ed.). New York, NY: McGraw-Hill.

Governor Nathan Deal, Office of the Governor. (2012a). Deal charges campus presidents with ‘Complete College Georgia’ mission [Press release]. Retrieved September 17, 2013, from <http://gov.georgia.gov/press-releases/2012-02-28/deal-charges-campus-presidents-complete-college-georgia-mission>

Governor Nathan Deal, Office of the Governor. (2012b). Deal releases college completion plans [Press release]. Retrieved September 17, 2013, from <http://gov.georgia.gov/press-releases/2012-09-10/deal-releases-college-completion-plans>

Governor Nathan Deal, Office of the Governor. (2014a). Deal: CNBC ranks Georgia No. 1 state in U.S. for business [Press release]. Retrieved June 17, 2013, from <https://gov.georgia.gov/press-releases/2014-06-24/deal-cnbc-ranks-georgia-no-1-state-us-business>

Governor Nathan Deal, Office of the Governor. (2014b). Deal: Georgia named No. 1 most competitive state in nation [Press release]. Retrieved June 17, 2013, from <https://gov.georgia.gov/press-releases/2014-05-06/deal-georgia-named-no-1-most-competitive-state-nation>

Governor Nathan Deal, Office of the Governor. (2014c). Deal: Initiative will make college more affordable, save taxpayers millions [Press release]. Retrieved July 14, 2015, from <https://gov.georgia.gov/press-releases/2014-06-04/deal-initiative-will-make-college-more-affordable-save-taxpayers-millions>



- Governor Nathan Deal, Office of the Governor. (2014d). Deal: With deep freeze over, Georgia's economy warms [Press release]. Retrieved July 14, 2014, from <http://gov.georgia.gov/press-releases/2014-01-15/deal-deep-freeze-over-georgia%E2%80%99s-economy-warms>
- Governor's Office of Student Achievement. (2011, December 11). *Complete college georgia: An overview*. Retrieved September 13, 2013, from <http://gosa.georgia.gov/complete-college-georgia-overview>
- Higher education funding commission: Report to governor deal*. (2012, December 12) [Press release]. Retrieved September 17, 2013, from [http://gov.georgia.gov/sites/gov.georgia.gov/files/related\\_files/press\\_release/Recommendations%20of%20the%20Higher%20Education%20Funding%20Commission.pdf](http://gov.georgia.gov/sites/gov.georgia.gov/files/related_files/press_release/Recommendations%20of%20the%20Higher%20Education%20Funding%20Commission.pdf)
- Hillman, N. W., Tandberg, D. A., & Gross, J. K. (2014). Performance Funding in Higher Education: Do Financial Incentives Impact College Completions? *Journal Of Higher Education*, 85(6), 826-857.
- Huber, M. T. (2013). Books worth reading: The completion agenda. *Change, The Magazine of Higher Learning*, September-October 2013, 60-64.
- Intermediate Institutional Impacts. (2013). *ASHE Higher Education Report*, 39(2), 45-51.
- Introduction. (2013). *ASHE Higher Education Report*, 39(2), 1-3.
- Jones, D. P. (2011). *Performance funding: From idea to action*. Retrieved April 7, 2014, from <http://www.nchems.org/pubs/docs/Performance%20Funding%20121411.pdf>
- Jones, D. P. (2013). *Outcomes-based funding: The wave of implementation*. Retrieved October 29, 2013, from

[http://www.insidehighered.com/sites/default/server\\_files/files/Outcomes-Based%20Funding%20Report%20\(Final\).pdf](http://www.insidehighered.com/sites/default/server_files/files/Outcomes-Based%20Funding%20Report%20(Final).pdf)

Kelchen, R. (2013). Book review: getting to graduation: The completion agenda in higher education. *Journal of Student Financial Aid*, 43(1), 54-58.

Kraft, E. (2011a). *Complete college america*. Retrieved September 10, 2013, from <http://www.completecollege.org/>

Kraft, E. (2011b). *Complete college america: Essential steps & model policies*. Retrieved September 15, 2013, from [http://www.completecollege.org/path\\_forward/essentialsteps/](http://www.completecollege.org/path_forward/essentialsteps/)

Laird, K. L. (2014). *Predictive model of intentional and unintentional outcomes: An evaluation tool for outcomes-based funding in texas higher education* (Doctoral dissertation). Retrieved from ProQuest Digital Dissertations. (AAT 3621358).

Lane, J. & Johnstone, D. (2013). *Higher Education Systems 3.0: Harnessing Systemness, Delivering Performance*. Albany, NY: State University of New York Press.

Lerner, G. (2008). *Corporatizing Higher Education*. *History Teacher*, 41(2), 219-227.

Maxwell, J. A. (2012). *Qualitative Research Design: An Interactive Approach* (3rd ed.). Thousand Oaks, CA: Sage Publications, Inc.

Miller, T. (2003). *Governmentality or commodification? US higher education*. *Cultural Studies*, 17(6), 897-904.

*Morrill land grant acts*. (2013, December 18). Retrieved September 28, 2015, from [http://scua.library.umass.edu/youmass/doku.php?id=m:morrill\\_act](http://scua.library.umass.edu/youmass/doku.php?id=m:morrill_act)

- Mortensen, B. L. (2009). *Emerging governance in state-level higher education: Competing pressures and models* (Doctoral dissertation). Retrieved from ProQuest Digital Dissertations. (AAT 3392039).
- Natale, S., & Doran, C. (2012). *Marketization of Education: An Ethical Dilemma*. *Journal of Business Ethics*, 105(2), 187-196.
- NCHEMS information center. (2015). Retrieved October 7, 2015, from <http://www.higheredinfo.org>
- Outcomes-based funding: Important takeaways for state policymakers*. (2016, March 10). Retrieved May 25, 2016, from <https://www.luminafoundation.org/news-and-events/outcomes-based-funding-important-takeaways-for-state-policymakers>
- Parameter [Def. 1.3]. (n.d.). In *Oxford Dictionaries*, Retrieved November 1, 2015, from [http://www.oxforddictionaries.com/us/definition/american\\_english/weight](http://www.oxforddictionaries.com/us/definition/american_english/weight)
- Patton, M. Q. (2002). *Qualitative Research & Evaluation Methods* (3rd ed.). Thousand Oaks, CA: SAGE Publications, Inc.
- Policy Instruments and Their Immediate Institutional Impacts. (2013). *ASHE Higher Education Report*, 39(2), 35-43.
- Primary documents in American history: Morrill Act*. (2015, July 15). Retrieved April 14, 2015, from <http://www.loc.gov/rr/program/bib/ourdocs/Morrill.html>
- Rabovsky, T. M. (2013). *Accountability and performance in higher education: Promise, potential, and pitfalls of performance management* (Doctoral dissertation). Retrieved from ProQuest Digital Dissertations. (AAT 3560727).

- Radhakrishna, R. B., Yoder, E. P., & Ewing, J. C. (2007). Strategies for linking theoretical framework and research types. *Proceedings of the 2007 AAAE Research Conference*, Volume number (34), 692-695.
- Reed, T. W. (1948). *History of the University of Georgia: The Board of regents and the administration of the university from 1932-1947*. Retrieved from <http://www.libs.uga.edu/hargrett/archives/reedindex.html>
- Reindl, T., & R. Reyna. (2011). *From information to action: Revamping higher education accountability systems*. Retrieved October 16, 2015, from [www.nga.org/files/live/sites/NGA/files/pdf/1107C2CACTIONGUIDE.PDF](http://www.nga.org/files/live/sites/NGA/files/pdf/1107C2CACTIONGUIDE.PDF)
- Seidman, I. (2006). *Interviewing as Qualitative Research: A Guide for Researchers in Education and the Social Sciences* (3rd ed.). New York, NY: Teachers College Press.
- Shugart, S. C. (2013). *Rethinking the completion agenda*. Retrieved October 16, 2015, from <https://www.insidehighered.com/views/2013/02/07/moving-needle-college-completion-thoughtfully-essay>
- Simon K. (2015). *SIPOC diagram*. Retrieved October 18, 2015 from <http://www.isixsigma.com/tools-templates/sipoc-copis/sipoc-diagram/>
- SIPOC. (2015b). In *iSixSigma.com*. Retrieved June 8, 2015 from <http://www.isixsigma.com/dictionary/sipoc>
- Six Sigma vs. Lean Six Sigma*. (2015). Retrieved October 18, 2015, from <http://www.villanovau.com/resources/six-sigma/six-sigma-vs-lean-six-sigma/#.ViPp1SvSnpI>

- Six Sigma. (2015c). In *iSixSigma.com*. Retrieved June 8, 2015 from <http://www.isixsigma.com/dictionary/six-sigma>
- Smith, D., & Blakeslee, J. (2002). The New Strategic Six Sigma. *T+D*, 56(9), 45-52.
- Southern Regional Education Board. (2012, September). *Essential elements of state policy for college completion: Outcomes-based funding*. Retrieved June 23, 2015, from [http://publications.sreb.org/2012/Outcomes\\_Based\\_Funding.pdf](http://publications.sreb.org/2012/Outcomes_Based_Funding.pdf)
- Summary and Conclusions. (2013). *ASHE Higher Education Report*, 39(2), 79-90.
- Tharpe, W. (2014, May). *Georgia budget & policy institute policy report: Georgia still climbing out of deep economic hole*. Retrieved July 14, 2015, from <http://gbpi.org/wp-content/uploads/2014/05/SWGA-May-2014.pdf>
- The land-grant tradition. (2008). *National association of state universities and land-grant colleges*. Retrieved from ERIC database. (ED517309)
- The White House: President Barack Obama. (2014). *Higher education*. Retrieved March 1, 2016, from <https://www.whitehouse.gov/issues/education/higher-education>
- Unique [Def. 1]. (n.d.). In *Oxford Dictionaries*. Retrieved October 31, 2015, from [http://www.oxforddictionaries.com/us/definition/american\\_english/unique](http://www.oxforddictionaries.com/us/definition/american_english/unique)
- United States Census Bureau, State Government Tax Collections. (2014). *State tax collections summary report*. Retrieved July 14, 2015, from <http://www2.census.gov/govs/statetax/G14-STC-Final.pdf>
- United States Department of Labor, Bureau of Labor Statistics. (2012, February). *Spotlight on statistics: The recession of 2007–2009*. Retrieved July 14, 2015, from <http://www.bls.gov/spotlight/2012/recession/>

- Walters, G. (2012). It's not so easy: The completion agenda. *Liberal Education, Winter* 2012, 34-39.
- Waterbury, T. A. (2008). *Lean in higher education: A delphi study to develop performance metrics and an educational lean improvement model for academic environments* (Doctoral dissertation). Retrieved from ProQuest Digital Dissertations. (AAT 3331426).
- Weight [Def. 3.1]. (n.d.). In *Oxford Dictionaries*. Retrieved October 31, 2015, from [http://www.oxforddictionaries.com/us/definition/american\\_english/weight](http://www.oxforddictionaries.com/us/definition/american_english/weight)
- Weinstein, L. B., Petrick, J., Castellano, J., & Vokurka, R. J. (2008). Integrating Six Sigma Concepts in an MBA Quality Management Class. *Journal of Education for Business, 83*(4), 233-238.

APPENDIX A:  
Copyright Permission

**Re: State POC's for Research Study: "Determining Research- Based Metrics for Public Higher Education Outcomes-Based Funding Models"**

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From: Dennis Jones <Dennis@nchems.org>  
Sent: Wednesday, October 7, 2015 14:15  
To: Richard N Knepp  
Subject: Re: State POC's for Research Study: "Determining Research-Based Metrics for Public Higher Education Outcomes-Based Funding Models"

Permission granted.

*Sent from my Verizon Wireless 4G LTE DROID*

Richard N. Knepp

<rnknepp@valdosta.edu> wrote:

Good afternoon Dennis!

I am making great progress on CH II (Literature Review). I am requesting permission to use any data, images, and references from the <http://nchems.org/> and <http://www.higheredinfo.org/> web sites

Higher Education Finance > Revenues and support > Diagram - Understanding Higher Education Finance

I would like to use the attached image to explain a point of interest.

Thank you very much for your support, sir!

*-Richard*

Richard N. Knepp  
229-639-6469 (8AM-3PM EST)  
RNKnepp@Valdosta.Edu



APPENDIX B:

Board of Regents Funding Formula

## **BOR Funding Formula**

### **History**

The current BOR Funding Formula was developed in 1982 and first implemented in the FY 1984 budget. The formula is used to calculate the amount of funding appropriated by the Legislature and the Governor in a particular fiscal year. However, the funding formula is not used to allocate the money to the various institutions.

**BOR Formula** = [Instruction and Research] + [Academic Support] + [Student Services and Institutional Support] + [Operation and Maintenance of Plant] + [Fringe Benefits] + [Public Service and Community Education] + [Technology and Enhancement Program] +/- [Adjustments]

### **7 Parts to the BOR Funding Formula:**

- Part I: Instruction and Research
- Part II: Academic Support
- Part III: Student Services and Institutional Support
- Part IV: Operation and Maintenance of Plant
- Part V: Fringe Benefits
- Part VI: Public Service and Community Education
- Part VII: Technology and Enhancement Program

### **Part I: Instruction and Research**

- **Part I = Instruction + Research**
- 2 Subparts to Instruction and Research:
  - Instruction
  - Research

### ***Instruction***

- The BOR Instruction portion of the funding formula is based on credit hours.
- The credit hours used are the credit hours counted from 2 years prior (e.g.- the FY 2016 funding formula will be calculated using the FY 2014 credit hours).
- **Instruction = Cost of Professors + Cost of Support Staff + Instructional Expenses**
- *Step A: Calculation of the Number of Professors*
  - There are 5 groups of professors based on the subject they teach. The subject a professor teaches directly impacts the amount of credit hours they produce (i.e. – a professor that teaches history will have a higher credit hour output than a professor that teaches a lab course because of class size).
    - The 5 Groups are:
      - Group 1: Law, Letters, Library Science, Psychology, and Social Sciences
      - Group 2: Area Studies, Business, Communications, Education, Home Economics, Mathematics, Public Affairs, and Interdisciplinary Studies
      - Group 3: Agriculture, Architecture, Biological Sciences, Computer Science, Engineering, Fine and Applied Arts, Foreign Languages, Health Professions, Physical Sciences, and Technologies
      - Group 4: Learning Support Programs
      - Group 5: Medicine, Dentistry, and Veterinary Medicine

- Within these 5 groups are 3 instructional levels that are divided out based on the level at which the professor teaches. The level a professor teaches at directly impacts the amount of credit hours they produce (i.e.- a professor that teaches a large freshman history class will have a higher credit hour output than a professor that teaches a small medical lab course because of class size).
  - The 3 Instructional Levels are:
    - Lower Level
    - Upper Level
    - Graduate Level
- The Groups and Levels correspond to “instructional productivity” numbers. These instructional productivity numbers are used to calculate the number of professors needed for the number of credit hours produced in that Group/Level category.

**Instructional Productivity Numbers**

	<b>Lower Level</b>	<b>Upper Level</b>	<b>Graduate Level</b>
<b>Group 1</b>	884	624	265
<b>Group 2</b>	794	693	429
<b>Group 3</b>	627	512	227
<b>Group 4</b>	1,888	NA	NA
<b>Group 5</b>	NA	NA	253

- *Step B: Calculation of the Cost of the Professors*
  - To calculate the cost of the professors, multiply the number of professors in each Group/Level category calculated in Step A by the average salary rate of the Group.
  - The average salary rate in each group is the rate of the prior year plus any pay raise.
  - The average salary rates in FY16 were:

	<b>Average Salary Rate</b>
<b>Group 1</b>	\$62,392
<b>Group 2</b>	\$67,650
<b>Group 3</b>	\$75,579
<b>Group 4</b>	\$49,040
<b>Group 5</b>	\$152,439

- *Step C: Calculation of the Cost of Instructional Support Positions and Salaries*
  - The professors in each Group/Level category receive support from various personnel (i.e. - secretaries, assistants, etc.). These are funded in the Instructional support portion of the funding formula.
  - First, calculate the number of support positions. To calculate the cost of these support positions, divide the number of professors in each Group/Level category calculated in Step A by the position ratio for the corresponding group. The position ratio is the number of professors to support staff person (i.e. - 1 Group 1 support staff person supports 3.3 Group 1 professors).

	<b>Position Ratio</b>
<b>Group 1</b>	3.3

<b>Group 2</b>	3.3
<b>Group 3</b>	2.4
<b>Group 4</b>	2.4
<b>Group 5</b>	1.5

- Next, calculate the cost of the support staff positions by multiplying the number of support staff positions in each Group by the salary rate of the Group.
- The average salary rate in each group is the rate of the prior year plus any pay raise.
- The average salary rates in FY16 were:

	<b>Average Salary Rate</b>
<b>Group 1</b>	\$37,295
<b>Group 2</b>	\$37,295
<b>Group 3</b>	\$37,295
<b>Group 4</b>	\$37,295
<b>Group 5</b>	\$37,295

- Step D: Calculation of Instructional Operating Expenses
  - Instructional operating expenses are used to support the professors in teaching their courses. They pay for copying, etc.
  - To calculate the instructional operating expenses, multiply the number of credit hours by \$12.66.
  - **Instructional Operating Expenses = [Total Credit Hours] x \$12.66**

***Research***

- The funding for research is equal to the graduate instruction professors' salaries calculated in *Instruction Step B*.

**Part II: Academic Support**

- The funding for Academic Support provides support services for institution libraries, education media, computers labs, etc.
- Academic Support is calculated by multiplying the total number calculated in *Instruction and Research* by 18.9%.
- **Academic Support = [Instruction and Research] x 18.9%**

**Part III: Student Services and Institutional Support**

- The funding for Student Services provides support for the financial aid office, the bursar, counseling, admissions, etc.
- The funding for Institutional Support provides support for the college Presidents, CFOs, budget offices, HR, payroll, purchasing offices, etc.
- Student Services and Institutional Support is calculated by multiplying the total number calculated in *Instruction and Research* by 26.9%.
- **Student Services and Institutional Support = [Instruction and Research] x 26.9%**

**Part IV: Operation and Maintenance of Plant**

- Part IV = Regular Operations + Major Repair/Rehabilitation Fund + Utilities
- *Regular Operations*

- The funding for regular operations pays for personnel and operating costs of physical plant, maintenance, custodial, grounds, etc.
- Regular Operations is calculated by multiplying the total number of square feet used for resident instruction purposes on the campuses by \$5.1782.
- **Regular Operations = [Total Campus RI Square Feet] x \$5.1782**
- *Major Repair/Rehabilitation (MRR) Fund*
  - MRR provides funding for regular maintenance and repairs on BOR's buildings.
  - MRR is based on the replacement value of the buildings. MRR is funded at 1% of the replacement value of the buildings.
  - MRR has been funded with bond funding in recent years.
  - **Major Repair/ Rehabilitation (MRR) Fund = [Replacement Value] x 1%**
  - Note: MRR has received only bond funding since FY 2009
- *Utilities*
  - Utilities provides funding for electric, gas, water, etc.
  - Utilities funding is calculated by multiplying the total number of square feet used for resident instruction purposes on the campuses by \$2.1340.
  - **Utilities = [Total Campus RI Square Feet] x \$2.1340**

#### **Part V: Fringe Benefits**

- Fringe Benefits provides funding for the fringe benefits of the professors.
  - Includes funding for Social Security, Health Insurance, Life Insurance, Workers' Compensation, Unemployment Compensation, Employees Liability Insurance, Tort Claims Liability, and Teacher's Retirement.
- When calculating workload changes, the 'total positions' is the number of professor positions calculated in *Part I, Instruction, Step A*.
- Changes to health insurance are included in formula by calculating the yearly impact of rate changes to the employer premiums.

#### **Part VI: Public Service and Community Education**

- Public Service and Community Education provides funding for the Public Service Institutes, Community Education, Campus Coordinators, and the Minority Education Program.
- Community education capped at 2004 credit hour level.

#### **Part VII: Technology Enhancement Program**

- Technology Enhancement Program provides funding for technology advancement and innovation above and beyond normal support such as computer labs.
- Technology Enhancement Program is calculated the by summing Parts I through VI and multiplying that amount by 1.70%.
- **[Part I through Part VI] x 1.70%**

#### **Total Formula Requirement**

- Total Formula Requirement is the sum of Parts I – VII. In theory, this amount is equivalent to the total cost of educating students at the credit hour level entered in Part I. In reality, there have been minor adjustments to the variables in the formula since its inception 30+ years ago. Variables such as salaries, faculty course loads, utility rates, and more have remained relatively constant.

#### **Adjustments to Total Formula Requirement**

- Student Tuition is calculated as 25% of the total formula requirements (minus small adjustments). This was the amount determined by the creators of the formula to be the appropriate student cost level. The State was to fund the other 75% of the cost of higher education.
- Debt Service Payments are reductions to the USG appropriation to cover the debt service on projects such as dormitories and parking decks. These projects were funded by the General Assembly through the authorization of G.O. Bonds before authorities such as GHEFA existed to issue revenue bonds. Because the capital projects had auxiliary enterprise purposes instead of instruction or research, the General Assembly has reduced the amount of the appropriation to USG by the amount due for debt service. As the bonds expire, funding has historically been restored to the BOR.
- Other Funds and Programs are appropriation by the General Assembly for special projects related to the USG mission.
- Sustained Budget Reductions is the combined total of unfunded formula growth and reductions to the formula base.

**Total Formula Requirement +/- Adjustments = Appropriations to Board of Regents  
(Teaching Program)**

APPENDIX C:

University System of Georgia Fiscal Year 2016 Budget

**Exhibit I**  
**UNIVERSITY SYSTEM OF GEORGIA**  
**ALL BUDGETS FOR FISCAL YEAR 2016**

	EDUCATIONAL AND GENERAL	CAPITAL	AUXILIARY ENTERPRISES	STUDENT ACTIVITIES	TOTAL BUDGET
<i>Research Universities</i>					
Georgia Institute of Technology	\$ 1,035,124,868	\$ 66,000,000	\$ 151,768,602	\$ 14,163,521	\$ 1,267,056,991
Georgia Regents University	\$ 785,890,897	\$ 1,063,834	\$ 17,862,738	\$ 1,857,984	\$ 806,675,453
Georgia State University	\$ 725,049,717	\$ 1,975,000	\$ 44,843,137	\$ 18,185,195	\$ 790,053,049
University of Georgia	\$ 1,097,123,837	\$ 48,598,952	\$ 177,403,698	\$ 17,404,427	\$ 1,340,530,914
<i>Regional Universities</i>					
Georgia Southern University	\$ 276,603,574	\$ 75,000	\$ 89,917,062	\$ 10,887,236	\$ 377,482,872
Kennesaw State University	\$ 378,821,239	\$ 288,008	\$ 79,396,097	\$ 14,890,589	\$ 473,395,933
University of West Georgia	\$ 151,847,528	--	\$ 43,046,450	\$ 3,811,942	\$ 198,705,920
Valdosta State University	\$ 136,984,050	\$ 33,718	\$ 40,894,371	\$ 5,056,619	\$ 182,968,758
<i>State Universities</i>					
Albany State University	\$ 65,988,032	\$ 50,000	\$ 14,956,152	\$ 2,308,000	\$ 83,302,204
Armstrong State University	\$ 85,862,395	\$ 5,000,000	\$ 13,649,706	\$ 1,312,600	\$ 105,824,701
Clayton State University	\$ 81,759,892	--	\$ 14,653,751	\$ 2,500,450	\$ 98,914,093
Columbus State University	\$ 107,601,473	\$ 20,000	\$ 12,458,698	\$ 3,998,440	\$ 124,078,611
Fort Valley State University	\$ 70,673,183	--	\$ 12,404,318	\$ 517,977	\$ 83,595,478
Georgia College & State University	\$ 98,954,727	\$ 100,000	\$ 29,477,162	\$ 4,203,728	\$ 132,735,617
Georgia Southwestern State University	\$ 35,287,664	\$ 5,000	\$ 10,204,955	\$ 532,500	\$ 46,030,119
Middle Georgia State University	\$ 82,538,482	\$ 16,000	\$ 17,269,544	\$ 2,571,670	\$ 102,415,696
Savannah State University	\$ 82,236,663	--	\$ 32,030,360	\$ 2,502,450	\$ 116,769,473
University of North Georgia	\$ 158,566,148	--	\$ 32,330,773	\$ 3,030,907	\$ 193,927,828
<i>State Colleges</i>					
Abraham Baldwin Agricultural College	\$ 35,430,670	\$ 264,000	\$ 9,532,500	\$ 349,500	\$ 45,576,670
Atlanta Metropolitan State College	\$ 33,546,168	--	\$ 1,505,955	\$ 1,149,163	\$ 36,201,286
Bainbridge State College	\$ 27,148,347	\$ 3,000	\$ 457,320	\$ 1,785,100	\$ 29,393,767
College of Coastal Georgia	\$ 31,883,875	\$ 10,000	\$ 5,780,000	\$ 395,000	\$ 38,068,875
Dalton State College	\$ 42,578,413	\$ 15,000	\$ 3,388,447	\$ 627,265	\$ 46,609,125
Dartmouth College	\$ 51,497,288	\$ 1,220,000	\$ 6,496,751	\$ 2,050,000	\$ 61,264,039
East Georgia State College	\$ 25,234,809	\$ 1,000	\$ 1,941,758	\$ 85,000	\$ 27,262,567
Georgia Gwinnett College	\$ 117,553,953	\$ 11,500,000	\$ 16,904,000	\$ 6,526,300	\$ 152,484,253
Georgia Highlands College	\$ 42,337,296	--	\$ 1,367,012	\$ 2,181,574	\$ 45,885,882
Georgia Perimeter College	\$ 163,574,850	--	\$ 11,062,751	\$ 1,982,137	\$ 176,619,738
Gordon State College	\$ 33,847,798	\$ 40,000	\$ 10,985,010	\$ 1,378,000	\$ 46,250,808
South Georgia State College	\$ 24,791,860	\$ 2,061,894	\$ 4,740,920	\$ 423,181	\$ 32,017,855



**Exhibit 1**  
**UNIVERSITY SYSTEM OF GEORGIA**  
**ALL BUDGETS FOR FISCAL YEAR 2016**

	EDUCATIONAL AND GENERAL	CAPITAL	AUXILIARY ENTERPRISES	STUDENT ACTIVITIES	TOTAL BUDGET
<i>Other Units</i>					
Office of Information Technology Services	\$ 64,097,564	--	--	--	\$ 64,097,564
Regents Central Office-A	\$ 47,782,983	--	\$ 15,084,000	--	\$ 62,866,983
Shared Services Center - Sandersville	\$ 8,920,850	--	--	--	\$ 8,920,850
Georgia Research Alliance	\$ 5,344,609	--	--	--	\$ 5,344,609
System Services & Initiatives	\$ 13,108,932	\$ 60,000,000	--	--	\$ 73,108,932
Alternative Media Access Center (AMAC)	\$ 1,804,117	--	--	--	\$ 1,804,117
UGA Skidaway Inst of Oceanography-A	\$ 1,684,142	--	--	--	\$ 1,684,142
<b>Total Resident Instruction</b>	<b>\$ 6,229,102,913</b>	<b>\$ 198,340,406</b>	<b>\$ 923,813,998</b>	<b>\$ 128,668,455</b>	<b>\$ 7,479,925,772</b>
<i>Line Items</i>					
GA Public Telecommunications Commission	\$ 14,997,510	--	--	--	\$ 14,997,510
Georgia Military College	\$ 3,547,852	--	--	--	\$ 3,547,852
Georgia Public Libraries	\$ 38,091,920	--	--	--	\$ 38,091,920
Regents Central Office-B	\$ 10,627,794	--	--	--	\$ 10,627,794
Southern Regional Education Board (SREB)	\$ 1,267,160	--	--	--	\$ 1,267,160
Georgia Archives	\$ 5,335,533	--	--	--	\$ 5,335,533
Georgia Radiation Therapy Center	\$ 4,837,326	--	--	--	\$ 4,837,326
GJT Enterprise Innovation Institute	\$ 19,065,935	--	--	--	\$ 19,065,935
GJT Georgia Tech Research Institute	\$ 319,706,402	--	--	--	\$ 319,706,402
MCG Health Inc.	\$ 28,840,775	--	--	--	\$ 28,840,775
UGA Agricultural Experiment Station	\$ 76,047,446	--	--	--	\$ 76,047,446
UGA Athens/Tifton Vet Lab	\$ 5,785,273	--	--	--	\$ 5,785,273
UGA Cooperative Extension Service	\$ 57,371,347	--	--	--	\$ 57,371,347
UGA Forestry Cooperative Extension	\$ 1,386,419	--	--	--	\$ 1,386,419
UGA Forestry Research	\$ 12,910,812	--	--	--	\$ 12,910,812
UGA Marine Extension Service	\$ 2,589,238	--	--	--	\$ 2,589,238
UGA Marine Institute	\$ 1,413,279	--	--	--	\$ 1,413,279
UGA Skidaway Inst of Oceanography-B	\$ 5,073,798	--	--	--	\$ 5,073,798
UGA Vet Medicine Experiment Station	\$ 2,649,796	--	--	--	\$ 2,649,796
UGA Vet Medicine Teaching Hospital	\$ 14,917,163	--	--	--	\$ 14,917,163
<b>Total Line Items</b>	<b>\$ 626,462,778</b>	<b>\$ --</b>	<b>\$ --</b>	<b>\$ --</b>	<b>\$ 626,462,778</b>
<b>GRAND TOTAL</b>	<b>\$ 6,855,565,691</b>	<b>\$ 198,340,406</b>	<b>\$ 923,813,998</b>	<b>\$ 128,668,455</b>	<b>\$ 8,106,388,550</b>

**Exhibit 2  
UNIVERSITY SYSTEM OF GEORGIA  
EDUCATIONAL AND GENERAL - REVENUE  
BUDGET FOR FISCAL YEAR 2016**

	GENERAL - UNRESTRICTED				RESTRICTED			TOTAL
	STATE APPROPRIATION	TUITION	SPECIAL INSTITUTIONAL FEE	OTHER GENERAL	TOTAL GENERAL FUNDS	SPONSORED	DEPT SALES AND SERVICES	
<b>Research Universities</b>								
Georgia Institute of Technology	\$ 218,383,623	\$ 359,925,000	\$ 25,800,000	\$ 73,868,944	\$ 678,077,567	\$ 319,547,301	\$ 37,500,000	\$ 1,035,124,868
Georgia Regents University	\$ 183,024,988	\$ 77,265,929	\$ 6,000,000	\$ 33,791,519	\$ 300,082,436	\$ 463,186,481	\$ 9,134,100	\$ 13,487,880
Georgia State University	\$ 198,011,705	\$ 230,521,118	\$ 27,814,230	\$ 43,702,604	\$ 500,049,717	\$ 180,000,000	\$ 45,000,000	\$ 725,049,717
University of Georgia	\$ 328,974,296	\$ 340,233,863	\$ 35,000,000	\$ 54,121,345	\$ 778,329,504	\$ 250,000,000	\$ 68,794,333	\$ 1,097,123,837
<b>Regional Universities</b>								
Georgia Southern University	\$ 91,460,935	\$ 104,505,450	\$ 13,000,000	\$ 6,726,410	\$ 215,692,795	\$ 53,711,995	\$ 7,000,000	\$ 198,784
Kennesaw State University	\$ 114,519,722	\$ 167,108,304	\$ 20,345,850	\$ 7,627,644	\$ 309,601,520	\$ 56,331,723	\$ 12,387,996	\$ 500,000
University of West Georgia	\$ 49,416,540	\$ 59,518,813	\$ 7,690,000	\$ 4,492,765	\$ 121,078,118	\$ 24,518,548	\$ 5,974,360	\$ 276,502
Valdosta State University	\$ 45,712,334	\$ 51,423,555	\$ 7,300,000	\$ 4,936,206	\$ 109,372,095	\$ 25,049,998	\$ 2,561,957	\$ 136,984,060
<b>State Universities</b>								
Albany State University	\$ 19,471,697	\$ 18,566,355	\$ 1,800,000	\$ 1,800,000	\$ 41,638,052	\$ 24,000,000	\$ 350,000	\$ 65,988,052
Armstrong State University	\$ 29,912,995	\$ 32,561,000	\$ 3,741,000	\$ 2,086,400	\$ 68,301,395	\$ 17,335,000	\$ 226,000	\$ 85,862,395
Clyton State University	\$ 25,198,595	\$ 27,335,500	\$ 3,700,000	\$ 2,865,980	\$ 59,100,075	\$ 20,629,082	\$ 1,704,895	\$ 81,759,892
Columbus State University	\$ 34,413,634	\$ 39,844,124	\$ 4,151,100	\$ 4,242,801	\$ 82,751,659	\$ 21,607,882	\$ 3,241,932	\$ 107,601,473
Fort Valley State University	\$ 17,833,326	\$ 10,825,392	\$ 1,501,445	\$ 2,035,514	\$ 33,198,677	\$ 34,349,051	\$ 399,730	\$ 70,673,183
Georgia College & State University	\$ 31,307,908	\$ 50,005,740	\$ 4,200,000	\$ 2,567,200	\$ 88,281,848	\$ 8,614,073	\$ 2,038,806	\$ 96,954,727
Georgia Southern State University	\$ 11,204,775	\$ 12,515,000	\$ 1,800,000	\$ 618,700	\$ 26,138,475	\$ 8,960,877	\$ 30,000	\$ 35,287,664
Middle Georgia State University	\$ 31,560,380	\$ 22,512,649	\$ 4,093,753	\$ 3,767,282	\$ 61,934,064	\$ 19,640,793	\$ 983,625	\$ 80,558,482
Savannah State University	\$ 22,026,701	\$ 25,096,387	\$ 2,246,600	\$ 2,256,100	\$ 51,625,788	\$ 30,000,000	\$ 610,875	\$ 82,236,663
University of North Georgia	\$ 54,301,335	\$ 62,937,544	\$ 7,543,937	\$ 4,692,014	\$ 129,694,850	\$ 27,271,298	\$ 1,600,000	\$ 138,566,148
<b>State Colleges</b>								
Abraham Baldwin Agricultural College	\$ 15,258,174	\$ 9,004,750	\$ 1,432,000	\$ 996,727	\$ 26,691,651	\$ 8,533,019	\$ 206,000	\$ 35,430,670
Atlanta Metropolitan State College	\$ 10,395,948	\$ 7,511,124	\$ 1,417,800	\$ 843,000	\$ 20,167,562	\$ 13,299,263	\$ 78,943	\$ 33,546,168
Bainbridge State College	\$ 7,080,997	\$ 5,718,044	\$ 1,265,000	\$ 351,375	\$ 14,415,416	\$ 12,720,931	\$ 12,000	\$ 27,148,347
College of Coastal Georgia	\$ 13,318,875	\$ 7,780,000	\$ 1,340,000	\$ 902,000	\$ 23,343,875	\$ 8,500,000	\$ 40,000	\$ 31,883,875
Dalton State College	\$ 14,912,672	\$ 11,446,688	\$ 1,973,000	\$ 961,986	\$ 29,294,346	\$ 13,269,067	\$ 15,000	\$ 42,578,413
Darton State College	\$ 15,339,508	\$ 13,200,000	\$ 2,700,000	\$ 1,174,900	\$ 32,414,408	\$ 19,062,880	\$ 20,000	\$ 51,497,288
East Georgia State College	\$ 6,927,604	\$ 6,605,000	\$ 1,260,000	\$ 669,650	\$ 15,462,254	\$ 9,772,555	\$ ---	\$ 25,234,809
Georgia Gwinnett College	\$ 48,256,874	\$ 36,809,508	\$ 4,997,891	\$ 1,989,280	\$ 91,653,953	\$ 25,800,000	\$ 100,000	\$ 117,553,953
Georgia Highlands College	\$ 15,319,285	\$ 10,797,637	\$ 2,132,502	\$ 1,303,141	\$ 29,552,465	\$ 12,582,331	\$ 202,900	\$ 42,337,296
Georgia Perimeter College	\$ 47,225,523	\$ 52,193,997	\$ 10,810,323	\$ 3,326,386	\$ 113,556,229	\$ 49,402,394	\$ 616,227	\$ 163,574,850
Gordon State College	\$ 11,983,938	\$ 9,100,000	\$ 1,520,000	\$ 795,500	\$ 23,399,438	\$ 10,291,360	\$ 130,000	\$ 33,847,298
South Georgia State College	\$ 10,017,432	\$ 5,922,806	\$ 956,309	\$ 645,077	\$ 17,545,624	\$ 7,203,536	\$ 42,700	\$ 24,791,860

**Exhibit 2  
UNIVERSITY SYSTEM OF GEORGIA  
EDUCATIONAL AND GENERAL- REVENUE  
BUDGET FOR FISCAL YEAR 2016**

	GENERAL - UNRESTRICTED				RESTRICTED			TOTAL	
	STATE APPROPRIATION	TUITION	SPECIAL INSTITUTIONAL FEE	OTHER GENERAL	TOTAL GENERAL FUNDS	SPONSORED	DEPT SALES AND SERVICES		(State Funds) SPECIAL FUNDING INITIATIVE
<b>Other Units</b>									
Office of Information Technology Services	\$ 27,981,899	--	--	--	\$ 27,981,899	--	\$ 36,115,665	--	\$ 64,097,564
Regents Central Office-A	\$ 19,999,341	--	--	\$ 884,566	\$ 20,483,907	--	\$ 13,346,168	\$ 8,604,320	\$ 47,782,983
Shared Services Center - Sandersville	\$ 8,920,850	--	--	--	\$ 8,920,850	--	--	--	\$ 8,920,850
Georgia Research Alliance	--	--	--	--	--	--	--	\$ 5,344,609	\$ 5,344,609
System Services & Initiatives	\$ 13,108,932	--	--	--	\$ 13,108,932	--	--	--	\$ 13,108,932
Alternative Media Access Center (AMAC)	\$ 1,345,362	--	--	\$ 6,056	\$ 1,351,418	--	--	--	\$ 1,351,418
UGA Skidaway Inst of Oceanography-A	\$ 1,623,172	--	--	\$ 54,970	\$ 1,678,142	--	--	--	\$ 1,678,142
<b>Total Resident Instruction</b>	\$ 1,795,857,875	\$ 1,888,812,577	\$ 209,492,820	\$ 270,771,132	\$ 4,164,934,404	\$ 1,780,992,725	\$ 250,483,812	\$ 32,691,972	\$ 6,229,102,913
<b>Line Items</b>									
GA Public Telecommunications Commission	\$ 14,997,510	--	--	--	\$ 14,997,510	--	--	--	\$ 14,997,510
Georgia Military College	\$ 3,547,852	--	--	--	\$ 3,547,852	--	--	--	\$ 3,547,852
Georgia Public Libraries	\$ 32,869,520	--	--	--	\$ 32,869,520	\$ 5,222,400	--	--	\$ 38,091,920
Regents Central Office-B	\$ 10,627,794	--	--	--	\$ 10,627,794	--	--	--	\$ 10,627,794
Southern Regional Education Board (SREB)	\$ 1,267,160	--	--	--	\$ 1,267,160	--	--	--	\$ 1,267,160
Georgia Archives	\$ 4,646,232	--	--	--	\$ 4,646,232	\$ 99,107	\$ 590,174	--	\$ 5,335,533
Georgia Radiation Therapy Center	--	--	\$ 4,837,326	--	\$ 4,837,326	--	--	--	\$ 4,837,326
GIT Enterprise Innovation Institute	\$ 8,590,935	--	--	\$ 1,100,000	\$ 9,690,935	\$ 7,875,000	\$ 1,500,000	--	\$ 19,065,935
GIT Georgia Tech Research Institute	\$ 5,694,440	--	\$ 32,254,140	--	\$ 37,948,580	\$ 208,042,709	\$ 13,715,113	--	\$ 319,706,402
MCG Health Inc.	\$ 28,840,775	--	--	--	\$ 28,840,775	--	--	--	\$ 28,840,775
UGA Agricultural Experiment Station	\$ 38,494,527	--	--	\$ 9,552,919	\$ 48,047,446	\$ 22,000,000	\$ 6,000,000	--	\$ 76,047,446
UGA Athens/Tifton Y & Lab	--	--	--	--	--	\$ 375,000	\$ 5,410,273	--	\$ 5,785,273
UGA Cooperative Extension Service	\$ 32,287,418	--	--	\$ 8,083,929	\$ 40,371,347	\$ 3,750,000	\$ 13,250,000	--	\$ 57,371,347
UGA Forestry Cooperative Extension	\$ 810,431	--	--	--	\$ 810,431	\$ 475,988	\$ 100,000	--	\$ 1,386,419
UGA Forestry Research	\$ 2,660,386	--	--	\$ 1,250,426	\$ 3,910,812	\$ 9,000,000	--	--	\$ 12,910,812
UGA Marine Institute	\$ 1,243,709	--	--	\$ 745,529	\$ 1,989,238	\$ 600,000	--	--	\$ 2,589,238
UGA Marine Institute	\$ 926,998	--	--	\$ 118,633	\$ 1,045,631	\$ 367,648	--	--	\$ 1,413,279
UGA Skidaway Inst of Oceanography-B	\$ 1,273,178	--	--	\$ 300,000	\$ 1,773,178	\$ 2,710,620	\$ 550,000	--	\$ 5,073,798
UGA Vet Medicine Experiment Station	\$ 2,649,796	--	--	--	\$ 2,649,796	--	--	--	\$ 2,649,796
UGA Vet Medicine Teaching Hospital	\$ 417,163	--	--	--	\$ 417,163	--	\$ 14,500,000	--	\$ 14,917,163
<b>Total Line Items</b>	\$ 191,845,844	\$ --	\$ --	\$ 118,442,902	\$ 310,288,746	\$ 260,588,472	\$ 55,615,560	\$ --	\$ 626,462,778
<b>GRAND TOTAL</b>	\$ 1,987,703,719	\$ 1,888,812,577	\$ 209,492,820	\$ 389,214,054	\$ 4,475,233,150	\$ 2,041,551,197	\$ 306,099,372	\$ 32,691,972	\$ 6,855,565,691

**Exhibit 3**  
**UNIVERSITY SYSTEM OF GEORGIA**  
**EDUCATIONAL AND GENERAL - EXPENDITURES**  
**BUDGET FOR FISCAL YEAR 2016**

	PERSONAL SERVICES	OPERATING EXPENSES	TRAVEL	EQUIPMENT	TOTAL
<i>Research Universities</i>					
Georgia Institute of Technology	\$ 622,511,142	\$ 351,742,811	\$ 3,983,457	\$ 56,887,458	\$ 1,035,124,868
Georgia Regents University	\$ 581,152,532	\$ 198,716,285	\$ 2,505,814	\$ 3,516,266	\$ 785,890,897
Georgia State University	\$ 455,771,495	\$ 237,768,565	\$ 3,346,685	\$ 28,162,972	\$ 725,049,717
University of Georgia	\$ 740,267,835	\$ 312,808,001	\$ 10,493,835	\$ 33,554,166	\$ 1,097,123,837
<i>Regional Universities</i>					
Georgia Southern University	\$ 184,746,386	\$ 80,142,276	\$ 2,431,471	\$ 9,283,441	\$ 276,603,574
Kennesaw State University	\$ 238,040,382	\$ 125,722,594	\$ 2,822,926	\$ 12,235,337	\$ 378,821,239
University of West Georgia	\$ 100,455,038	\$ 48,451,981	\$ 1,167,498	\$ 1,773,011	\$ 151,847,528
Valdosta State University	\$ 91,949,470	\$ 42,999,021	\$ 1,052,775	\$ 982,784	\$ 136,984,050
<i>State Universities</i>					
Albany State University	\$ 38,601,212	\$ 25,738,235	\$ 656,813	\$ 991,792	\$ 65,988,052
Armstrong State University	\$ 53,424,006	\$ 30,359,587	\$ 679,414	\$ 1,399,388	\$ 85,862,395
Clayton State University	\$ 50,727,181	\$ 29,624,702	\$ 937,178	\$ 470,831	\$ 81,759,892
Columbus State University	\$ 67,753,220	\$ 38,346,471	\$ 590,550	\$ 911,232	\$ 107,601,473
Fort Valley State University	\$ 39,280,898	\$ 28,339,872	\$ 1,960,667	\$ 1,091,746	\$ 70,673,183
Georgia College & State University	\$ 73,329,641	\$ 24,463,399	\$ 572,367	\$ 589,320	\$ 98,954,727
Georgia Southwestern State University	\$ 23,297,796	\$ 11,492,401	\$ 272,003	\$ 225,464	\$ 35,287,664
Middle Georgia State University	\$ 51,806,855	\$ 29,716,823	\$ 662,804	\$ 372,000	\$ 82,558,482
Savannah State University	\$ 42,578,117	\$ 37,313,264	\$ 765,041	\$ 1,580,241	\$ 82,236,663
University of North Georgia	\$ 109,923,781	\$ 45,376,412	\$ 1,388,741	\$ 1,877,214	\$ 158,566,148
<i>State Colleges</i>					
Abraham Baldwin Agricultural College	\$ 18,488,792	\$ 16,367,878	\$ 471,625	\$ 102,375	\$ 35,430,670
Atlanta Metropolitan State College	\$ 18,699,502	\$ 14,491,771	\$ 266,735	\$ 88,160	\$ 33,546,168
Bainbridge State College	\$ 12,027,238	\$ 14,867,266	\$ 173,379	\$ 80,464	\$ 27,148,347
College of Coastal Georgia	\$ 19,390,987	\$ 12,120,706	\$ 322,182	\$ 50,000	\$ 31,883,875
Dalton State College	\$ 25,185,331	\$ 16,993,482	\$ 253,896	\$ 145,704	\$ 42,578,413
Darton State College	\$ 27,877,263	\$ 23,259,580	\$ 235,445	\$ 125,000	\$ 51,497,288
East Georgia State College	\$ 12,388,501	\$ 12,679,001	\$ 121,137	\$ 46,170	\$ 25,234,809
Georgia Gwinnett College	\$ 71,704,024	\$ 42,728,649	\$ 513,597	\$ 2,607,683	\$ 117,553,953
Georgia Highlands College	\$ 23,152,486	\$ 18,737,823	\$ 218,806	\$ 228,181	\$ 42,337,296
Georgia Perimeter College	\$ 94,415,475	\$ 65,803,526	\$ 786,729	\$ 2,569,120	\$ 163,574,850
Gordon State College	\$ 19,881,658	\$ 13,603,840	\$ 212,800	\$ 149,500	\$ 33,847,798
South Georgia State College	\$ 12,816,440	\$ 11,527,841	\$ 400,122	\$ 47,457	\$ 24,791,860

**Exhibit 3**  
**UNIVERSITY SYSTEM OF GEORGIA**  
**EDUCATIONAL AND GENERAL - EXPENDITURES**  
**BUDGET FOR FISCAL YEAR 2016**

	PERSONAL SERVICES	OPERATING EXPENSES	TRAVEL	EQUIPMENT	TOTAL
<i>Other Units</i>					
Office of Information Technology Services	\$ 21,777,636	\$ 33,291,255	\$ 376,700	\$ 8,651,973	\$ 64,097,564
Regents Central Office-A	\$ 18,801,308	\$ 28,599,579	\$ 380,296	\$ 1,800	\$ 47,782,983
Shared Services Center - Sandersville	\$ 3,105,518	\$ 5,745,332	\$ 70,000	--	\$ 8,920,850
Georgia Research Alliance	--	\$ 5,344,609	--	--	\$ 5,344,609
System Services & Initiatives	--	\$ 13,108,932	--	--	\$ 13,108,932
Alternative Media Access Center (AMAC)	\$ 1,804,117	--	--	--	\$ 1,804,117
UGA Skidaway Inst of Oceanography-A	\$ 1,106,314	\$ 562,828	\$ 15,000	--	\$ 1,684,142
<b>Total Resident Instruction</b>	<b>\$ 3,968,239,577</b>	<b>\$ 2,048,956,598</b>	<b>\$ 41,108,488</b>	<b>\$ 170,798,250</b>	<b>\$ 6,229,102,913</b>
<i>Line Items</i>					
GA Public Telecommunications Commission	--	\$ 14,997,510	--	--	\$ 14,997,510
Georgia Military College	--	\$ 3,547,852	--	--	\$ 3,547,852
Georgia Public Libraries	\$ 3,553,204	\$ 34,422,249	\$ 111,296	\$ 5,171	\$ 38,091,920
Regents Central Office-B	\$ 3,684,773	\$ 6,847,521	\$ 95,500	--	\$ 10,627,794
Southern Regional Education Board (SREB)	--	\$ 1,267,160	--	--	\$ 1,267,160
Georgia Archives	\$ 1,561,868	\$ 3,755,665	\$ 18,000	--	\$ 5,335,533
Georgia Radiation Therapy Center	\$ 2,719,620	\$ 2,117,706	--	--	\$ 4,837,326
GIT Enterprise Innovation Institute	\$ 15,003,858	\$ 3,102,876	\$ 951,601	\$ 7,600	\$ 19,065,935
GIT Georgia Tech Research Institute	\$ 157,347,181	\$ 131,393,844	\$ 111,171,966	\$ 19,793,411	\$ 319,706,402
MCG Health Inc.	\$ 27,737,585	\$ 1,103,190	--	--	\$ 28,840,775
UGA Agricultural Experiment Station	\$ 52,260,724	\$ 22,437,245	\$ 895,963	\$ 453,514	\$ 76,047,446
UGA Athens/Tifton Vet Lab	\$ 3,578,758	\$ 2,138,825	\$ 12,934	\$ 54,756	\$ 5,785,273
UGA Cooperative Extension Service	\$ 48,048,608	\$ 8,351,608	\$ 893,672	\$ 77,459	\$ 57,371,347
UGA Forestry Cooperative Extension	\$ 1,060,532	\$ 290,491	\$ 35,396	--	\$ 1,386,419
UGA Forestry Research	\$ 8,980,626	\$ 3,506,453	\$ 227,731	\$ 196,002	\$ 12,910,812
UGA Marine Extension Service	\$ 2,199,098	\$ 371,672	\$ 18,468	--	\$ 2,589,238
UGA Marine Institute	\$ 828,645	\$ 582,053	\$ 2,581	--	\$ 1,413,279
UGA Skidaway Inst of Oceanography-B	\$ 3,685,223	\$ 1,293,338	\$ 36,971	\$ 58,266	\$ 5,073,798
UGA Vet Medicine Experiment Station	\$ 2,268,670	\$ 369,628	\$ 11,498	--	\$ 2,649,796
UGA Vet Medicine Teaching Hospital	\$ 5,870,967	\$ 9,046,196	--	--	\$ 14,917,163
<b>Total Line Items</b>	<b>\$ 340,389,940</b>	<b>\$ 250,943,082</b>	<b>\$ 14,483,577</b>	<b>\$ 20,646,179</b>	<b>\$ 626,462,778</b>
<b>GRAND TOTAL</b>	<b>\$ 4,308,629,517</b>	<b>\$ 2,299,899,680</b>	<b>\$ 55,592,065</b>	<b>\$ 191,444,429</b>	<b>\$ 6,855,565,691</b>

Exhibit 4  
**UNIVERSITY SYSTEM OF GEORGIA**  
**EDUCATIONAL AND GENERAL**  
**SUMMARY OF FUNCTIONS BY FUND SOURCE**  
**FOR FISCAL YEAR 2016**

	<u>General Funds</u>	<u>Sponsored</u>	<u>Dept Sales and Services</u>	<u>Special Funding Initiative</u>	<u>Total By Function</u>
<i>Summary of Functions by Fund Source</i>					
Instruction	\$ 1,782,274,454	\$ 91,562,323	\$ 99,437,612	\$ 11,133,817	\$ 1,984,408,206
Research	\$ 494,935,576	\$ 813,120,699	\$ 27,245,960	\$ 2,780,362	\$ 1,338,082,597
Public Service	\$ 201,760,906	\$ 445,614,622	\$ 54,420,050	\$ 7,949,920	\$ 709,745,498
Academic Support	\$ 551,486,899	\$ 21,542,804	\$ 29,578,798	\$ 1,387,468	\$ 603,995,969
Student Services	\$ 220,891,975	\$ 4,716,297	\$ 11,508,960	\$ 45,432	\$ 237,162,664
Institutional Support	\$ 645,180,490	\$ 48,491,585	\$ 74,726,607	\$ 9,394,973	\$ 777,793,655
Operation and Maintenance of Plant	\$ 574,514,850	\$ 2,996,805	\$ 9,181,385	\$ -	\$ 586,693,040
Scholarships and Fellowships	\$ 4,178,000	\$ 613,506,062	\$ -	\$ -	\$ 617,684,062
<b>TOTAL BY FUND SOURCE</b>	<b>\$ 4,475,223,150</b>	<b>\$ 2,041,551,197</b>	<b>\$ 306,099,372</b>	<b>\$ 32,691,972</b>	<b>\$ 6,855,565,691</b>

APPENDIX D:  
Introduction E-mail

Subject: Request for dissertation research participation from [STATE]

Dear Mr./Mrs./Dr. [PARTICIPANT NAME],

My name is Richard N. Knepp. I am an Adult and Career Education (ACED) Doctoral Candidate at Valdosta State University (VSU) in Valdosta, Georgia. My Doctoral Research title is: “**Identifying Research-Based Parameters for Developing Public Higher Education Outcomes-Based Funding Models.**” The purpose of my research study is to provide clearly articulated parameters that might serve as a basis for the development of a generalizable outcomes-based funding model that any state can use.

Your state has been identified by the National Center for Higher Education Management Systems (NCHEMS.ORG) as one of the ten states that is doing great work in implementing outcomes-based funding. I would like to solicit your cooperation and participation to assist me by discussing and exploring your state’s funding model with you.

Participation in this study is completely voluntary and your anonymity is assured. The attached survey questionnaire verifies the elements, metrics, and weights for your state’s outcomes-based funding model (estimated duration: less than 10 minutes). Please answer and return the attached survey questionnaire by [DATE]. In addition, I would like to coordinate a date and time with you later for a follow-up telephone interview (estimated duration: one hour) at your convenience. My expected graduation date is in December 2016. At the conclusion of my study, I will send you an executive summary report of my findings.

Please feel free to contact me with any questions or comments you may have about this study. If you are not the correct point of contact to assist in providing the information for your state, or if you cannot participate in the study, I would greatly appreciate your providing another point of contact.

Questions regarding the purpose or procedures of the research should be directed to *Richard N. Knepp* at 229-639-6469 or [rnknepp@valdosta.edu](mailto:rnknepp@valdosta.edu). This study has been exempted from Institutional Review Board (IRB) review in accordance with Federal regulations. The IRB, a university committee established by Federal law, is responsible for protecting the rights and welfare of research participants. If you have concerns or questions about your rights as a research participant, you may contact the IRB Administrator at 229-259-5045 or [irb@valdosta.edu](mailto:irb@valdosta.edu).

*Thank you very much for your support!*

Sincerely,  
Richard N. Knepp



APPENDIX E:  
Survey Questionnaire

## Questionnaire

Participation in this study is completely voluntary and your anonymity is assured.

The following elements, metrics, and weights were identified by your State's Higher Education (SHED)/[LINK(s)] Office for your states outcomes-based funding model. Please review and verify (this is the formula). After I receive your verification response, I will send an e-mail to schedule a follow-up telephone interview with you to explore in more detail your state's funding model.

State: [STATE]

Elements: [ELEMENTS] \*

Metrics: [METRICS] \*

Weights: [WEIGHTS] \*

\* [IF NEEDED] Please see attached Funding Formula documents.

1. I am at least 18 years old.
  - a.  Yes  No
2. Please verify the elements, metrics, and weights above for your state.
  - a.  Correct  Incorrect
  - b. If incorrect, what corrections should be made?
3. Has this funding model changed in the last five years?
  - a.  Yes  No
  - b. If Yes, please tell me the nature of the change(s):

Questions regarding the purpose or procedures of the research should be directed to *Richard N. Knepp* at 229-639-6469 or [rnknepp@valdosta.edu](mailto:rnknepp@valdosta.edu). This study has been exempted from Institutional Review Board (IRB) review in accordance with Federal regulations. The IRB, a university committee established by Federal law, is responsible for protecting the rights and welfare of research participants. If you have concerns or questions about your rights as a research participant, you may contact the IRB Administrator at 229-259-5045 or [irb@valdosta.edu](mailto:irb@valdosta.edu).

**Thank you!**

APPENDIX F:

Thank You Note and Schedule Follow-up Interview E-mail

Subject: Research participation for [STATE]: schedule follow-up interview

Good morning/afternoon Mr./Mrs./Dr. [PARTICIPANT NAME],

I have received your survey questionnaire response. Thank you very much!  
**[Note. Is there something that needs to be addressed from the survey? – Remove if not needed]** Please let me know a date and time that I can schedule a follow-up telephone interview with you to explore in more detail your state's funding model (estimated duration: one hour). I am hoping to complete the interviews by **April 30, 2016**.

Questions regarding the purpose or procedures of the research should be directed to *Richard N. Knepp* at 229-639-6469 or [rnknepp@valdosta.edu](mailto:rnknepp@valdosta.edu). This study has been exempted from Institutional Review Board (IRB) review in accordance with Federal regulations. The IRB, a university committee established by Federal law, is responsible for protecting the rights and welfare of research participants. If you have concerns or questions about your rights as a research participant, you may contact the IRB Administrator at 229-259-5045 or [irb@valdosta.edu](mailto:irb@valdosta.edu).

*Thanks again!*

Sincerely,  
Richard N. Knepp

APPENDIX G:

Reminder E-mail with Sample Questions

Subject: Research participation for [STATE] follow-up interview reminder

Good morning/afternoon Mr./Mrs./Dr. [PARTICIPANT NAME],

This is a reminder of our follow-up telephone interview scheduled for: [DATE] at [TI:ME AM/PM] [MST/CST/EST] (estimated duration: one hour), and I will call you at your office phone number: (###-###-####). As a reminder, my Valdosta State University Doctoral Research title is: “**Identifying Research-Based Parameters for Developing Public Higher Education Outcomes-Based Funding Models.**” The following is an example (do not respond) of the topics I will be discussing with you during our follow-up telephone interview:

1. Your thoughts and feelings concerning the funding model’s strengths and weaknesses.
2. What was the rationale for selecting the model’s elements, weights, and progression metrics?
3. If the metrics are weighted, how are the various metrics weighted, ordered, or prioritized including the rationales?

Questions regarding the purpose or procedures of the research should be directed to *Richard N. Knepp* at 229-639-6469 or [rnknepp@valdosta.edu](mailto:rnknepp@valdosta.edu). This study has been exempted from Institutional Review Board (IRB) review in accordance with Federal regulations. The IRB, a university committee established by Federal law, is responsible for protecting the rights and welfare of research participants. If you have concerns or questions about your rights as a research participant, you may contact the IRB Administrator at 229-259-5045 or [irb@valdosta.edu](mailto:irb@valdosta.edu).

*I look forward to our conversation. Thank you very much for your support!*

Sincerely,  
Richard N. Knepp

APPENDIX H:

Follow-up Telephone Interview Questions

## Follow-up Telephone Interview Questions

**Read:** VSU IRB consent statement.

**Question 1:** Based on your e-mail survey questionnaire response you indicated the model I sent was current and accurate. Is this still true?  Yes  No

**Or**

You indicated on your e-mail survey questionnaire response that it was not accurate. Can we talk about the issues you indicated on the response?

**Question 2:** What do you feel are the strengths of this model?

**Question 3:** What weaknesses can you identify with the model?

**Question 4:** Were there any difficulties implementing the funding model?

**Question 5:** Do you have any data or evidence that this funding formula is achieving what it was intended to achieve?  Yes  No

If **Yes**, what and where is the evidence?

If **No**, follow up question: What is your perception with regards to the funding formula achieving what it was intended to achieve?

**Question 6:** Talk to me about the elements, metrics, and weights. What was the rationale for selecting these elements, progression metrics, and weights?

**Question 7:** If the metrics are weighted, how and why were the various metrics weighted, ordered, or prioritized?

**Question 8 (If applicable):** You responded in the questionnaire that the funding model has changed in the last five years. Let's talk about why it was changed. What has changed?

**Question 9:** Is there anything you would change concerning this model? Would you toss-out or add a metric? Why? What would it be?

**Question 10:** What do you feel are the top three metrics? Why is that?

**Question 11:** Is there any information you would like to add at this time?



APPENDIX I:  
Funding Model Sources and Links

State	Organization Name (Acronym) and Information Link
Arkansas	Arkansas Department of Higher Education (ADHE) <a href="http://www.adhe.edu/institutions/master-plan">http://www.adhe.edu/institutions/master-plan</a>
Illinois	Illinois Board of Higher Education (IBHE) <a href="http://www.ibhe.org/PerformanceFunding/default.htm">http://www.ibhe.org/PerformanceFunding/default.htm</a>
Indiana	Commission for Higher Education (CHE) <a href="http://www.in.gov/che/2772.htm">http://www.in.gov/che/2772.htm</a>
Louisiana	Board of Regents/Higher Education Governance Commission (HIED) <a href="http://www.regents.la.gov">http://www.regents.la.gov</a>
Missouri	Missouri Department of Higher Education (MDHE) <a href="http://dhe.mo.gov/">http://dhe.mo.gov/</a>
Nevada	Nevada System Of Higher Education (NSHE) <a href="http://system.nevada.edu">http://system.nevada.edu</a>
New Mexico	New Mexico Higher Education Department (NMHED) <a href="http://www.hed.state.nm.us/">http://www.hed.state.nm.us/</a>
Ohio	Ohio Department of Higher Education (ODHE) <a href="https://www.ohiohighered.org/">https://www.ohiohighered.org/</a>
Oklahoma	Oklahoma State Regents for Higher Education (OSRHE) <a href="http://www.okhighered.org/">http://www.okhighered.org/</a>
Tennessee	Tennessee Higher Education Commission (THEC) <a href="http://www.tn.gov/thecc">http://www.tn.gov/thecc</a>

APPENDIX J:  
All Funding Model Metrics

All Funding Model Metrics	Frequency	Percentage
Progression/Course Completion (Hours)	8	80%
Associates/Undergraduate Degree	8	80%
Technical Certification/Credentials/Diploma	7	70%
Progression/Course Completion (FTEs)	7	70%
Bachelor's Degree	6	60%
Graduation Rates	6	60%
Masters/Specialist Degree	5	50%
Transfer Students Credentials	5	50%
Research	5	50%
Doctorate/Law/Professional Degree	4	40%
STEM/Health Care Credentials	4	40%
Remedial Credentials/Rate/Success	4	40%
Technical Certification/License	4	40%
Pell Eligibles/At-Risk/Retention	4	40%
Employment/Placement	4	40%
Low Income/% Low Income	3	30%
Adults	3	30%
Retention	3	30%
Course Completion	3	30%
Time to Award Earning Degree	3	30%
High Demand Credentials	2	20%
External Grants and Awards	2	20%
Credentials	2	20%
Cost per Completion	2	20%
Cross/Dual Enrolled 2 & 4 Yr. Institutions	2	20%
Minority Credential	1	10%
Program Certification/Accreditation	1	10%
Compensatory	1	10%
Workforce Training	1	10%
Hispanic	1	10%
Black, Non-Hispanic	1	10%
Underprepared	1	10%
Cost per Credit Hour	1	10%
Quality of Student Learning	1	10%
Minority Bachelors	1	10%
Minority Masters +	1	10%
First-Time Entry Students	1	10%
CCA Degree Target Completion	1	10%

*Note.* Percentage of states that participated in the study.

APPENDIX K:

Metrics and Weights for Element: Degree/Credential/Performance

Element: Degree/Credential/Performance Metrics	State Code				
	P89	P32	P73	P38	P11
	Weights				
Progression/Course Completion (Hours)	0.50	\$300- \$1,500		1.15	Variable 3-7%
Associates/Undergraduate Degree		\$4,000	0.30	1.15	Variable 15-25%
Technical Certification/Credentials/Diploma	1.00	\$2,000	0.20	1.15	
Progression/Course Completion (FTEs)			0.10		Variable 1-17%
Bachelor's Degree	1.00	\$8,000	0.30		Variable 15-30%
Graduation Rates				1.15	Variable 15-30%
Masters/Specialist Degree		\$4,000	0.10		Variable 15-20%
Transfer Students Credentials	O 1.00		0.10	1.15	Variable 5-10%
Research			0.15		Variable 10-15%

*Note.* State Code P89 can select Optional (O) metrics for a total of 4, and are variable. Weights for State Code P11 were determined by institution or mission.

APPENDIX L:

Metrics and Weights for Element: Region/Mission

Element: Region/Mission	State Code			
	P89	P32	P58	P11
Metrics				
			Weights	
Progression/Course Completion (Hours)			1	
Associates/Undergraduate Degree		\$3,000	1	
Technical Certification/Credentials/Diploma		\$1,500	1	Variable 1-17%
Progression/Course Completion (FTEs)			1	
Graduation Rates		\$6,000	1	
Transfer Students Credentials	Variable 0-2.0	\$1,400		

*Note.* State Code P89 can select optional metrics for a total of 4. State Code P58 reported that all metrics are weighted equally. Weights for State Code P11 were determined by institution or mission.



APPENDIX M:

Transcription of Telephone Interviews

## Research Participant P14

Q Okay. The first survey question basically indicates that the model I sent you was current and accurate. Is that still the case?

A It is.

Q Okay. What do you feel are the strengths of this funding model?

A Well, I think at a, at a very high level, the significant strength is that it, it changed the conversation in the state of (P14). We had a predominately enrollment-based funding formula for a, a large number of years, and when you think about the incentive that creates, (um), they are not really aligned with the goals of the state in terms of getting more students with a credential into the workforce. And so, transitioning to a performance-based funding formula really just changed the conversation and dialog at our institutions of higher education, but it also changed the dialog at the state house, with our elected representatives, in the public, (uh), with the parents, if they were, you know, looking at options to send their, their kids to a public institution of higher education. Suddenly those institutions were being evaluated, not on the number of students that they could enroll, but on the number of students that were successfully completing courses and degrees. And so I think that the, just at the highest level, the, the biggest strength is that it, it reminds public institutions of higher education why they are there, and that their purpose is to, you know, really do everything they possibly can to provide students with a credential that will help them to (um), better their lives, and get them something they can use in the workforce to get a job. I think more specifically one of the, one of the strengths that I feel is, is really important to highlight is the (uh), incorporation of what are called access weights into the formula. And in the department of higher education we spend a lot of time, (uh), doing a great deal with analysis to look at individual student characteristics, and attribute them to the likelihood that either, to complete or not complete at the, at a public institution of higher education, and the last thing we want to do is develop a formula that is dis-incentivized institutions from taking risks on students who might be at risk in a higher Ed institution. And so, what we have is, is four individual characteristics that are imbedded with our formula where, you know, if a, if a student meets one of those criteria, is enrolled at a public institution, and is successful at that institution, there is a financial incentive that is provided to the institution for (um), for a couple of reasons. One is to recognize the additional investment that is required to often be successful with at risk students, you know, whether it through counseling, or advising, (um), theirs is just a more costly exercise to provide the services that are necessary for the at risk student. That is one of the reasons we wanted to do it. The second reason is just to make a very public case for incentivizing institutions that continue to take risks on students who, (um), might be considered at-risk. We have a variety of at-risk institutions in our state. You know, institutions that really call them to be open-access institutions, and so we wanted to be sure the formula didn't (um), unduly harm them. So, those are some of the strengths I think, I think I really see are in our formula.

Q Okay, that's good! Some of the other states I have talked to, they focus on Pell recipients because they, according to their research, most Pell recipients are also at-risk.

A Yea, that's one of our criteria as well. That's (uh), definitely true, income has at least from our data, definitely has a correlation to at-risk students.

Q What weaknesses can you identify with this model?

A I think (um), (pause) you know, it relies on (pause), I'll start, I'll start this way, (um), I mean we have been incredibly fortunate in our state for (um), to receive an increase in state appropriations over the time in which the formula has been implemented. So, every year in which we've (uh), phased-in our performance-based funding formula, the general assembly has (uh), been fortunate enough to provide additional resources to public institutions of higher education. But I think from a weakness standpoint, the inverse is also true in the sense that there could, there could come a time where as revenues decline, and there are less resources for all, all factors of state government. You could have institutions who are doing better from a course completion and a degree completion standpoint, who could conceivably get less state appropriations in an environment in which (um), revenues were declining, and total appropriations were, were decreasing. And so, while we have not experienced that weakness yet, we have, you know, just knowing it's a possibility, is something I would identify as, as a weakness. I think the other thing is just the ability to explain it succinctly. You know we, we tried really, really hard when we were developing our formula to develop something that wasn't overly complicated. That you could, you could explain it to somebody, our formula is 100% enrollment-based. It provides resources for course completion, degree completion, and other (um), criteria that indicated that a student is successfully progressing towards a credential. But when you really start to explain it to the people at the institutions who want to understand it more deeply, you know, so the institutions research director was, CFO's, one of the weaknesses is just that it is challenging to explain. When you get into nuances (um), are difficult to explain. Because its \$1.9 billion dollars a year, there's 37 public institutions, there's a lot of data that goes into it, so it's just inherently complicated.

Q Were there any difficulties implementing this funding model?

A Well, let me, let me ask you for clarification on the word implementing. I mean are you referring to parts of the department implementing it, or in terms of just the data, and, and, paying people on behalf of it, or are you talking about the more political process of developing a new performance-based funding formula.

Q The process of going from enrollment-based to performance-based.

A It was a very (uh), challenging process to do that. (Um), you have, the culture of institutions that are comfortable with the former, the former formula and the way in which it, it allocated resources. Anytime you are going from a, from a known to an unknown, you know, there's fear, (um), consternation. There can be (um), hesitation and

resistance. In our state the governor really (um), made this a signature issue. Something that he (uh), wanted to let institutions to pursue. And he utilized (um), a couple, a couple of things really well. I mean one; he utilized the media really well. To sort of highlights some of the shortcomings of our public institutions. And to say you know, these are our current graduation rates, these are the number of students who come to an institution, get some credits, accumulate student debt and then leave, with nothing to show for it at the end. And he kind of presented that information in a way to say the status quo really is not working and our education and we have an incentive set up in our state funding formula where we are allocating an enormous amount of resources every year and to what end are we allocating those resources. And he sort of posed that question publicly. And then used that to really set the stage for the second piece. That I think that he really did well which was appealing to the intellectual egos of higher education leaders. So he really called them all together and said, (um), you all are incredibly smart, you know, you, you manage multi-billion dollar institutions every day, you, you know what you're doing. We want to rely on you to develop a new performance-based funding formula. And, and he really put the onus back on them to say here's where I want to end up. I want to end up with a formula that allocates our resources based on performance rather than enrollment. And he left it to them to sort of come back to him with recommendations, and how to do that. And the outcome, I mean the outcome, the ultimate outcome was that (um), I think we got a product that was better than we would have gotten had state officials (um), drafted a formula on their own, in a vacuum. And there was more buy in because public institutions each had a representative at the table, working through the data, making recommendations. And so at the end of the day when they, when they brought their recommendation forth, it felt like their recommendations rather than something that a state agency was telling them as a mandate you must do, and so. I think all those were challenges, I mean there were definitely challenges in the transition. I think those two pieces using the media, and really up, you know, asking the institutions to develop the formula were two pieces that really, really worked well in our state.

Q That's great, the buy-in.

A It was amazing. I mean, it was amazing to see it in action, because you know, the reality is that had we, if the governor had, had called the department of higher education and said develop a performance-based funding formula, we, would, there's no way we would have gone as far as the public institutions were willing to go on their own. I mean they really came back with a proposal to allocate 100% of their resources based on performance, and (um), you know, there's no way that had they mandated that ever would not be feasible. It would have been fought by the institutions in the general assembly, if, if it was a mandate that they were being told to adopt. And so, as it were, they, they came forth with recommendations, and they actually sent representatives to present testimony to the general assembly to testify on behalf of the 100% performance-based formula. So it was really a, (uh), very savvy and wise way to (um), enact change. And I mean really, they, there, they benefitted from in it in a sense that from an appropriations standpoint, if you're a member of the general assembly, and you're, you're making decisions as to how to allocate resources, and you have a group who is resistant, has a tendency to be combative, versus a group who really is, is embracing

change and saying we understand that the status quo wasn't working, we're willing to put ourselves out there and adopting a new way of being paid, (um), there was, there were, there was more incentive for the, to pump the higher general assembly to (uh), to reward them (uh), with through additional resources in recognition to their commitment to, to the students.

Q Okay. Do you have any data or evidence that the funding formula is achieving what it was intended to achieve?

A We are (uh), in the early stages of really compiling that. You know, so we're in FY 16 right now. FY 15 was the first full year of implementation, so it's a bit early (um), the retention data suggests that retention is, is definitely being improved (um), over that time period. One of the things we, we have to try to account for is the enrollment decline that we have experienced in this state. (Um), you know, perhaps due to our location, or other, other characteristics. (Uh), during the recession, we saw a massive increase in enrollments. And so we are still, as we come out of the recession, our economy is doing very well, you know. As is, as is true in most other states, (um), enrollment is tied fairly closely to the economy, and whether it's doing good or bad, so. We've had a decline in enrollment, and so from a credential standpoint, trying to ascertain if we're going up or down in degrees and certificates. Trying to really (um), factor out the, the enrollment fluctuations in addition to that. So, I would say the retention is really the big thing that we have noted early on, (um), and we are certainly actively in the process of developing reports that will tell us, (um), as the formula continues to be implemented, whether to tune in the desired outcomes because multiple people want to know. I mean, there's, there's many stakeholders who are anxious to see is this (uh), producing the right you know, is this producing the outcomes that we thought it would.

Q Okay. You mentioned degrees, certificates, and retention. Can you talk to me about the elements, metrics, and weights, and the rationale for selecting those?

A Well I guess the first thing I would say is that (um), we made a very conscious decision early on that we were going to develop the, the full funding formula for our community colleges, and a funding formula for our universities. Because as we were all sitting in a room kind of working through the information and trying to put something down, it became apparent very early on that the missions of the two sectors was different enough that we would all be far better off to develop separate formulas for each sector rather than (uh), fighting about the criteria for a single formula. (Um), so in the 4-year side, the feeling very strongly was that degrees are what we want to incentivize. We want to incentivize getting a student a degree (um), as quickly as possible, at the lowest possible cost and so, 50% of the 4-year funding formula is, is allocated for degrees, (um), right off the top, and that was really the focus of the conversations. That was really the highlight that most people picked up on was the universities are, are literally allocating half of their state resources for degree completion. (Um), 30% is allocated for course completion, and then approximately 20% is allocated for the support of (um), medical and doctoral students at our public institutions of higher education. And each component of the formula is cost-based. Meaning that we, we collect data from each public

institution to tell us how much it costs on average to provide a course or a degree in a given subject matter. And so obviously certain subjects are, are more costly to provide whether it is due to, you know, cost of faculty in those areas, or equipment, laboratory space, etc. And so our, our formula subsidizes institutions in proportion to the cost of providing the instruction in varying levels and within different categories. So that's the 4-year formula, and again, the focus really there was on degree completion. On the (uh), community college side, it's (uh), 25% based upon (um), let me get it here actually, I don't want a mistake... (pause) So 50% of it is, of the (uh), community college funding formula is allocated for course completions. (Um), 25% of allocated is for what's called completion milestones. And that's made up of three elements. (Um), either the completion of associate's degree, the completion of a certificate that takes more than 30 hours to complete, 30 credit hours to complete, and (um), a transfer to a 4-year university. So one of the, one of the elements of the community college was, they wanted to make sure they were rewarded for was, if they were to enroll a student (um), provide that student with course work, and then allow that student to successfully transfer to a 4-year institution, they wanted to be incentivized to do that, and so that's built into their formula. And then 25% is based upon what's called success points. And our success points are really (um), just milestones in the career of a student that indicates they're on the path towards (um), completion, and so, completion of 12, 24, and 36 credit hours. (Um), just to basically again, recognize community colleges for doing what they were designed to do, which is providing students with (um), training and course work to either equip them with a credential that they can use to get a better job, or transfer to a main campus or a 4-year institution to continue their studies. (Um), again the access categories are included in both of the formulas, so there's an element there that tries to incentivize institutions to enroll at-risk students and be successful with them. And really that's, that's, that's our formula in a nut shell. I mean it's, it's choosing the, the buckets that you want to incentivize, whether it's courses, degrees, certificates, (um), and then subsidizing in those buckets based upon the cost, to provide instruction in various subject levels, and then making sure that at-risk students are not left behind.

Q Okay. Actually your explanation there answered this question. Okay. You mentioned in your response to the survey that the funding model was changed. Can you take a few minutes to talk about why it was changed?

A Yea, I mean it was, it was really a recognition that higher education as a whole is changing, and that as a state we have a workforce need that is not being met. We have a need both currently projected and in the future, and there was really a strong feeling that the status quo from a higher education funding perspective was not achieving desirable outcomes, and that we needed to go in a different direction. And so, I don't think anybody at the time felt that they have seen a study that suggests that this was going to be a panacea or the answer to all of our issues. It was more a feeling of we have tried that status quo for a long number of years, it has achieved (uh), results that are less than desirable. Let's try something different that intuitively makes a lot of sense. We are incentivizing institutions to be successful in providing students with a credential in the shortest amount of time possible, and we are attaching their funding to that (um), to that

policy objective. And so, really that's the rationale as to why our funding formula underwent the change that it, that it did.

Q Okay. Of all of the states I've interviewed, that was the best explanation I have heard.

A Oh, thank you.

Q Is there anything you would consider changing concerning this model? Something you would you toss-out or add?

A Well, I, I will say this. I mean at this point, we are, we are at the mindset that our formula has gone enormous change in the last three to four years. And you know, your question just a couple of questions ago, kind of underscores something that we've been feeling here in the sense that we need to give this time to play out. We went, we went through this change; it's still a bit early to kind of see what kind of impact is it having? And so, the broad kind of feeling here is that the foundation of the formula needs to stay the same for a few years, at least for us to be able to assess whether it's being successful or not. (Um), so I think in that, in that regard, we're, we're hoping to keep things relatively constant for the next few years. But, what we are doing is continually, on an annual basis, looking at the data within the formula, the manner in which the formula is actually being implemented within our data system, and, and are there any unintended consequences of the formula. Are there things when we crafted the formula we thought it was going to work one way, and it really turned out that, to institutions, you know, are trying to sort of take advantage of the formula. So what we're doing really right now is just on an annual basis, just going in and making minor tweaks to the formula to just insure that it continues to work in the way that we originally wanted it to. (Um), you know, so that's, that's really our goal right now, not, not broad sweeping changes, but really just continuing to tweak around the edges to make sure the formula continues to achieve the outcomes that we hoped it would.

Q Okay. Thank you. What do you feel are the top three metrics and why?

A What do you mean by metrics?

Q Well, previously you mentioned degree completion, certificates, and there was one other that I actually highlighted all three, I thought you would, let's see...

A Courses?

Q Degree completion, (pause) Okay, enrollment, degree completion and retention.

A So you mean the top three metrics for evaluating the success of the formula?

Q Yes.

A I, I would definitely say, I would, I would make it a bit broader than just degree completion, and say (uh), credential completion. Because in our state, (um), there is a fairly high premium for certificates of value (um), that are in the workforce. You know, so there are certain certificates that might only take a year to complete, but they have potential to you know, to take an individual to from a \$15 an hour job to a \$30 an hour job. And so they have a great return on investment. So for us it would be the, the total number of credentials that are being produced by our public institutions of higher education. (Uh), our retention, absolutely. I mean we, what we want to see that students are being retained at our institutions, and so our fear previously was, well if it's an enrollment based model, and you enroll 20,000 students and 5,000 of them drop out after the first semester, you know, maybe institutions are just going back in and backfilling with additional students that are enrolling even though they know in their heart those students do not have the skills to complete at a public institution of higher education, and are not going to be provided with the services to overcome those deficiencies. So we want to see institutions taking a more active role in retaining the students. So yea, retain is certainly, (um), retention, credential completion, and then I think, you know, I think in light of that we would like to see some workforce connection. You know, so some, some connection to the total number of positions that we have in the state for which they can't find qualified workers. I mean I would like to see a reduction in that. Because we feel like, as a state, one of the big impediments to workforce development is, if you are talking with a perspective employer and they are telling you, you do not have the pipeline of graduates that we need to locate in your state. So we want to be able to, to demonstrate that we have a formula that incentivizes institutions to be completing more students, and the students that they are completing are a nexus to workforce development and job creation in the state.

Q Okay. One state I interviewed referred to it as a living-wage job. That if they completed a program, it could be a degree program or a certificate program, if they indicated they had a living-wage job, not just a minimum-wage job, that they could also consider that a quality metric.

A Yea, that's a great point. I think we would feel the same way. I mean that certificates had kind of a bad rap for a while. What we're trying to do is say, there are certain certificates that, you know, workers place a lot of value on. I mean employers that place a lot of value on it. So, we should be incentivizing those on our formula if it's something where the student has an opportunity to spend a year pursuing a credential that can literally change their life from a salary standpoint. We, we should be doing everything we can to encourage that. Rather than you know, rather than falling victim to the stigma where everybody needs to have a 4-year degree, we want to have really a diverse, well-rounded public institution, public, public system of higher education institutions that can meet students kind of where there at, and provide them with a credential that, that helps them pursue the goals that they're interested in.

Q Okay. That concludes my question session. Is there anything you would like to add at this time?



A I don't think so. I think (uh), those were some you know, good questions. We covered quite a bit of it.

Q Okay. At the conclusion of my study, I will send you an executive summary report of my findings for helping me with the interviews and survey. And I would like to thank you very much for your participation and support.

A My pleasure, glad to help. And I look forwards to seeing your executive summary. I wish you the best of luck.

Q I thank you very much for your support!

A Have a great day! Bye!

Q Bye!

END OF INTERVIEW

### **Research Participant P32**

Q Okay, alright our first question is based on the e-mail survey you sent to me. You said that there were metric adjustments that have changed. Can you elaborate on that for me?

A (Uh), yea, in 2003 when performance funding was really started in (P32), it was based on some of our very established research institutions, (uh), their enrollment not changing. So they were no longer looking to increase enrollment, (uh), and when the funding was based on FTE loosely, your funding would not increase, so they (the state) entered a research metric so it was for research institutions to get more research grants from the state. And then from there, (uh), the metrics moved on to really start to focus on the change on degree completions - to get more degree completions through the system. Really, there have been mild adjustments along the way, and some metrics that have not really included a lot of money, but predominately in (P32), there were the state looking at overall completions, on-time completions, and at-risk completions (which is Pell students) that is where the predominate portion of the funding goes.

Q I noticed that when I looked at the funding model, it mentioned Pell recipients as under the at-risk category. And I broke it down into, it had completion metrics, progression metrics, and productivity metrics.

A Yes.

Q And I also noticed that it said general funds and B\*F funds. Do you know that B\*F is?

A Yea, it is Billed (P32) Funds. It is a different tax source. (Uh), some of the lottery money goes there. We include it in our recommendations for the governor, and for the state budgeting agencies, but it is not really something that the commission is focuses on because it's, it's the tax base is outside the general fund. So when we are making our internal recommendations we're, those lines are hidden.

Q Okay, I also noticed in the funding model and some of the documents, it said that right now in (P32), they do not actually use weights, they have what I call elements and metrics. An element would be completion metrics, and metrics would be overall degree or at-risk or high impact.

A Where did you get the word element from?

Q Elements is what I would call the high level item that you're interested in, like completions to me, would be an element, completions would be an element, and the metric would be overall degree or at-risk degree. Is that how you see it?

A Okay, yea, I think that's a lot of the work, even us to some degree, sometime ago they would assign some weights to the metrics. So they would say we are putting 30% of our money into this picture, and when you do that you are making a statement about where the money is going. Probably before you know that the outputs are, so you can get into situations where if you say you are putting 25% of the money in on-time completions, and if you only have a couple hundred outputs, we were paying a lot of money per degree. And then the instinct of everyone is to the shift the weight to kind of match the output. So by doing the per units, you can up front say this is what we are going to pay for all of these per unit values, and then the outputs drive the weights.

4:06

Q Okay, because (uh), they respond to funding, and if they see where the money is at, that is where they are going to go.

A Yes, and then if the state needs to increase or decrease the overall amount in the performance funding pool, we do that just by uniform amounts. So, in this next biennium, bachelor's degrees are going to be 20.8% of the total no matter if they put \$100 in the performance pool or \$100 Million in the performance pool. It will be 20.8% in the funds in the overall completion metric.

Q Okay, I noticed in one of the documents called HCM strategies, it talked about adding weights to degrees in the future, and seemed like it focused heavily on bachelor's degrees. And then the other percentages were based on: - let's see what it's called here - weighted rates for PFF. And It said bachelor's degrees - A weight would be a multiplier, bachelors would be 100%, associates would be 50% of the bachelors' value, 1 year certificates would be 50% of an associate value. Has that been implemented, or are they just thinking about it?

A No, that has been the same way before, (uh), since the third biennium. That weight started six-year period in 2014. That started, that was, the one you are looking at, in think is the 2013-15. When you look at that one, they were still using weights, and they were saying 30% goes into overall completions. And then in 2015-17 is when we made to move to say were going to the per unit value, we are keeping the per units from the previous biennium. But the per unit values would drive the overall percent in each of the metrics, not the other way around. And that gives the institutions almost another year of planning because we will make that decision very early on and we're saying we're not going to adjust the per unit percent (uh), of the total.

Q Alright, thank you sir. What do you feel the strengths of these models are?

A (Um), you know, I think, in (P32), I mean I have been to a lot of conferences and presented with my contemporaries, and I think the thing that always pops out at me is our calculation and our metrics are simple. Everyone can understand it. Where 90% of the money is in three categories: overall completions, on-time completions, and at-risk. But if you do good in those, you will do fine in performance funding. And the calculation is very simple. You are just taking in the productivity metrics, so you are just taking the change of two three-year averages times the per-unit metric – that's it. And then on-time you are looking at a percent for on-time because that is a success metric. So it makes that sure schools aren't just ramming more students into the population to get the overall money. So it's very simple. The other states, I can sit literally for hours and not get through the calculations.

Q I have noticed especially that with (P11) it so massive.

A Well, the other thing, and to not say anything bad about (P11) because I have a lot of good friends there, but for one, no one understands the model. Like, a lot of the (P11) people do not even understand the model, and they say they are running 100% of the funding through the performance funding model. Well the performance funding model includes fixed cost. So when they are saying that, it's not all based on performance - because rent is not performance. All of those fixed costs that are in the performance funding model - are fixed, it is not performance.

Q Actually I noticed that, in Georgia we call that O&M.

A What?

Q O&M - Operations and Management funds.

A Oh yes, so it is a little old, and it's troubling for us because they will stand up there and say if you do not put 100% of the money in performance, and it may not make a difference, but I think HCM has determined that somewhere around 80% of their money is performance, not 100%. So it is still a big percent, but you also you have all of these different types of measures to correct for any fluctuations in funding. So it sounds like they are all in, and it could be a very dramatic change from year to year, but it actually

can't. So ours is just really simple, I can explain it to people - the calculation in 15 minutes, and they actually understand what's happening. And that to me is a benefit, and it's certainly a beneficial in (P32) because our legislatures really know what they are voting on and supporting.

Q That's good, and that's another key point. Can you think of any weaknesses in your model?

A Weaknesses in the model? (Um), you know I don't want to be kind of pie in the sky guy, that ours is the best thing ever, but I think that not weaknesses, but you know you always have commission members changing, you always have legislatures changing, and in (P32) we are our coordinating board, so we are making a recommendation, and then we're getting buy-in for the model. Where as in (P11) and other states their boards of regents, and whatever model they want to use that's what they are doing. So it's very different in (P32). We have to always be very cognizant of the fact that we're getting buy-in, and if people do not buy-in into the model, it does not work and it will not happen.

Q Right.

A And, schools hate reallocation. I think it works, reallocation. If it were me sitting in seat of an institution - which I have worked in institutions for 10 of my 16 years in higher Ed - I would want to keep my current money, as much or more than I would want a bonus. But institutions absolutely do not like reallocations. They want all performance money to be new money. And I do not know that is a weakness, but it is a reality.

Q Right.

A So, our model and in (P32)'s model is very much based on collaboration and partnerships, and it's not us or anyone ramming a model down someone's throat.

Q That's good! That is something I have noticed that, is that the turn over, is something I encountered even trying to reach somebody to talk to about the models.

A Right.

Q People that help set up the models are gone and trying to talk with people are like well, that's the way is has been, or I do not know why they did this.

A Yea, ours is so simple that you can really, anyone can walk in to my job and figure out the why. Of why things are done that way, and we really did set it up that way, so any of us can get hit by a bus, or jump in front of a bus at any time, and someone can walk in off the street and really know what's happening.

Q Okay.

A And we have a system now, when I first got here in 2013, a lot of stuff was done in Excel - like a lot of other states. And we actually have a system now where all of the institutions submit their student level data, and the system works with the state budget agent, to the governor, the house, the senate, the finance authority, and takes all the information from all sources, and it will create budget runs. So if the house wants to change something in higher Ed, we can change the percent of reallocation, or new money, we can change the capital, the R&R formula, all of those things I can do it in, you know, three minutes and we can recreate the entire higher Ed budget, and then send it off to whomever. And that's where those budget runs are coming from, the excel sheets you are looking at. The 2013-2015 version was still in the excel form, the 2015-2017 is in excel, but it is being generated by a system.

Q What is that system called?

A (Uh), it's called CHEDS, which is the Commission for Higher Education Data Submission System. (Uh), we have a guy that just is an absolute genius and built it, and that way we can make selections and changes, and know that it's absolutely accurate where people were asking to adjust this, or change that. Because we are a coordinating board, so it's not us saying here is our recommendation use it, it's us saying here is our recommendation and then the house, senate, and governor tweaking our recommendation slightly.

Q Right.

A We have to be able to recreate the entire higher Ed budget immediately.

Q What would the tweaks be based on? The current needs, or state objectives, and things like that?

A Yea, I mean the commission, you know, it's the commission for higher education, so they are fighting for money for higher education. And they are going to look at the state budget and say, Okay, its 11% of the overall budget, and we want to be 12%. Well, all of the other K-12, Medicare, Medicaid, and all of these other funds are fighting for their money as well. So the governor has to deal with the reality of the financial situation. So, if we argue for 3% new money, and he's saying we don't have 3% new money, he might take our recommendation and dial it back. So, he might say we are not going to do 3%, we are going to do 1 1/2% in his new budget. So that changes the whole budget. So you have to be able to immediately change that. Or he might say we want to fund these capital projects, but we want to fund them with cash instead of debt service. So We can go in and tweak, and say OK for this building fund it with cash, and only in the second year of the biennium, or whatever anyone wants us to do like that, it can be immediate.

Q Okay, that's neat!

A Yea, it's great!

Q Have you had any problems implementing the funding model?

A (Uh), you know, I mean it's been around for 13 years now, so it's, I think that implementing so much as it's a constant implementation, because as I said, everyone is turning over, so you are constantly making sure people are aware of what's happening, and making sure there is buy-in. And, you know the new system, the only trouble with that was it had been done a certain way for, the budget had been done in excel for however long excel had been out. So all the institutions were pretty anxious about a new system, but we just did it both ways in the first biennium so they could see this way is actually better, but here is the old way if you want to use that. And now there is buy-in across the board.

Q Do you have any data or evidence that the funding model is achieving what it was intended to achieve?

A You know, we do biennium over biennium for the last two, and the reason for the last two is (uh), because the same exact metrics were used for two biennium's. So you can look and say OK the deltas were this in 13-15, now the deltas are this, and you can see the change in the deltas of the two 3-year averages, and you can also just go year by year and see the increase in degree production. I think when you get into the research of performance funding, you know, a lot of schools and others will say, you can't directly tie it to that 6% of the money going into performance funding because we are doing all of these other innovative things, because of other reasons. And that's really true. So it's hard to say it's just because of performance funding, but it's also a very simple question of do you want to pay for inputs or outputs. And if you want to pay for outputs, how do you do that? So that no model is going to be perfect, but the real question is are you paying for inputs or outputs?

Q Okay.

A And in (P32), that's a very simple answer. Everyone is, you know, they're metrics-based and they want to pay for outputs. But unlike some other states you are seeing right now, like (STATE), our legislatures are big supporters of higher Ed, as is our governor. (Uh), so you have a lot of support for higher education. Whereas I think some of these governors are coming in and bashing higher Ed, and cutting their budgets immediately, when they may not have a really good understanding of what a 4 1/2% or 9% cut to an institutions budget may be, and how that may affect a research institution differently than a community college. Because here in (P32) a community college gets 50+% of its funding from the state, and a research institution now only gets 10% of its funding. So, to do across the board cuts like that is a pretty, using a very blunt instrument, when they should probably be using a scalpel.

Q Right.

A So (P32) is not like that.

Q That's good! Our governor is very pro-education. His wife is a teacher.

A Our governor's wife is a teacher as well. So that is helpful. And you know, you can be fiscally conservative and still be supportive of higher Ed and K-12.

Q Some of them would rather build a jail than another school.

A Yes, (laugh), and some of them just, you know, if you haven't ever worked in higher education, the - I think the general consensus is everyone is in a white tower, and they make too much money, and their benefits are too good. And it's, if you don't go deeper than that, it's easy to say you get too much money, cut the budgets.

Q Right.

A And it's easier to tie higher Ed to only work force cuts, to say higher education equals this much in your next job. And we definitely do a return on investment report that says, if you go to this college and you have this degree, this is how much you will make in 1 year, 5 year, and 10 year based on the data. But that's only one piece of the value of higher education. So we're also doing gallop polls to, you know, survey all kinds of things, about relating to satisfaction in life, and experiences, and all of those other things. Because if, you have to keep the focus not just on how much you are going to make.

Q Well, the focus should be on how much the student is going to make with the higher degree, and how that will impact the economy of the state.

A And that's, I mean that's what our ROI report does. So it says to a student, this is what we expect you to make, if you take this degree. But I guess what I mean is, you know when some of these governors are bashing liberal arts, they're not taking into account the value that, you know, all of the holistic Ed experience will have for the student - for lifelong learning, and soft skills, and all of those other things.

Q That's true. Do you know what the rationale was for selecting the metrics that they chose?

A (Um), Yes, I mean I think it's, really that it goes back to the big goal of 60% attainment in (P32). So they want to focus on certificates, and associates degrees, and bachelors, and masters, doctors, and the whole gamut of every kind of degree. They want more completers to get to that 60%. They are very focused on high-impact degrees, which are STEM degrees. (Uh), the at-risk population in (P32) - where the, we have the highest student aid in the mid-west, we have \$350M in needs-based student financial aid that we distribute to 120,000 students a year. (Uh), so at-risk students are really important to the state. (Um), improving the success in remediation is important, keeping community college students persisting is very important. So I think they were pretty logical metrics.

Q Okay, that's a good word: logical.

A And that's, that's what I would say (P32) may be known for. Or If you look at all of the other models, ours seems relatively logical, and something that a normal human can understand.

Q Okay. Actually, I see that you already answered that question (7), and that one (8). Is there anything that you personally would like to change about the model, or toss out a metric, or add something?

A (Uh), You know the only thing that I wanted to change - that I did not really like was the (uh), the institutionally defined metric. And our, you know, our commissioner (um), is really, I don't say this because I work for her, but I think she is one of the best in the nation, and she is absolutely about partnerships with the institutions. And that was initially designed to partner with them to make metrics that were specific to their institution. But the bottom line is the payment on seven different metrics for seven different institutions ends up being subjective. (Um), so I never really was comfortable with that. So this time the commission voted to do away with the institutionally defined metric, and just focus on the complete metrics. Now only 3% of the money was in that anyway, so it was not a huge shift. But that's the one that I thought that needed improvement, and it would be better severed to push the money into the big three.

Q Okay. Actually, I got a spreadsheet that I put together that I built - with what I call elements, the high-level metrics. (STATE) is pretty big, (P32) has seven - Seven key metrics. (STATE) is Okay.

A We're at six now.

Q What I found interesting about (STATE) was they actually have, they break out their metrics by college, university, and tech school. And (STATE) actually has a separate item for research institutions. But most of them...

A You know, we have seven public institutions that are eligible for performance funding, but the seven aren't eligible for all of the metrics. So the big three: on-time, overall, and at-risk, everyone is eligible for, but persistence is only for 4-year comprehensive institutions and the community colleges. The research institutions are not eligible for that. (Uh), the remediation piece is only for our 2-year schools. High-impact is only for the research institutions. So ours is differentiated within the model. So we just did not want to make up three different classes of institutions because that adds a whole lot more to the explanation of the model.

Q This question you probably answered it already in part, but it's basically what do you feel are the top three metrics - the most important ones?

A Overall, at-risk, and on-time. And that's reflective in 90% of the money. And some of what I am saying is, I am speaking in the current biennium is 17-19, so you



obviously do not have what I am saying, so it's going to be slightly off what your - 15-17 that you're looking at. There is still going to be the highest percent of money in those three. But it's even higher in 17-19.

Q My research is actually based on which models were used from 2010 to 2014. But in the conclusion section - I am actually, do have a lot of discussion in there on why things have changed...

A Since then...

Q Right, as you learn and grow - so this is actually some good information. Is there anything else you would like to add at this time?

A I don't think so, you know I don't say much more than I have to ever (laugh), so if you don't have questions, I probably don't have anything else.

Q Okay, well I am done with my questions. I would like to remind that at the completion of my research, I will give you a copy of the executive summary report of the findings.

A Great!

Q And I wanted to thank you very much for your participation and support. And on a side note - as I go through these, my research notes, and compile my report, if I have a question or need some clarification is it OK if I e-mail you?

A Oh Yes, e-mail, call, whatever. I am always here.

Q Okay, great! Well that concludes my interview, and I would to really like to thank you for helping me. This is great information.

A You are very welcome; I wish you all the best in your research.

Q Alright, thank you very much sir, have a great day, bye.

A Bye.

END OF INTERVIEW

### **Research Participant P79**

Q Okay. Do you have any questions about my study, methodology, or anything before we begin?

A Where is this going to be, where will this be published?

Q It's a doctoral dissertation. It will be published in the UMI registry, which is a repository for dissertations and thesis papers that other college students, and anyone that can do research by Galileo online, or different types of search engines can pull it up.

A Okay, great.

Q Okay. Based on the e-mail survey questionnaire response you indicated the model I sent was current and accurate. Is that still true?

A Yes.

Q Okay. What do you feel are the strengths of this model?

A (Uh), the fact that it is based on credible nationally recognized data, (um), and that with the added outcomes portion, basically we are incentivizing and able to impact behavior (uh), in a positive way all the way down to the campus level.

Q Okay. What weaknesses can you identify with the model?

A (Um), (long pause), with the structure of the model itself, I don't see any, any true weaknesses. (Um), other than the, I mean really funding is the issue; it's not the formula itself because it is based on credible information, in my opinion. (Um), in (P79) we are one of the lowest funded states. Actually, I think we are the lowest funded (uh), since the recession per FTE student. Running, running a, a low amount of money through the formula is going to cause consternation, and will (uh), what we'll call issues no matter what. But (uh), I think, I can tell you that a point of conversation or contention is the (uh), 'by size'. Cause there is a class size multiplier that we apply to each SREV category basically. Community colleges have one class size which is lower than the (uh), 4-year institutions. That as of late has been a, a conversation that the college and universities have been wanting to change. They don't really know of what the solution is, they just view them that, they may be treated unfairly due to class size. Because (um), a lower class size would mean it's more expensive to teach than a higher less class size would be less so, that's a contention right now but we're actually (uh), thinking about getting with a consultant to flush that out, and make sure all of our data is sound. And is representative of our, that, that, I don't know if that's a weakness, we're going to find out. But, (um), it is definitely a point of conversation and contention at this time.

Q Okay. Were there any difficulties implementing the funding model?

A (Um), so it's a collective conversations with the management boards, CFO's and people of that nature, so the only I wouldn't call it difficult, but to reach some sort of consensus, or really more of a compromise on some of these things, is (uh), probably the most challenging part.

Q Okay. Would you consider that buy-in?

A (Um), yea, in a sense. But in, I don't know about buy-in, but we're the board of regents, we're a coordinating board and we (uh), we take the input from the systems that proves, that we think it's a good policy and it's something we, we don't catch, we always take suggestions, and we always investigate the suggestions, and see if it would make it a more credible model. But buy-in is more of a elective research.

Q Okay.

A I mean between the management board, CFO's, and the board of regents and our form of people.

Q Okay, you said management board, CFO's, and the board of regents and one other thing?

A So the board, I work for the board of regents, we're the coordinating board, there's four other management (P79) boards. Each of those systems have colleges and universities under their boards. And we coordinate all of them.

Q Okay.

A So when I say the CFO's of the management board, I mean the CFO from each one of those systems that has their schools underneath them. That's who we work with - formula.

Q Okay. Do you have any data or evidence that this funding model is achieving what it was intended to achieve?

A (Uh), yes. I think we have seen (um), well and, let me just say in the past, (uh), we've incentivized strategic initiatives such as (uh), Pell students, (uh), workforce, and (um), and some research grants. So you would get, basically you would get heavier weight or more money for performing more of those things and (um), we're actually going to implement this formula without, with the actual outcomes, now it's cost outcomes in (P79). They're going to be in FY17 for the first time we're actually implement it, so we will have data, but I mean there is national data that shows you where you, advise outcomes, certain outcomes, and universities and their employees understand that you can get more money to behave a certain way. Yea, there's a positive impact. As far as, an example for enrolling more adult learners 25 and above is something (P79) has a lot of uneducated adults (um), that need education to be competitive in the workforce - as an example of one of the things we're going to incentivize.

Q The non-trationals?

A Correct.

Q Okay. We'll talk about elements, metrics, and weights. What was the rationale for selecting these elements, progression metrics, and weights?

A (Um), the rationale was basically, (um), four things. I mean; you have (um), student success is one, (pause) student success is one thing that we wanted to incentivize through student progression and completers. (Um), the other thing is articulation and transfer. (Um), we do get through a number of students cross enrolled and transfers for two and four institutions. Incentivize those; the other thing is workforce and economic development. Those numbers of programs waiting for four and five-star jobs in (P79). And (uh), there is the workforce and economic development, adult learners, and grant funded research. The last thing is proficiency, accountability, and time to award. We have addition time to award for student earning degrees (uh), and the including of students on Pell, so those two things we go after in all those things. The big aim is to increase the education attainment of (P79) citizens.

Q Okay. You just answered that with your last statement.

A Okay.

Q The next question. Okay, you mentioned in the survey response that the funding model changed in the last couple of years. Can you talk about why it was changed?

A Right. (Um), it was changed due to legislation passed by (uh), the legislature. And (um), that it basically set a lot of the parameters of how it should be structured, how it should be incentivized, by (uh), the legislature and (um), the state. That's why it was changed by legislative action.

Q Okay. Is there anything you would change concerning the model? Would you toss something out or add a metric?

A (Um), no. I think I wouldn't add anything at this point. I think we're, just like, about any time you have a formula or anyone has a formula and you monitor the success of it. After it's been implemented and look at how everyone did and make adjustments, get the outcomes that you want. So, I mean we'll be doing that in the future, but as of right now I think, no.

Q Okay. What do you feel are the top three metrics and why?

A (Um), I think, let's see the top three, just throw them out: one is the (um), number of completers and programs leading to four and five-star jobs. I think it's important because it's direct to (P79) and what (P79) needs as far as the workforce. (Um), so that's vitally important to incentivize that behavior to get students out in areas that are, where we have a Gap. We're producing X number of (uh), welders, in areas, and say we need 100 more to fill those gaps. I think that's one of higher education's missions. That's an important one to me. (Um), the other one is probably the time to award or students earning degrees, because I think it's important that students have the classes they need to

get out on time, so they have less debt, and you know, to get people out into the workforce more quickly. And (uh), third, probably grant funded research. Because that's a higher education mission. Is in need of that as well, and commercialization of research and things like that. I think that need to be the top three. Also, only, I will add a fourth one, I might add (um), if I had to supplant time to award, I would say one I forgot, enrollment and student completion on Pell because (P79) has a long or higher rate of poverty than a lot of states, and that is one thing we need to, I think they all are vitally important, but I think Pell might replace time to award on that list.

Q Okay. Is there any information you would like to add at this time?

A (Um), no, not unless you have more questions.

Q Well this concludes the interview portion of the survey. I wanted to remind you that at the conclusion of my study, I will be sending out an executive summary report of my findings to the participants of my research participants. That's it, and I would like to thank you very much for your participation and support. Have a good day!

A Okay, you too, bye!

END OF INTERVIEW

### **Research Participant P11**

Q Okay. Do you have any questions about my study, methodology, or anything before we begin?

A (Uh), not at this point, no.

Q Okay. Based on your e-mail survey response you indicated the model I sent was current and accurate. Is that still true?

A Yes it is.

Q Okay. You indicated there were minor revisions from 2011 to 2015. Can you elaborate on those?

A (Uh), sure, (um), in most of these Richard, are, are very technical, kind of minor technical changes. Nothing about the main working model changed really - especially as far as your study is concerned. (Um), some of the outcomes got defined a bit differently, (um), we dropped one or two of the outcomes in the model for instance, the transfer outs outcomes are no longer there. (Um), and we also changed some of the weights. As you know you are familiar with our model, but (uh), each institution has a unique weight structure that weighs each outcome differently. (Um), those got changed in (um), some small ways from the previous 5-year version to the one that we just (uh), just started. So,

I mean minor things like that, nothing of major substance, I don't think. Again the main structure is the same, and the main way it works is primarily the same.

Q Okay. What do you feel are the strengths of this model?

A I guess the main strength is that it, it aligns (uh), the financial incentives with the, of the policy goals of the state. (Um), you know, it takes (P11) for the last, I guess six years or so, has emphasized (um), degree attainment, improving retention and graduation rates, more degrees from more types of students, (um), that's been a policy goal for several years now, and the outcomes formula aligns the financial policy to the overall policy goals. I mean I think that's its main strength, (um), you know, it also is (um), it's in tune with the campuses overall mission, in other words (uh), the idea that you would put greater weights or greater incentives on schools to actually do emphasize research, graduate degrees, etc. So the model is able to (uh), sort of reflect back to the mission of the campus so it's not a one size fits all approach. (Um), I another strength I think too that it's fairly mechanically simple in the sense that it's not a many moving parts, so it's not a model that is difficult to understand in the technical sense. (Uh), there's very few moving parts. A lot of performance funding programs historically have been, and currently still are, kind of complicated, involving targets and goals and points and (um), sliding scales of rewards and, and that has certain issues, it also has one big disadvantage which is that it's too complicated, and ours does not include those things, so, it's very simple. So over all I think there are quite a few strengths, and I am sure you will ask me next about weaknesses, but I think the overall common, is that (um), that the tradeoffs that this model makes for (P11) are far preferable to the tradeoffs that another funding system would make for us, or the previous funding system based on the rules so overall I think it's much more (uh), it's a much greater instrument for us and for what our goals are, then what we used to use.

Q Alright. What weaknesses can you identify with the model?

A So one of the weaknesses is that, well, I am not sure, well let me phrase it this way, but I don't view this as a tremendous weakness, though I recognize that other people do, so let me phrase it that way. (Um), that the model shifts base funding every year. In other words, (um), what a school earned last year, you know, we start over every year. So we, the model is constantly having money gravitate to where the outcomes are being produced. So therefore you have a shifting financial landscape every year. Not, we don't think not dramatically, so but enough that, that the incentives should work and (uh), I recognize some people would view that as negative because there's a belief that money ought to generally stay where it has been. And, and not move around unless there's new money or some significant reason to do so. (Um), I don't view that as a weakness at all, I view it as a strength actually. (Uh), but I recognize that other people do not see it that way. (Um), other weaknesses, (um), you know one of the challenges here is trying to, trying to, completely, well not completely, but trying to be as exact as possible, (uh), reflect campus mission in a funding formula. That's a very difficult thing to do, (um), the weight structure I use I think did set that pretty well, but I recognize that there's nuances to campus mission and that is tough to capture in any, any funding

system and not just a weakness in ours, but a weakness in probably ever one of them. (Um), and so those weights attempt to do that, but that's a very difficult thing. Another weakness I think is, and again this is a weakness really of every model, and not unique to ours, is a weakness of most of all finance policy is trying to (um), I hate to use the phrase even the playing field, because it's not quite what I mean, but, try the incentivize or (um), encourage institutions to focus on (um), (pause) populations of students which are important to policy goals of the state or important because they are just more challenging to complete. (Um), our model attempts to do that by having a (um), a premium for certain focus populations: adults, low income, academically underprepared students, etc. I think that's a noble thing, but it's also very hard to figure out how to strike that balance between the premium or an incentives (uh), that is indeed (um), insuring the campuses do not have an incentive to NOT pursue those student, and in fact do have an incentive to pursue those students to try to get them to completion. So that's a very challenging thing. Again, not just for our model, but for any model (uh), that struggles with that as well.

Q Right. Would you consider Pell recipients in that?

A Yes, the three that we focus on are adults students, (uh), low income (defined as Pell eligible), and then (uh), we have an academically underprepared. So if you are (uh), flagged for remediation needs, or anything that indicates you have some academic preparation challenges (um), those students in our community college model are receiving a premium as well.

Q Alright. Were there any difficulties implementing this funding model?

A (Uh), yes quite a few. (Um), this is, there's a reason it's not done often in my, I mean a full scale 100% outcomes funding Model. (Um), there's a reason most states have tended to sort of nibble at the edges of this like 5%, 10%, maybe 20% because (um), I think the, I think the momentum across the decades of public policy is that funding does not move around, and therefore (um), a system that does shift money around every year is one that faces a lot of uphill battles to get people to accept it. (Um), so that's one challenge. There's also I think, (um), a technical challenge of how you go about designing something new like this, because, there's a reason we do not call ours performance funding, because I think over the, you know, the three or four decades that has come to mean a very specific type of finance policy. Which involves again, targets and goals, and there's some small piece of finding that is an add-on to the enrollment model. Well, that's not what ours is, so we were building something completely new. So that just posed quite a few technical problems on how to create something like this. That's purely a function of outcomes and not a function of enrollment at all. So that was a significant challenge. And yet again, another challenge too is, (um), you know, public policy higher education kind of lives in a space that is between higher education and, and state government and policy makers and those, those two groups don't always see eye to eye on every policy issue. So finding common ground among the many different constituencies (uh), that are at play in this policy area is, is difficult, and again, that is why simplicity was so important to us. I mean it was fairly simple, because finding common ground can be difficult. So a lot of these issues are very tough to work

through, and there's no perfect answers, it's always a series of tradeoffs, and that's just a tough to navigate. In, in when you try to implement something, (uh), on this scale.

Q Okay. Do you have any data or evidence that the funding model is achieving what it was intended to achieve?

A (Uh), yes, this is a complex question too as you can imagine, Richard. So here's, here's how we think through this. (Um), first is sort of philosophical, and I think philosophical level there's no doubt this is for working, and by working I mean that the alignment of financial incentives with policy incentives, is something that I think every state and every observer thinks is a good idea, in other words, why incentivize something that you are not trying to achieve in public policy. That's where enrollment models are incentivizing enrollment, and their states have as a policy goal to dramatically increase enrollment. Now they do use that as a means to an end, which is to increase completions, then again, the idea is that you have a finance policy that is aligned to (um), the state's policy goals. So in that sense, it's been exactly what's it's supposed to do. It, if properly connected what we want out of higher Ed, with what the states going to pay for. Secondly, is that (uh), it has, and this is anecdotal, on the alternatives to grants, but its present for sure, it has dramatically changed the way our campuses think about the way they spend their money, the way they invest their money in activities on campus, and what outcomes they are expecting. They have, there has been sort of a (um), an extraordinary (uh), opening of, or let me rephrase. There's been tremendous activity as campuses have thought through how best they can better the design, better the retention policies, better completions, (um), that I think that has been dramatic in the last three years. And we've heard from presidents, from governors, board heads, from campus personnel, that is has just dramatically changed the way about how they spend the money, and what they are trying to get out of this policy. And that has been exactly what state policy makers had hoped it would do. Which is (um), you know again, to get campuses to rethink how they reinvest their money, and how they spend it in ways that are promoting the common goal which is more completions. (Um), so in that sense, it's done what economic incentives do which involves human activities, it has changed the way people think about (um), the way they spend money, because now it's tied to the goals of, of the state and of the campus. So in that sense it's working. In the quantitative sense, this is hard to either prove or disprove because this because, you know, untangling the many complex (um), streams of activities that are impacting campus, (uh), performance is really though. And how you would isolate the effects of just one particular policy change like this is difficult to (um), now it is true that our outcomes went up quite a bit the last six years, but more so than would had otherwise it's hard to say. (Um), I mean there's a lot of reasons outcomes have gone up in the last six years. Enrollment response to recession, all sorts of things. Other policy changes which are beyond the scope of your paper and very dramatic and far reaching. So in other words quantitatively isolating the effects of our outcomes formula on institutional productivity is just really difficult to do. (Um), I think the long term trends will be important, (um), and I think the qualitative aspects will be important. Like how do presidents, provosts, CFOs, faculty, I mean, how do they approach their tasks? How do they think about whether their activities their investments change based, (uh), based on the outcomes formula? I mean from that sense,



the say it has. And that so far as the evidence to me means, this indeed is having the desired effect.

Q Okay, great! Okay, we'll talk a little bit about the elements, metrics, and weights. You mentioned the states goals and objectives, but what was the rationale for selecting these elements, progression metrics, and weights?

A Yea, primarily it was, it was, here was the thought process. The thought process was what are the states goals, and what do we want to incentivize? What are the outcomes that are important to higher education, and so you have seen our model, and have done that research, I mean the outcomes are pretty intuitive. I mean the graduation rates, its degrees, a count of the degrees, retention, research, workforce training, it's those things, so they, the process was really asking, we had a large group of people that, that worked through the details of this, and (um), they started with the question what is it we want to incentivize? What is it that we want our higher education institutions to produce? And, and from those conversations the list was developed. So, and it was, it was, in that sense, it was fairly straight forward. It started out with the question what would we want our higher education system to produce, and (uh), what elements are common in the model that we all incentivize?

Q Okay. Well the next question was if the metrics were weighted, how and why were they weighted, ordered, or prioritized?

A And yea, ours are weighted of course, and, and that stems from kind of the second question we asked which is if you have this set of outcomes that you are setting up the model, (um), what is the, what is the priority of that outcome at a particular campus. In other words, again, graduation rates themselves may not be as big a factor as an open access school, as would be at a flagship campus which is very selective. Or conversely, maybe where research activity is very at some campuses and not so much at others. And so the weights came about to try and reflect back, (um), we looked at missions by campuses so each outcome is weighted based on how we thought through the questions of what was important at a particular campus.

Q Okay. In the beginning you mentioned that the funding model has changed a little bit because you changed the weights and some outcomes were defined. What was the reason behind making those changes?

A Yea, just a refresher, (um), you know we had, we have used our model for six years now, and so every five years we thought it was good just to idea you know, to go back and, and, touch base again with what the principles were, touch base again with (uh), the design parameters, just kind of see if indeed (uh), it's still the way it ought to be done. I mean we do review every year that kind of looks for things that aren't quite working, tweaks we need to make, we felt that after five years it would be good to go back and hit the reset button and see, (uh), kind of start over. Are we incentivizing the right outcomes, do we have the weights to reflect mission, just a need for a refresher?

Q Okay. That's good. Is there anything you would change concerning the model? Would you toss something out or add something?

A (Uh), in the, on the whole no. And the reason I say that it, that I think it's important to have a product that, that has as much consensus as possible. And so, any one person's opinion, particularly mine, would (uh), make it less acceptable. So I think, even though each individual person would probably will have their one unique way to design the entire model. (Um), I mean there's a reason there is a committee that exists so we can find common ground. So (um), you now while I may have my own specific version of it, I think what we, with (P11) has now is what it ought to have because that was a product of very, a very (uh), lengthy and deliberate process of deliberations, so. I don't think I would change anything in that sense, (um), now if, if over time if things start to not work, or if we don't think this is incentivizing (uh), what we hoped it would, I think it's a different story, but as of now, I think (um), we reached (uh), consensus is the wrong word, but we, we had as much agreement from as many people as possible. Such that this is, this is widely accepted as the way (P21) should go about finance policy. So in that sense I would not change a thing.

Q Okay. What do you feel are the top three metrics and why?

A Well, that varies by campus of course, based on the weights. (Um), now you could, you could argue that degree production might be, the number of credentials, probably the most important at the most campuses just because of the state policy (uh), based on state policy goal is to get more (P11) with a post-secondary credential. (Um), of course there's some schools where the way you do that is, with a different outcome, like for instance our flagship is (uh), which is a selective institution, needs to be thinking about its graduation rates. (Uh), what percentage of that freshman class graduates? I'm not so sure that our, that our, (um), more open access schools, do. I know for a fact for instance our community college don't. So it's a different way to get the same end, which is we all want a more dynamic educational system, a more dynamic economy, greater numbers of degrees, that are of high value, linked to the workforce, how do you get there based on mission of campuses? Sometimes it's a little bit different, but I guess in the mean is about increasing educational attainment, economic competitiveness of (P11). That's everyone's number one goal.

Q Okay. Is there any information you would like to add at this time?

A (Uh), I don't believe so, no.

Q Okay. At the conclusion of my study, I'll send you an executive summary report of my findings. At this time the interview is done.

A Great, Okay. Richard, thanks, (uh), I'd love to read the summary when you have it. I wish you luck in this project. I appreciate the conversation!

Q Thank you very much!

A Alright Richard, thank you! Good luck!

END OF INTERVIEW

### **Research Participant P21**

Q Do you have any questions about my study, methodology, or anything before we begin?

A No. Nope. I don't think so. We're good to go.

Q Okay. Let's see, alright. Okay, based on your survey response, you indicated the model example I sent to you was current and accurate. Is that still true?

A (pause) Yes.

Q Okay. What do you feel are the strengths of this model?

A (pause) I'm sorry, you broke up there.

Q Okay. What do you feel are the strengths of this model?

A (Um), the strength, the number one strength is that it is, it's an established model approved by the, our board of higher education, (uh), for public universities. It's one that (um), is set a three year, locked it in for three years, as opposed to going year to year to year. They locked it in for three years, for (um), 16, 17, and 18 (FY). So I think the strength is that after a series of long meetings, of steering committees, and, and input, then the board has (uh), put in place an actual performance funding model in which the board of education, the board of higher education would then make its budget recommendations for those three years. I think that the number one strength is that it is an established model, the metrics are out there, it's well, and they are well known by all the institutions. The nine systems there, well there are twelve public universities, but there are nine systems. (Um), so I think that's the number one strength. And if I can add that (um), when they, when our, the legislature and then following that and our board and steering committee, (um), started piecing the model together they wanted to make sure that, (uh), they recognized and accounted for each universities' unique mission, and set of circumstances, and they wanted the model to be able to adapt to changes in (um), state policies and priorities, and I think it's a piece is that it would be representative of our public agenda, our college careers and success.

Q Okay, great! What weaknesses can you identify with this model?

A (Um), I would say that the number one weakness is that the level of funding that is attributed to the performance-based funding right now is only (um), set at a half a percent of the entire public university (uh), budget. So of the \$1.2 billion for public universities, that equates to just over \$6.1 million dollars, in the formula, so a half a

percent is that (uh), something that we are being incurred by the legislature to increase that amount. So I'd say that's a weakness. That, that is, that funding amount is what the governor's office, the governor's office proposed the budget as a weakness, and he essentially, (um), (uh), increased that ½ percent by tenfold to a 5% overall percentage by proposing \$15M dollars in his FY17 budget to be (uh), allocated and distributed pursuant to the boards performance funding model. So while it's a weakness, we believe the governor's in his budget proposal acknowledged that the performance funding model, (um), is really the main, moves the needle so to speak, in order to make an impactful (um), performance model that you need to increase the funding, so that is why he proposed the FY17 budget.

Q Okay.

A Which is roughly about 5% of the overall (um), percentage of the funding for higher Ed, that \$15M. Not for higher Ed, for public universities. He also, in that same vein, when he entered his, when he proposed his budget, (uh), he made on the community college side he increased that quite a bit more, from \$360K for how many (uh), community colleges are there, four unique, increasing that to \$9.5M so he increased theirs, which is separate from us, the board of higher Ed. But their funding model for community colleges is, and their metrics are a little bit different. I think we sent you some of the metrics, (um), on the original e-mail. I think at the bottom there we talked a little bit about community colleges. Our community colleges performance (um), model. But (uh), the governor's proposal also included an enhanced amount for performance funding. (Um), for community colleges as well - \$9.5 million for community colleges, yeah. Did you catch that Richard, that the 9 ½ increase for the amount for community colleges.

Q Yes.

A The \$9 ½M from \$360K to \$9.5M.

Q That's pretty good!

A Proposed for FY17 for community colleges. For public universities, (uh), the board recommended, we recommended our half-percent which is the redistribution of the \$6.1M, the governor took that half-percent and essentially said I want to do about 5% which is about \$15M and is proposing to put that through our funding model for FY17.

Q Okay. Is that the performance portion or is that base funding?

A That's performance-based funding. So that \$15M that would be put through our model, based on the performance funding metrics that we had are already established.

Q Okay. Were there any difficulties implementing this funding model?

A Once it was established?

Q No, when they started, or when they switched from enrollment-based to performance-based.

A Well, I mean, admittedly yes. I mean because we had such a, (um), well we were not actually here, (uh), when the model was established. But there was such a quick turn-around that they literally had six months, (uh), based on the legislation that passed, and decided by law. (Um), the governor turned around and create a model, and so they had to hurry up and form a steering committee and he (um), the legislation, and as you know, and I am sure you already looked at it, and already researched it, that our legislation, (um), you know laid down specific (um), components that needed to be accounted for, and (uh), people that we needed to have the, in the discussion, obviously university folk, and academic folk, (um), our board, (um), and so forth. And in order to determine the best way to go about designing the model. But there were, I mean, I would just reiterate because that is was so quick that the six month turn around, it was not perfect, but it works for FY13 budget year. That was the first year that they implemented performance funding here.

Q Okay. Do you have any data or evidence that this funding formula is achieving what it was intended to achieve?

A Well, the reality is that in the last few years, the general assembly has, understand that the board makes the recommendation that the performance allocation shall be, that we propose to the legislature and the governor (um), that the university operating funding including the, including the breakout for the (uh), performance-based funding. The governor may choose to accept it, or to do whatever they wish in the final budget (uh), proposal to the legislature. And the legislature – the ultimate appropriators – then decide whether to include it or not include it. (Um), in FY14 was the last year in which they used some measures of (uh), performance (uh), funding. In FY15 they basically they went with regular (um), distribution, they didn't consider any performance. For FY16 the budget we are in now, we have no budget. Right now we are only getting 30% funding. So (um), these last two years, there's really nothing to measure. Going back to FY14, (uh), the difference was fairly (uh), somewhat, insignificant. I mean we're only talking a difference of less than a million dollars, and (uh), no there's really not (uh), an assessment yet on that performance. I think, and that's part of the weakness of the formula, of the model is that when we award, reward performance, it is after the fact. And it's not a model where it's (um), prospective, your traditional performance funding would say give a target and tell us whether or not you met the target at the end of that year and then you get rewarded based on that target. This model, this funding model would be back in order to pull in reliable data to look at three years for FY17 – I don't know if you caught that – so for FY17 we look at 12, 13, and 14 right? And what we do is take the average of those three and then average, then plug that average into our model, that data we get from IPEDs. And that's data that, it's pretty firm data, so but yet its PEDs data. And when you try to determine (um), the overall effectiveness of whether or not the performance funding is working, (um), you are at somewhat a disadvantage because you are dealing with two or three year's data at a time. Does that make sense?

Q Yes.

A That's why when I pose that question, to you back when we first were connecting, I posed the question, I am interested to hear in your research is whether or not you have (um), other states that are in your study group, that do prospective performance-based modeling. I am most interested in that (um), because those are very difficult metrics taken; we want to have current and reliable just in time data that's happening, (uh), in order to make that one-year assessment. Something that we're looking at, (um), we acknowledged that it is (uh), (um), something in the model that we have to revisit. And (um), and so that's where we are, so.

Q Okay.

A Does that make sense?

Q Yes, I understand that completely. And the states I have interviewed have indicated that when the timeframe is shortened to say on year, what they are discovering is, if they implement or start new programs, that there's not enough data to say whether it's going to be successful or not. Kind of like starting a new small business, they expect you to lose money the first couple of years until you get up to speed. So that's one thing they are seeing on that end. The other end is similar to what you said earlier, that you make the recommendation and the governor or legislature may say no, we have ideas that you are not aware of, and we want the money to go over here because we are starting a new campus, or they are starting a new nursing program or something like that.

A So, yea, and that's the challenge of performance-based funding. You can recommend the funding, but the legislators are the actual appropriators, the general assembly. So In essence what it becomes is performance-based funding is indicators for the legislature to make their decision. Whether or not to accept or, you know, for the most part, (uh), and this is pretty much true with, (um), and this is one of the reasons the governor proposed to make a change, is if you look at the percentage of what some of our fine institutions received the just 10 years ago, was basically the same percentage they received is last full year in FY15. So like University of (P21) got 56% of the funding years ago, well, ten years ago they got 56% of the funding in 2015, and that's pretty much true with a lot of our institutions. So the (uh), distribution by the legislature hasn't really varied much, and they have been sticking to that (um), or the usual (uh), percentage from year to year.

Q So they pretty much agree with your recommendations?

A So, well, just the opposite really. They pretty much just take the annual appropriation from the previous year and if they do actually, the funding for higher Ed, public universities has decreased, they just decrease it proportionally down from year to year, so that the institutions basically get the same level of percentage, of funding. The last time our performance model saw any type of motion in the final product, in the final act appropriation was in in FY14, (um), and then (uh), again, that was a redistribution of

\$6.1M and (um), when you include the winners and the losers, you're talking not much of a difference of maybe \$250K - \$300K dollars difference in the swing of additions and the subtractions if that's clear.

Q Okay. You mentioned earlier that (P21) was strapped for cash I guess from the, there's not enough money to appropriate from the... Are you guys recovering from the recession, or is there a decrease in enrollment? What's causing the money problems?

A Well, the lack of a state appropriations (um), has driven the universities to have to use their own local resources, their tuition funds, their income funds, to (uh), support operations. And at the end of April, (uh), the general assembly finally authorized spending of 30%, 60% for state university, but everyone else for the most part received four months of their normal state appropriation, and so they were without eight months of normal state support funding, so that is what (um), just to clarify, that's what happened and is currently what's happening now. We have five more days in this legislative session, and were hoping in that legislative session that (um), will, so that put in some additional funding for public universities. But right now we're not seeing any additional movement.

Q Okay. We'll talk about the elements, metrics, and weights now. What was the rationale for selecting those elements, progression metrics, and weights?

A (Um), well I think (uh), again, the members of the steering committee discussed some, and, I will say from the models change in FY14. So and what you see now with the nine measures, and the five sub-populations, it's in our model for FY14. But the initial model we had those measures. Now we have a persistence measure, a retention measure, and our credit measure, cost per credit measure, those were not in the start-up model, so that's evolved. We also instituted a performance funding refinement committee on top of the steering committee, and that extensive which (um), throughout the spring and summer (um), 2014, 2013 and 2014 in order to modify and strengthen the model as well, so the initial (um), scaling and the weighting and all of that basically goes back to (um), encompassing the unique missions of the campuses and each school, and also (um), (uh), providing quality, to try and attempting to provide, because we don't actually a measure quality for staying in the model and that's something that our refinement had talked with them about, is how to account for that in the actual model. But we haven't really been able to provide a way to do that at this point. So I think that's something you know, when we, after that three year period is that (um), when my committee was backing a little bit more to. I can add to that. The quality issue is a national debate, and is very difficult on how to measure that. Do you measure from the student perspective, Or do you measure from the school perspective, or do you ultimately go to the workforce and measure are we producing enough (uh), I think as you put it in one of your e-mails, producing (um), a degree mills without fully having an (um), awareness is it really meeting the market demand there. And on a side note to that, (um), we are hoping at some point to develop some better metrics in terms for quality (um), what's instrumental to that is we have begun here in (P21) (um), a workforce commission that is trying to inject (um), private sector workforce needs into higher education to make

sure that the degrees that we are producing (Um), are in line with the workforce needs. And so were doing it, our executive director, has set up a commission that we did a nine-month review, and we're coming up with some preliminary findings here in the next couple of weeks. But looking at it more from a more regional standpoint so that each university, can look within their region to see what other immediate work force needs around the region, and seeing to make sure that the degrees that they're producing are in line first and foremost with the regional needs. So that's an effort that (um), is under way to help with potential future metrics in terms of quality. The avenue in which to help get that done in terms of identifying which performance metrics we have (um), are continuing to develop (P21) longitudinal data system which is a system that is going to track (um), the birth all the way through career, we're aligning itself with the (P21) department of employment security in which we can identify when a person leaves college or they disrupt their pathway, any course that they P20 realm, that they actually get a job we can identify their job, and try to see if it aligns with the (uh), academic pursuit that they (um), pursued in college so, if someone has an accounting degree and we look at their, match their record and if they work as a CPA at a firm, that it's a hit, that it's a successful measure of meeting the quality so to speak. So that's some of the metrics that we're looking to develop into the future (um), which is not yet in this model, and is just very difficult discussion during a steering committee. (Um), how do you actually measure that? That's one of the pursuits that we're thinking about (uh), at this point. So in terms of just the general (um), measurements we have degree completion, which is a, I think most states probably would use. That's a measurement of actual completion, production, potential (uh), completion production of actual degrees. In our state, we separate by bachelors, masters, and doctoral. Then we also look at the (uh), graduation rates, and also persistence rates, (um), within the first, what time is that, less than 30 hours, 30-60 hours, 60 and above, and that encompasses the transfer rates. Transfer students, that was added recently by the refinement committee. And then the cost factor, with cost per credit hour, cost per completion, (um), and that's annual information that we get here. It's within our office that's important to our research and public service expenditures (um), we do have, and it's worth mentioning, and I'm sure other states have done this too, (P21) Is so unique, because we integrate with our flagship university, public, university of (P21), in terms of total expenditures, I don't know what the percentage is, I can get it if you really need it, but 5% of all our expenditures for public university expenditures in (P21), you can't compare an institution of that magnitude to one of our smaller institutions, like (P21) state university, or (um), one of our regional schools out in western (P21). The missions are clearly different and unique (um), so that was the original task under the 2010 legislation that we had to do (uh), incorporate (uh), as to include the differences in mission, so with that was when we came up with the, the Pell eligibility, the adult Hispanic, and the African American (uh), sub-populations (uh), so that was important to help identify student profiles within each different campus. To follow up on with that in the sub-populations, we also included a 40% premium, (um), in the years that provide (uh), that's another for account, for the (uh), each schools mission.



Q Okay. You answered that one already, number seven. Okay. Actually you answered that one also. Is there anything you would change concerning this model? Would there be something you would toss-out or add?

A In terms of the model, in terms of the initial funding that's needed (uh), to put through that model, but the model itself (um), what's important is like I said the number one strength is the three year established for three years, so in order for us or not is (um), whether or not the actual model is used by the legislature in terms of, of, enactment of their appropriations, there's still value in the fact that for three years and that we will have (uh), three good years of measuring same consistent data with the same consistent metrics. But when we go to refine and improve the metrics, we have valid data in which to build from, so that's going to be very important (um), in that re-refinement (um), analysis.

Q Okay. What do you feel are the top three metrics and why?

A (pause) Let me back up to just clarify. (Uh), (P21) is unique, because we have the University of (P21), and the medical Hospital in (P21), and the veterinary clinic in (P21), and southern (P21) University, and other systems (um), has a medical school. One of the things the model does take into consideration is what we call high indices, so those (um), unique programs that are, (uh), need to be excluded because it's not the overall (uh), operations so we exclude those high indices from the model. And that, that's important (um), so that we can compare apples to apples, that's a point of clarification. So (um), what you have in (State) the problem is, you can't really pick one or two of these because it's a totality. You got to look in it as the group, because it's really not fair to (um), look at bachelor's degree, and say that one institution produces more bachelor's degrees, but yet if the university is more of a higher Ed research (uh), institution, we have better doctoral and master's degrees, (um), numbers. So with (P21) complex and range of (uh), universities, (um), it's very difficult for us to say this is a better metric than one over the other. (Uh), all of the metrics in its totality is an attempt to try to (uh), consider the value of differentiation of all the missions. So I think if I were to separate your questions to say what are the most identifiable metrics (um), I think it's simply the degree production are one that are base lined (um), metrics that are probably the most identifiable when we talk to the legislature (um), but then you got to include those institutions where receive a lot of transfer so, students like our governors state university, and our (P21) state that do not have a very strong freshman and sophomore class but, because they have a strong community college network they are also get a lot of local transfers. So there's great value in education in that, so that's an important metrics. Two metrics, and of course there's three that (uh), mentioned regarding the grouping of the Pell, adult, Hispanic, and black, in terms of differentiated, (uh), including the different student profiles are different and third set of important metrics that needs to be included.

Q Those are sub-populations?

A I'm sorry?

Q The ones you call sub-populations?

A Yes, that also include the STEM and health care degrees as well.

Q Okay. Is there any information you would like to add at this time?

A Well, I mean basically said I think, and it's important to note that after the FY18 cycle we do plan to reconvene our steering committee group and our board to (um), continue developing the model and (uh), still looking into the strengths and what I was saying about quality and (um), you know, we don't want to lose, because the legislature public act provided the basic template that we have to follow, but in terms of modifying it and strengthening it we continue to have those discussion and (um), even this spring, you know, we had to testify in front of the legislative higher education committee and we were asked whether or not we were going to (um), you know, look into further developing the model, and you know, maybe adding or modify some of the measures, and being prospective instead of retrospective, which is important too. So all of that we plan to look into probably (um), next spring or summer. We will try to reconvene then, steering and refinement. And a closing thought on that effort to (uh), reassemble the (uh), (um), the refinement committee, we would have to do an assessment of the (um), impact of the FY16 budget impasse that had on the operations and programmatic and academic (um), operations of the universities. So not having a budget (um), for the most part of FY16 and depending on other local resources and depending on FY17 and the measurable impact on performance. So before we could actually reassemble, you got to do that assessment on what kind of impact the current (uh), budget impasse has had on higher education, and what that means to performance so, that assessment you can't do it now, but as soon as we get a better understanding of where we are at the completion of the FY16 budget and doing our assessment on the FY16 budget impasse, (uh), that's an important analysis that's going on and what we must do before we can even consider to refine our performance measures.

Q Okay.

A If that makes sense.

Q Yes. That concludes my interview question session. At the conclusion of my study, I will send you an executive summary report of my findings for helping me with the interviews and survey. And I would like to thank you very much for your participation and support.

A Thank you! Bye!

END OF INTERVIEW

**Research Participant P73**

Q Thank you. Do you have any questions for me before we begin the study, about the methodology or anything?

A Not at all, so go right ahead.

Q Okay. On your e-mail survey you mentioned that the, let's see, that your model had changed in the last five years. And I looked at it and it said the base formula had changed. And it talked about lower division and upper division. Does that mean 2-year school and 4-year school?

A (Um), yea, it does. For (P73) system of higher Ed, we have a 2-year institutions and 4-year institutions in the same system. So, (uh), basically is it 100 and 200 level courses at all the institutions, and then 300 and 400 level courses at the (uh), university. So English, English 101 at the university is reimbursed the same as English 101 at the community college.

Q Okay. What do you feel are the strengths of this funding model?

A That it aligns state funding with the work completed. In this case measured by completed weighted student credit hours.

Q Okay. Can you identify any weaknesses with this model?

A Probably the (uh), biggest mechanical issue with it is that it's based on most recent actuals. So there is always a time delay between an institution completing the work and getting state funding.

Q How much of the delay would you say? One fiscal year or more.

A More than one fiscal year.

Q Okay. I know for example, Georgia, it looks at the year before.

A We look at the most recent actuals going into the legislative session. But our legislature only meets every-other year. So for instance, fiscal 16 that we are in now, and fiscal 17 are based on fiscal 14 - which was the most recent that we have during the legislative session.

Q Okay, that's interesting. Were there any difficulties in implementing this funding model?

A Well we had it implemented on a cost neutral basis. And, that means (uh), that of course that (uh), if you have same amount of money divided up different ways was still the same amount of money. So, some institutions lost funding (uh), during the implementation, and some institutions gained.

Q Do you have any evidence or data that shows the funding model is achieving what it was intended to achieve?

A Well, so it's only been in place (uh), for a couple of years now, but it appears to be, (uh), matching up state funding to work completed, and (uh), institutions are focusing now on completing those weighted student credit hours. The prior formula was based on enrollment, so we were really good at just enrolling kids, just not so good at getting them back out the door with a degree or certificate. So I think it, we're more closely aligned to what the institutions missions are.

Q Okay, that's good. Tell me about the elements, metrics, and weights. What was the rationale was for selecting those?

A So, (uh), NCHEMS actually (uh), developed that weighting matrix for us. Are you talking about the performance pool or the base formula?

Q Well, there is, you had the base...

A There is the base formula that is the primary (uh), funding mechanism, and then there is the performance pool that (uh), is the carve out, (um), that tied to more specific metrics. So I want to make sure we are talking about the same one.

Q The performance pool. Is that the...

A Okay, so that was the chart that you actually sent me. That is the money that is carved out and then institutions had the opportunity to earn it back. It has very specific criteria such as graduation rate, or (uh), STEM graduates, those kinds of things.

Q Okay. I've got a copy of the performance pool, that PP spreadsheet you sent, the education funding formula summary document - does that have the base formula in it?

A Yes. That has both pieces.

Q Okay. How much percentage is the performance pool, is that 100% or is that a fraction of it?

A It's a fraction of it. (Uh), let's see, it is 10% this year, 15% next year, and it will be up to 20% the year after, and it will be 20% (uh), going forward.

Q Okay. That is how NCHEMS wanted to do it, right? Gradually?

A No, that was the actually an initiative of the National Governors Association. They were doing quite a bit of work on performance funding in higher Ed, and (uh), our governor is the vice chair of the higher Ed sub-committee for the NGA. So, there was a natural tie-in there, but no, that was a National Governors Association Initiative. I'm, I

think the name of the guy there was (NAME) and I think he may have moved on since then.

Q Okay. The next question is if the metrics are weighted, how and why were the various metrics weighted, ordered, or prioritized?

A (Uh), so again, you're talking about the performance pool?

Q Yes.

A It was, (uh), it was based on their alignment with state workforce goals.

Q Do those change?

A (Uh), you know they're subject to change, but not quickly and not dramatically.

Q Okay. I noticed in (STATE) there was a, from talking to them there was a focus on what they call it STEM-H. For a, they also have agriculture considered along with their STEM, and because...

A (Hmm), Yes

Q Because the price of oil has dropped, their tax revenue base dropped. Tax income for the state went down, so they are having to come up with different ways to get money.

A Yea, pretty common story.

Q Okay. You responded that the funding model changed in the last five years, and I read the funding formula that shows what changed. Can you tell me why it changed?

A Well I think (uh), here in (P73), funding formulas seem to have about a ten year life expectancy. So, (um), it was due for a revisit and an overhaul. (Um), the old formula was very complex; it was an inch thick book full of formulas and spreadsheets. You know, you see the new formula is only 10 or 11 pages total. So the old formula just was due, it was really complex, and nobody understood it. There was a concern that it was FTE's and not completions.

Q That's interesting that (P32) brought into the same thing, that the complexity was an issue, and I noticed some states talk about FTEs and others talk about 100's of FTEs.

A Yea.

Q Okay. Is there anything you would consider changing in the model? Would you toss something out or add it?

A Well, it's, so just to be clear, (um), it is the legislatures model, not ours, so, so I just want to make sure that point is made. (Um), no I mean I think the formula is doing exactly what the legislature intended it to do. (Um), we're going to ask the legislature to adjust some of the weights just because now that we have a couple of years under our belt, we realize some of the weights are not appropriate. But, those are just minor tweaks. Overall I think it does what it's intended to do.

Q Okay, excellent. What do you feel are the top three metrics and Why?

A Well, (uh), top three metrics and why. (Um), I mean I guess it a little hard to answer, but I would say, (uh), you now they are all important because they all tie to (uh), specific goals and expected performance of the institutions. So I would not want to say graduates are more important than (um), STEM graduates, or (uh), those kinds of things. I mean I think they are all there for a reason.

Q Okay.

A There was an, that was, the final version that you have (um), was, I think it ended up being like version 20 or version 21. Through the process, and there was an enormous amount of give-and-take, and every (uh), constituency had a lot of time to make their case. So (uh), I think the result is a pretty balanced, broad set of metrics.

Q Alright. Is there any information you would like to add at this time?

A (Uh), no I think it pretty well covers it.

Q Okay. Well, at the conclusion of my study, I will send you a copy of an executive summary of my findings.

A Great!

Q And I wanted to thank you very much for your participation and support. And as I go through these research notes and compile a report, if I have a question or need clarification, can I send you an e-mail?

A Yes, an e-mail is the best. (Uh), we're, May is our extremely busy month for (uh), budget preparation, so give me as much lead time as you can. And actually copy (NAME) when you sent it to me too, to be able to help run it down.

Q Okay.

A Great.

Q Alright, I appreciate your help! Thanks again!

END OF INTERVIEW

### Research Participant P47

Q Thank you. Do you have any questions about my study, or the methodology or anything else before we begin?

A I don't.

Q Okay. I looked at your survey, and you mentioned that the model that I sent to you was an older model, I guess. The new funding formula was for 2016 to 2017.

A Yea.

Q Okay. My research actually focuses on 2010 to 2014. But, the last two research questions deal with changes that the states are making after that, so that is where the focus of this interview is.

A Okay.

Q Because that from 2010-2014, that gives us five years of data to look at to see if it is working, and if it has changed, what changed, and what were the rationales for the changes.

A Okay.

Q Alright. What do you feel are the strengths of this model?

A (Um), one of the strengths is that it does encourage programs to focus more on student performance than on (uh), the size of the program. Our old funding formula model that we had in 2010 was pretty much based in head counts than on need. And instructional hours too, I guess, provided. But no performance. So when pushed, the performance piece, started performance in 2011.

Q Okay. Why would you consider that a strength?

A Well, what? That we put performance in it?

Q Yes. You said student performance and size of the program. By size of the program do you mean enrollment?

A Yea. I mean, well previously before we put the performance-based part in it, we just based it on enrollment, and instructional hours, and a little bit on the percentage of the need that they serve. And now we have added, you know, made some of that - in 2011 we made it 5% performance, and now we're at 20% performance.

Q Okay.

A And the strength was (uh), it demonstrated itself initially by improved performance statewide. (Um), and so, I consider that a strength to fund programs based more on the quality of service than on the amount of service.

Q Okay, that's a good way to put it! Can you identify any weaknesses in the model?

A Yea, (um), I am expecting that (um), there is a point at which we will not be, programs will not be motivated to improve their performance. (Um), I don't know if it will be if we increased the percentage that is based on performance too much, or if people just get used to it. I, you know, I am certain that performance-based funding has a tendency to cause programs to be less willing to take risks. (Um), in developing new practices and adopting best practices.

Q Okay. I interviewed one state that said they were concerned that their performance was focused on the money, and not so much the students. They were concerned that they were going towards profit instead of academic-type business model.

A Yea, I don't actually see that happening here.

Q Okay.

A (Um), the, our people are so (um), just universally dedicated, and we are so underfunded that the institutions, which in this state are higher education institutions, do not see us as any major help to their funding.

Q So they get, You mentioned earlier that 20% of the funding now was performance-based, does the other 80%, is that, what type of funds is that called?

A That's enrollment, and a piece of that, I think it's 5% of that is based on the percentage of the people who need it in the region that the program is serving. But it is mostly enrollment.

Q Okay. One state called that...

A I have seen that some of the larger programs have focused more on actually increasing enrollment anyway, they have begun to do that because they realize that gets them more funding in the 80%, than the performance would in the 20%.

Q Would that 80% enrollment, would you consider that base funding?

A (Uh), no, we have a base too. I mean, we give every program, (um), \$70,000 a year. And that's because we think that is the minimum it would take to keep a small program operating. P47 is geographically the fifth largest state, and has only about 2 million people, so there are areas where there are very few people, and so the programs are small.



Q Okay. Were there any difficulties you encountered implementing this funding model?

A No, not particularly, but that's because we have taken great care to involve all the program directors, (um), in determining what the formula should be, and that is an ongoing process. We meet every year and talk about how it is and isn't working to meet our state goals, and the continuous program improvement. So we, in the, while the task force that we have does not decide what the funding formula is, we really do listen to their input and they trust that.

Q Okay. So it has good buy-in?

A Yea.

Q That's one of the trends I am seeing talking to the states is, for it to work, there has to be buy-in and, and like you said, trust.

A Yea.

Q Okay.

A That, that takes effort.

Q Do you have any evidence that indicates that the funding formula is achieving what it was intended to achieve? Earlier you mentioned it was achieving its performance objectives.

A Well, it did for a while. It doesn't seem to be doing that as much now, (um), so I am not sure why that is. It, it may be that we need to raise the percentage of funds devoted to performance. I think that may be what we need to do. But I still, what I really fear about it most of all as I said, it, (um), the inclination is gives programs to be fearful of taking risks that might in fact improve their performance, but also increase the risk of depriving them of funds.

Q Okay. Can you talk to me about the elements, metrics, and weights that are in the formula? What was the rationale was for selecting those?

A (Um), we selected NRS measures, National Reporting System for adult education that those, (uh), goals which were (um), attainment of high school equivalency, or GED, (um), transition to a job, (um), retaining a job, or transitioning to post-secondary, and also level gains. And then we have (uh), each of those, that's five right - yea. Each of those metrics is weighted equally, and we've also added another which is: did the program (uh), reach the state's performance targets or not, and then they get an extra credit. And in addition, (um), we measure the, except for that last one I mentioned, we do, we look at the program over the preceding three years, and see which each of those three periods they improved for that particular (um), metric. And that's how we award points is for

continuous improvement. So, they aren't competing with each other, in terms of their performance, but try individually to improve. And over the course of three years, and hoping that by the doing it over the course of three years, it might mitigate their fears of taking risk a little bit. Because they wouldn't lose as much if they had a first year's slump after trying something new, you know.

Q Right. Kind of like a small business. They expect you to lose money the first couple of years before you start making a profit.

A (laugh) Yea, right. And I think it's demonstrated that you have a year or two, you abandon a practice before you are still figuring out how to perfect it, you know.

Q Right. Okay, you mentioned all those five metrics were weighted equally.

A Yes.

Q Okay, that answers that question. Was there a reason that they were weighted the same?

A The folks out there, started that, you know, and wanted that at first. We were considering some (uh), major changes, you know, working on major changes during this coming year for (uh), 17-18 because we will be, totally being governed by WIOA then, and we might weight some differently. (Uh), because those are no longer our metrics, not all of those metrics are ours, they are WIOA's. But, and some of those are measured differently. For our funding formula, we will measure them in ways that will make sense for program improvement. So we will be doing a lot of work doing that, and that may involve weighting some more than others. I am also going bring up with the group the possibility of weighing educational functioning level gains more than the other things, simply because we do very poorly at that as a state, but as we do pretty well with high school equivalency, and transition to post-secondary and things like that. So I am thinking of giving more weight to stuff that we do poorly.

Q That's a good point. Okay. In the questionnaire you mentioned that the funding formula changed to measure program performance measures over the preceding four years. What was the reason for that change? Was that because like you said, you wanted to focus on performance improvement?

A Yea, the major change in that period you're looking at was, we introduced, was during the performance models. At first we compared program performance to state targets, but that was not an incentive to, (uh), was not a reasonable incentive because some programs were very far beneath the state target, and some were performing very well without it. Right, so that the ones very low had no hope of meeting that target in any given year, and the ones above it had no incentive to improve. So that's why we changed it to comparing them with their own past performance - to see if they were continuously improving. So that's the reason for that change.

Q That's excellent.

A And, and we did all of this in consultation with the program managers, and actually, frankly, anyone else that wants to come to those meetings and provide input, like teachers, or financial managers, or anybody.

Q Okay. Is there anything you would change about this model or something you would toss-out?

A (Um), I can't specifically say that, I mean anything other than I said already, except maybe weighting things on what we do poorly. I am going to keep researching the success and failure of, of the performance-based funding in adult education, and try to figure out better ways to do it. But I, you know, we'll do that as a group, to improve and, so I expect we will make changes. We try not to make vast changes of course from one year to the next, because we want programs to be able to plan. (Um), and, there's on other thing I want to say, having that task force, it's not only critical for buy-in, but it is critical for getting good creative ideas. It's not just people at the state level developing a formula, it's people on the ground who are doing the work, you know, helping us, really understand what would motivate them and what won't.

Q Okay. That's another theme that seems to be reoccurring - talking to the various states, is to have buy-in.

A Yea, but it is also to have the contribution of those people, their brains, you know, and their creativity to, to actually creating the solutions in the formula.

Q Okay. This one is probably a moot question at this point, because the weights are the same, but what do you feel are the top three metrics and why?

A The top three metrics to me are probably, are probably, that we have now, are probably transition to post-secondary education or training, (um), attainment of employment, and high school equivalency credentials. (Um), and we are at the other end, the employment focus we have is on, we are trying to make that an emphasis on getting living wage jobs - not just any job. Most of our, not most, about 40% of our students enter our programs already with a job. But, they can't live on the income.

Q Right.

A You know, so we do not see getting a minimum-wage job, or keeping a minimum-wage job as a, a success. We like to help them, give ours a career pathway.

Q Okay. Some states would consider that a quality metric. That if they are successful in getting a job at the living-wage level, then you were successful in your program.

A Yea, I would agree that we could do that, yes. We could add that as a metric.

Q Okay. One of the states I was talking to was concerned that there wasn't quality metrics in there. That they were concerned that if the states began to focus on performance, they may lose focus on the academic aspects of preparing good citizens.

A Right, and we had that concern too, which is why we are not going to change the metrics we currently use. So that they match the (uh), WIOA metrics, because we don't believe they do measure quality. (Um), we are going to, you know, keep measuring things that mean something to the lives of our students, and we may change (um), that attained employment metric to be (uh), attained employment in a living-wage job. We may well do that this time, you know, during the next change for 17-18.

Q Alright. Well, that concludes the questions. Is there anything you would like to add at this time?

A (Um), yea, I've got some questions for you, quickly, if that's Okay.

Q Sure!

A So you said this is your dissertation research right,

Q Yes.

A And (um), will the participants get to see what you find?

Q Yes. Actually, that was part of my closing remarks was, and also in the introduction e-mail I mentioned, that I would give an executive summary of my findings,

A Okay.

Q But I will also send anybody that is interested, a copy of my whole research paper with the UMI number, once it is approved.

A I would love it if you would do that. And I appreciate you doing research on adult education, and particularly on funding formulas, we need that! We need more of that.

Q Okay, you're welcome, and I want to thank you very much for your participation and support! It really does mean a lot to me and following up on the interview. As I go through these, my research notes and compile my report, if I have a question or need some clarification is it OK if I e-mail you?

A E-mail me or call me.

END OF INTERVIEW

**Research Participant P89**

Q Do you have any questions about my study, or methodology, or anything else before we begin?

A I do not.

Q Okay. On your response to the questionnaire you made note that the model has not changed, and everything, the examples I sent were correct, so that's good.

A I do want to preface this before we get into it, because we actually in the process of embarking on changing it. It has not changed yet, but you have pulled down the master plan, and our new model will be built around those master plan goals, and that was one of the reasons that I followed up with the documents that I did this morning. Because this was the document that was adopted in preparation for implementing what we currently have right now. So that is probably a better document to give you some guidance on the current model.

Q Okay.

A We are still planning an outcomes-based funding model for our next phase, at best, it will be aligned with our master plan and the goals that are our way forward with our master plan.

Q Well that will help with my discussion on the conclusions chapter. Because my research actually focuses on the 2010 to 2014...

A Okay.

Q ...to get some substantial data to see if the models work, and then the last two research questions deal with performance metrics, and what has changed and why they changed.

A Okay, perfect.

Q So that will help other states.

A Got it, sure, sure.

Q That were thinking about a metric, but this state we tried that and it did not work as well as we planned, so we want to think about something else. Okay.

A Okay.

Q What do you feel the strengths are of this funding model?

A (Um), just, this whole purpose our state embarked on performance funding back in 2011, (um), was the fact that (P89) really lagged behind in regards to our attainment

rate in our state as far as how many, (um), people, adults, that have post-secondary credentials, which obviously directly impacts the, (um), income earning potential for people in our state. And we are on the lower end of the average income as well, so I mean, they are directly correlated as far as education level are lower and our average income in our state is lower. So our governor at that point in time challenged the institutions in the department of higher education to double (um), the number of, really the institutions, to double the number of degrees by 2025. But that was the whole basis for which our current performance funding model was built, was to measure the progress towards doubling the degrees by 2025. And I think that the, (uh), strength in that model that we currently have is the continuously tracks the progress to that goal, specifically on the university model, we will get into the details of the model, on how the metrics were, but one of the metrics in the university model measures just that. It was determined that it would take a 4.73% increase each year, with our base year being aligned to FY 2010 to double degrees - bachelor's degrees specifically, but double degrees by 2025. But does the model have a strength in that tracks that progress towards that goal. (Um), I think another strength that the model has was to move (um), fund - there is a portion of an institutions funding that could be lost if they don't meet these performance funding metrics. (Um), and I can later kind of explain how that works with their base funding with an institution base funding. (Um), they do not get any new money for performing; they get to keep the money that they were, (uh), allocated by the state if they performed - if that makes sense. (Um), so it really has changed the conversation on accountability, and not just getting students enrolled but getting them into completions. (Um), getting them a degree, progressing them, having better retention, things of that nature. Because the funding model in the past, and we still have it currently - because we got two models for which the intuitions are funded by. (Um), it's not 100% performance-based. There still a needs based, a portion that's performance-based. (Um), but It started, it changed that conversation on the accountability of not just enrollment, but to completions. So I would say that's another strength in that moving the needle to focus more on completions because we had, we been the state that really focused on access - getting students in the door. We've done a good job at that, but we've not had a good job at getting them out the door. (Uh), with a credential, (um), or any level for that matter, technical certificate, up to the bachelor degree and beyond. (Um), so I would say from a strength stand point, those are two (um), strengths of the current model.

Q Okay. When you mention 'move to funding so that they don't lose funding', is that, do they also call that stop-loss?

A (Uh), Not in this model. So I will explain just a little bit of how this model works in regards to how it impacts an institutions funding. So we have a needs based model that it is solely dependent upon enrollment. (Um), it is driven by the student semester credit hours that are produced in an institution, there's - and I won't go into detail on that model, but there is different (um), components to it, and it takes into account cost of different courses, obviously an English course is cheaper than an Engineering course. So all of those things are taken into consideration, and it then determines the needed funding from the state that an institution should receive. We make those recommendations to the legislature at what level you should fund the institutions. Ultimately the legislature

decides what levels they are going to fund institutions at. It's definitely not at 100% of what the needs of the institution are, but what the model of the needs the state should fund them. (Um), so of that money that the state funds, (um), to each of the, money that the state allocates, to each one of our institutions, there is a separate model that we run based on the performance, it's our performance funding model. And when performance funding was implemented, it was (um), to build to 25% of their base funding, or 25% of their funding that was allocated to them by the state. It went 5% the first year of implementation, 10% and it was supposed to go up 15%, 20%, and 25%. There was a law that was later passed that stopped it at the 10% mark until such time every institution was funded equitably, which is deemed to be at 75% of the needs-based model. Not every one of our institutions are there. I don't foresee any in the near future that all the institutions will be at the 75% mark. So therefore stuck at the 10% of the states, of the institutions money allocated by the state to them is subject to being lost if they don't meet the performance funding metrics. If they don't, there is a score out of 10 they have to at least meet 6 out of 10 in order to keep their funds. So the performance component is not additional money on top of what they are funded, it's actually, it's they get funded, they can lose up to that amount if they are not able to perform. They can lose up to the 10% if they do not perform. So there is not really a stop-loss, (um), it is basically a portion of their money they get if needs-based funds because of their needs, (um), and a portion of their money is allocated to them you know, if they meet the 6 out of 10, they get to keep that portion of the money and not lose it. (Um), it would be a one-time loss because each year, the institutions go back up to their base level, and then they are measured again. To see if they get to keep their money or if they lose a portion of it, because they did not perform. So, you are as much, (um), so it's the performance component of funding in our state is part of their base funding allocation, like it's not just the additional funds because they perform. They just get to keep what they were initially allocated by the state as opposed to losing it.

Q Okay. What weaknesses can you identify with the model?

A (Um), some weaknesses. (Um), at some point the way these measures are built, at some point, everybody is going to lose. (Um), because it is built on, (um), improving year after year after year. Now it is based on averages and rolling averages, but at some point institutions are going to reach their top performing level. (Um), you know, some of them, I would highly doubt it, but some of them could reach 100%, you can't really do better than that. (Um), so the, when this model was built, it was built on the intention that we would review the metrics periodically to address some of those issues, and that would be one of the weaknesses. At some point you are not going to improve anymore, you're doing as well as you're going to do. Also one of the weaknesses in the model is that it does not give any, (um), does not account for when an institution may see a significant enrollment decline. You are still expected to improve over the previous year; it's just with fewer students. Obviously with our two year community colleges that has (um), been a struggle because they have seen a decline in enrollment as well as the, (um), that I think it's similar across the nation, that the two year colleges at the time of the recession they were, you know, at enrollment highs, and now it is leveling off, and some of our institutions are seeing a pretty significant enrollment decline. (Um), I also think that is

more of a punishing model instead of an incentivizing model. Because it is you know, basically set up, well here is your money, but we are going to take some of this away if you don't meet the performance standards. (Um), I believe that a performance model would ideally it would be more, its, work better, and (uh), behavior more if you incentivize meaning, here is your funding, if you do this, this, and this, and you can receive you know, funding from this pot for improvement funds or performance funds. (Um), think also see that as weakness is our institutions probably see it more of a punishing stick, than they do as necessarily one that promotes performance, and especially when you take that into consideration with (um), that our state, higher education in our state really has not given any new funding in the last five years. We have been (uh), pretty much at a flat funding.

Q Okay. Were there any difficulties implementing the funding model?

A (Um), that is one question that I probably am not the best person to answer, they have, I would say that it took a lot of work. I was not here in this position at that point in time when they were developing the model. I came once it was developed, and then (um), I basically run the model every year, and then, (uh), you know, review all of that information on an annual basis. (Um), I will say that it, it, it, implementation-wise, it wasn't sure that we had to, it was by law, that we had to implement this funding formula, and that statement that two years, colleges, and the universities, (um), we did this, the department did this in coordination with the institutions, and they did see it as an opportunity that they could set these measures themselves, and then they didn't. That they couldn't come up with an agreement that the legislature was going to do it for them, (um), because it was mandated, I mean I think that's definitely something that pushes them along, and (um), the reason was (um), there wasn't necessarily a lot of pushback from implementing it, from, by the institutions, they had to, (um), I will say that to get to the point where everybody was comfortable with the data, I mean that it, they were meetings after meetings, after meetings, after meetings, just to review the data and to make sure that all of the institutions were comfortable with the data that the department would be using to run the model. (Um), I will say in (um), the university model there were two metrics that there would never had been the ability to measure those, (um), and we still have yet to figure out a way to measure those, or have not pursued (um), aggressively pursued starting to measure those, (um), and as well as one measure on the 2-year college side. So, and that's our cutting back or weaknesses and struggles with implementing (um), post completion, success, and then something that has been hard to measure basically (um), employment. (Um), that has been a weakness for our state to be able to (um), measure the (um), performance for institutions on their students that graduate and go on to get a job, (um), to get employment. (Um), that, that specifically is the measure on the 2-year college that we have yet to be able to measure accurately yet, (um), on the university side we have two measures that are (um), patents and startup companies. Obviously with our research institutions, that you know, something that they, that an activity, that, (um), something they pursue on their campuses, and we yet to be able to identify the best way to measure those either. (Um), so obviously we'll take that consideration whenever we build it, and in the process of building our new model that



we're working on now, that we won't put any measures in there that we can't properly measure. (Um), so that's something that we'll have to take into consideration.

Q Okay. On your, just to give you a heads up on your one-year measure - the post completion success enrollment, one state that I interviewed did talk about that, and they said they (the state) performed gallop polls to keep track of that very closely.

A Say that one more time, what you just said.

Q They conduct gallop polls to...

A Who conducts gallop polls, the institutions?

Q The state. It's one of the metrics they keep track of. It's not really a quality metric, but they do follow up to see what they're - I am trying to remember how exactly they described it - their college experience. Do they, are they gainfully employed, has their life style increased or improved, just different things that they track that once a person graduates...

A For their... Yea, I know we've had conversations for our current model. We've been since 2011, I'm sorry, the future model, when the current model that was built in 2011, there has been some (um), (um), gaining and ability to get closer to being able to measure that post completion success, whether it be employment. We're also looking at, I'm skipping ahead in the next model, but we're also looking at (um), like watching certifications, to success as a measure, to for post completion, (um), and then entry in the grad school. So we had made some strides in being able to (um), get employment figures, for the next model for the next iteration of our performance based model.

Q Do you have any data or evidence that the funding formula is achieving what it's intended to achieve?

A (laugh), (um)...

Q Did you just laugh? (laugh)

A (laugh) You know, (um), I'm so, it's hard to speak, and I will be honest in that I don't know if that's a yes or no, answer yet. But I can't say that for sure that it was the performance funding model that impacted change necessarily, but I will say this, that it is definitely much more on the radar of the institutions to track their data with regards to completion success. (Um), and many of them as they have reached their strategic plans, they are in their strategic plans, accreditation process, and their strategic planning process, many of these measures that we have used in the performance funding have now become part of their strategic plans. (Um), So I would say that, that alone shows that we at least have changed the behavior or the thinking of institutions, to really, instead of focusing on just access to really start focusing on retention and completions. Because our

state has really struggled, and really fallen behind on retention and completion component.

Q Some of the states I've interviewed, their comments were because it's such a low percentage, like 5% of 10%, they can't definitively say whether it has or has not had an impact on it.

A Made a difference, exactly. And really with ours being that it's more of a kind of punishing, you know, it's (um), it definitely has not - we have not moved the needle much. If you were to look back at our attainment rates back in 2011, and look at them now, the needle has not moved much. So, but at least it is changing the thought process, and hopefully behaviors to focus more on student-centric design to improve retention and completion. So we'll see.

Q Okay.

A And with our state also, I will just add this too, (um), we're not - our department is not one that allocates the money to institutions, but we don't get just a pile of all of money for higher Ed, and our model, you know, decides to what institutions gets what money. (Um), we make recommendations, we're a coordinating board, so we make recommendations to the legislature, but ultimately it's the legislature that decides line item by line item, who gets what. (Um), from our institutions, so, you know, that throws another, a wrinkle on how much can performance funding impact (um), an institution. When really the decisions are made at the legislature, and they don't necessarily have to follow the recommendations of the model. They can choose if anybody is to receive any new funds or get cuts. Ultimately, it's up to the governor and legislature to make decisions. Most of the time they do come to the department to run some scenarios of how to distribute any new funds if there was any. (Um), which we go back and use the recommendations to, to (um), run some scenarios of how to do that. But, like I said it's ultimately up to the legislature and the governor.

Q Okay.

A We're a step away from really, really making a true impact from just our models, just to (um), try to have more of an efficient spending meter, attainment goals in the state.

Q It's interesting you go through all this drill to decide who gets the money...

A I know, it's true, (laugh).

Q and some can say no, I want to move some money over here...

A Yes, I will agree, it is a, (um), it can lead to some frustrations that the state... I would say institutions are going to be uncomfortable in that process. So, You know you gear up and work with the, the parameters you have, (laugh), so, you know some institutions are successful and, and have a strong representation in legislature, but (um), a

representative or senator that's from their area, so, some are better than others in the past. It has not been much like that in more recent years but, it definitely (um); the stronger your legislator was the more likely of you might get some funding, (laugh), or some additional funding. But since we've been flat, that really has not been a problem here of late.

Q Okay. I know you mentioned you came in after it was implemented, but do you know that the rationale was for selecting these elements, progression metrics, or weights?

A (Um), ultimately the yes, (um), ultimately the goal was completions. (Um), so, our governor, like I said, our governor had (um), challenged the institutions to double the degrees by 2025. So if you look at the metrics (um), most of the metrics are geared towards credential completion. (Um), we do have progression and or retention metrics that's also have another important piece to get student to a credential, so that is a part of one of the measures. All of this is geared behind getting more credentials (um), with a focus on STEM credentials as well as (um), creating an ability to (um), take into consideration the different missions of the institutions. So you will see in the optional metrics some of the institutions have more adults, so in the optional section you know, they can be scored on the improvement of adult metrics, PELL credentials, minority credentials, and so forth. There is a variety of different type of student demographics that are considered, it's also very important to us that (um), it, we don't have enough high school students to get us there. So non-traditional was definitely one that had to be part of the measures to see improvement on (um), improving the number of credentials that are awarded to non-traditional students. (Um), because if we are ever going to reach our attainment goals which is with our high school students, we got to reach back out to our adults that have has some or no college, at all to get them back enrolled and get them credentials. Those are pretty much the driving factors behind the way that those metrics were built. Basically which were credentials, retention, and then different student demographics to ensure having a focus on those student types. (Um), there is also what we call compensatory measures or, bonus points if you want to call it, and those are for the university or 2-year college model. (Um), for the university side it is for needy students or students that are eligible for the Pell grant, on the 2-year college side it is for under-prepared academically, (um), as well as Pell eligible students. (Um), also on the 2-year college side, their open door policy so, we didn't want to discourage institutions or 2-year colleges from serving those very students that their mission said that they need to serve. So as statistically those students perform at a lower rate than a student that's non-needy or a student that is prepared academically. (Um), in the whole model it's built around those students getting to be in. So apparently they, their improvement could be held back some because they serving the very students that are harder to get through they can argue compensatory points based on the percentage of their student population that's under-prepared as well as Pell eligible. (Um), and then on the university side Pell eligibility may not work in a poor state so, (um), we have a large population of our students that are financially to attend, financially dependent, or first generation students, that are attending college generally since they go hand-in-hand. So, in order to continue to encourage our institutions to serve those students, it was built in the compensatory points for that model.

Q Okay. Is there anything you would change concerning this model? Something you would toss-out or add?

A (Um), so let me just give you a few ideas on that comment, as we are going forth in developing a new model. (Um), I believe that this old model was really built more around protecting the institutions, (um), and trying to build a set of metrics that they could perform against and not lose any money. So I think maybe in the development of the first model we might have lost a little bit of sight of being student centric in building measures that would change behaviors of institutions to think more student centric, (um), so, meaning this next model we're looking at measures such as - like time to degree, credit completions, encourage institutions to have better advising so students can get through the pipeline faster, they can on time per se, it's more affordable. So we are really trying to go back and look at this, and build it say student-centric design, so I would say that (um), if we could change, now that we're throwing this performance model out the door and starting all over, (um), but obviously that is something that was important in building a new model, was ensuring that we don't get away from remembering that this is all about the students. And build a model that would encourage funding to support (um), initiatives that would be beneficial to the needs of the student, getting to the completion point in an affordable way. Not (um), we're really targeting non-traditional students. We said it in our last, when we developed our current performance funding model, non-traditional students were an important factor, and we said it on our report back then, I am not sure that it is necessarily, (um), is designed in a way that would further encourage institutions to really go out there and seek the non-traditional population, where I think the new model will have a little bit more weighting on the non-traditional students so that we can meet our attainment priorities, or (Uh), attainment goals that are set forth in our master plan. (Um), and I say that our current performance model, because really the funding recommendations are driven by the need model, I don't know that there is a lot of the alignment. (Um), or attempting to align funding with the state priorities. (Um), so those are some things that I would change. I would also change if we have any incentive monies available, we would be more than an extended model was opposed to punish model. Our current model right now is an all or nothing basically if you produce one more degree or one more on average degree in one of the areas of the metrics, you are considered performing. If you happen to have one less on average degree than it is either one point or a zero points - like all or nothing for that measure. (Um), trying to move away from an all or nothing type model. I don't know what our new model is going to completely look like, so I wish I could go further and can say how we fixed all of these things. But it's still (um), I'm saying in the early stages, what we're doing right now is building data behind some preliminary metrics that the work group has put together. We have not actually looked at the data yet. We're in the process of getting all of that information put together. So there are workgroups that will be able to repeat. Stability is also another important character of our model (um), it's pretty stable. I mean no institutions going to shift one way or the other based on the performance model. (Um), in how much funding they receive. (Um), so this model does provide some stability for the institution, so I would say it's very important that our new model also provide stability whether its stop-loss or stop-gains, like you mentioned earlier. But funding from year to year is not going to move a great percentage. (Um), up or down, (um), to make sure that

it's not, that it's saving an institution from one year to the next. When it's very hard to budget and plan; you really don't know what your funding is going to look like from year to year. (Um), so it's important that you make that stability, and it's going to be a slow process to transition, and to phase in a new model, (um), we have some safeguards in there to provide like I said stability, and funding going forward.

Q What do you feel are the top three metrics and why?

A What do I feel are the top three metrics? Like, the three most important metrics?

Q Yes.

A (Um), definitely the (uh), I say three, I mean three credentials. But we measure credentials at all the levels, (um), from the technical certificates, really from the certificate and proficiency, technical certificate, associates degrees, bachelor's degrees, and all the way up to doctoral. I mean, the credential get, I mean, that's the separate that, is the bread and butter, the purpose of our institutions is that (um), get students in, get them educated, that want to be educated, get them credentials, so they can go out and get them gainfully employed. (Um), so let's say the credential measures are most important measurements of importance. In the model (um), and second to that (uh), would be progression because it would be begin from semester to semester to retain their students. There never going to get to that credential point, so I mean the, those two pieces are the driver. And the most important piece of it (um), is a significant component of our funding here in the state is still enrollment based, and we're really trying to shift the needle to be (um), completion-based. And I mean even course completions, and then course enrollment and improvement. So were just trying to shift the needle to really be a completion model.

Q Okay.

A One piece I have not really talked about a whole lot on the 2-year college side, in our current model. There is a measure that's for work force training. (Um), you know, a lot of purposes of our 2-year colleges are to work with local industry, and provide training. Many times employees of local industry retool them or retrain them (um), so there is a measure in the current model that has workforce training (um), hours that improve the number of hours that they are providing in workforce training. I'm not sure exactly how that will matriculate into the new outcomes-based funding model. (Um), but I do know that it's something that's on the radar too, is for the workforce training efforts that are at our 2-year colleges provide. I did not want to give you the interview and not make any mention of the workforce training that it is because it's an important element.

Q Okay. Is there any information you would like to add at this time?

A (Um), I don't think so. I think I gotten it all out (laugh). I mean I consider a goal as to increase the attainment rate. That's ultimately it, where we have consistently fighting an uphill battle (um), trying to get to 60% of our population to have a post-

secondary degree, it's important. So whatever we can do to get there, (um), obviously many times money is what talks, so we are trying to align our funding policies with our current attainment goals with the state and our priorities of the state. So, that's where we are.

Q Okay. At the conclusion of the study, I will send you an executive summary report of my findings.

A Okay.

Q And at this time I would like to thank you very much for participating and support. And as I go through my notes and compile my report, if I have any questions or need clarification, can I e-mail you.

A Absolutely, yea.

Q Okay, Well, that's all I have and I would like to thank you very much for helping.

A Thank you and have a good day!

Q Alright, you too! Bye!

A Thanks, Bye!

END OF INTERVIEW

### **Research Participant P58**

Q Do you have any questions about my study, methodology, or anything before we begin?

A No, not right now, thank you.

Q Okay. This is just a preliminary quick-check question. Based on the survey response you indicated that the model I sent was accurate. At this time, is that still true?

A That is true, as of I think it was 2014; your ending was - yes.

Q Great. You mentioned, I read your notes and the documents you sent. You mentioned that the only difference was health awards and STEM for 2A were used as a chosen measure. The only thing I can find on, about what a 2A was, I am not sure what that is - was it Total Degrees awarded?

A I believe the difference was the weighting. I think we were weighting STEM at (um), at 1.5 (uh), basically multiplying by 1.5 per degree or certificate prior to 2014. I think 2014 was the first year we also weighted health.

Q Okay. What do you feel are the strengths of this model? And why would you consider those strengths?

A I think the strengths are, is that it's, you know, based on sort of the, all of the discussion that it arose out of. I think it's a good representation of different institutional missions. I think it's got some flexibility in there are some sort of manual options especially for the 4-year institutions, but I think it also, there are measures there that reflect, you know, reflect your degree production, reflect, reflect retention, reflect transfer, reflect (uh), you know, and then of course there's institutional measures, you know, (uh), you know, University of (P58) has (uh), research expenditures as an institutional measure now, so I think there's a piece there that, you know, there are some general, you know, success criteria within it, and things everybody should be focused on such as graduation retention obviously, but there are some other things that do vary by mission. I think the framework does a pretty good job of acknowledging that. I think it's also based, where possible, on (uh), reasonably standardized data sources. I mean, wherever we could, we based it on reporting to (uh), generally accepted secondary data sources like (uh), IPEDs, there's a National Community College benchmarking project that (uh), all our community college, colleges participate in. They're using the data that they report to that to pull a couple of the metrics. So I think that's another strength.

Q Okay. When you mentioned research metrics, was that the one metric that involved the amount of grant money?

A Yea, yea, for the University of (P58), there were institutional measures that are research expenditures, yea, that's the one.

Q Okay. That metric is one that is kind of out there by itself, right?

A P58 It is, that is one thing, they each have one measure that they can institutionally determine - with our board's approval. And that is one that they have chosen. But that's a good thing really, because in the public sector, I think, the other institutions have research dollars, but it is not really a primary area of focus. We have a couple of other major private research institutions, but the University of (P58) is the one that is the leading public.

Q Some of the other states I have interviewed, they do not consider that money as part of the performance pool. Is that Why?

A Well, it's not that it's part of the Performance Pool, that's part, it's that it's one of their metrics by which how they determine how they receive money that's part of the pool. It's not money that comes from the state. As a matter of fact, I think it's only focused on ISF dollars if I remember right.

Q Okay. The reason I am asking you all of this is because it was unique to the other models I have seen.

A Yea, interesting. If you mean unique in (P58) actually, they have that optional one institutional measure.

Q Okay. What weaknesses can you identify with this model?

A We're actually, right now, gearing up to (uh), be audited by our state auditor's office. And it started out a sort of a general institutional audit; it happens periodically every some number of years. But within that, they zeroed-in and broken off on a couple of other things that they like to take a closer look at. And one of them is performance funding. And which is fine, but a couple of things we anticipate that they are going to be interested in, are what the rationale is for the institutions self-selected peer groups. You know they, they can basically win a measure by continuous improvement, but they can also win a measure by sort of sustained excellence against a set of peers that they select. So, weakness might be too strong a word, but I think there's going to be some interest in how those peers are chosen since that does create a benchmark that they can win against.

Q (Hmm).

A The other thing that I think is going to be an area of focus is just getting underneath, you know I talked about the data, you know, comes from, you know, in, where ever possible, basically comes from data that's also reported to other (uh), other systems that are standardized. (Um), I think the auditors are going to let it be known that they like of get underneath that a little bit. We do not have the manpower to go out and say Okay, you reported, you reported this level of persistence, to (um), IPEDs for example. Well, you said you had this many students in your cohort, and this how many retained, however, this many students, you know, let's get underneath that, and really audit, you know, point for point. That we can reconstruct that data, and I think the auditors are going to be interested in doing that. And they won't be curious about what the results are, are they obviously as well too. Especially given well, you know, that we decided collectively that basically they get credit for continuous improvement measure that they improve by a 10th of a percentage point from one year or one rolling average to the next. Well, you know, that's a very small margin and (uh), I don't think that anybody necessarily thinks that anyone is out and out fudging the data, but, you know do we, you know, just either in terms of data accuracy, an data cleanliness, data quality, isn't what it should be. You know, we talked, you know a couple of years ago we had a task force that looked at a number of different issues around this, and one of them was should we have some sort of margin around these numbers, so that, if you, maybe if you are within that margin won't get full credit for that measure, but if you are above the margin then you do. So there is sort of a graduated scale there, that acknowledges, you know, margins of error in the data. And (uh), it was just decided after a lot of discussion that they created as many problems as it solved (laugh), so we ended up not doing it.

Q Right.



A But, it's almost certainly been a concern. I mean if you're going to say 42.2 percent beats 42.1 then you really got to have a handle on data quality. That's a couple of things I think we're going to be looking at in the near future.

Q Okay. One of the states that I talked to had performance measures similar to this where they compared to other institutions or other metrics, and they decided to have them compete against themselves. They tried and they said it did not work.

A Yea, I do not know if you are talking to (STATE) or not, but I have heard in the past that they really, that they have basically had, for a lack of a better word, a set of losers built into the system. That it's sort of, that's it's graded on a curve almost, and every year somebody as to not get the dollars. And I don't know that we decided to not go in that direction.

Q Right. Their thinking was that they did not want to punish, they wanted to incentivize performance funding.

A (Hmm), Yea, that would, seems like that would create a host of other issues too.

Q Right.

A It is for us, even though there's a set pot of money every year, it depends on the appropriation, I don't know that it necessarily sort of devolved into being overly competitive. Which isn't necessarily what we want, we want them sort of competing against themselves rather than each other.

Q Right.

A And I think that, you know, there's not a lot of, what I get at least, when a lot of, sort of, (uh), inappropriate concern over who did or did not make their measures, and how many, and even though a finite pot of money, so. But I certainly like to stay there if we can.

Q Another concern one state had that I talked to was if the economy took a dip. Cause you mentioned earlier that a tenth of a point, well a school may have the correct numbers, but that dip in the economy, like if there was a recession. If the recovery continues and people start getting jobs and are not as concerned about going back to school, then the numbers are going to drop off. And that's, and one of the tools they looked at to counter-act that was to go after non-trationals heavily.

A Yea, we should be. I don't know if we are doing as great a job of that as we could, but certainly in the 2-year sector, it's sort of a little ironic, but the, you know, but an improvement in the economy is counter-productive to retention and enrollment. And then when we've seen, you know, we don't have out and out enrollment as a measure for any of our schools, but we have certainly seen significant decline in the 2-year sector especially over the course of the last couple three years, they really have taken a hit.

Course that also proves per FTE funding too. Not that we don't want people to go to school, but, that at least.

Q Right. Were there any difficulties implementing this funding model?

A (Uh), yea, I mean definitionally, it's all is, I mean even out of the task force work group, sort of revision sessions we had a couple of years ago in 2014, we probably still haven't done as a great of a job as we could of really nailing down the documentation we well as we should. That's kind of on my radar this summer, so, sort of, but it's still always changing. I mean we've got another, the community colleges sort of got an agreement to replace the Dev Ed measures, still got to make changes in that vein, (um), we got this job placement graduate outcomes measure that's going to be a pilot that at least this fall, so it's kind of hard to stay ahead of it sometimes, you know, just given our staffing, and, and given our resources, but, so, documentation and definition I think are always challenges. You know, especially if you really want to have all the confidence you can have in data quality, you will have that out there. So, that's something I think we are just constantly trying to stay ahead of.

Q Okay. You mentioned Dev Med and job placement. What is Dev Med?

A Oh, Dev Ed - Developmental Education & Remediation.

Q Okay.

A So that Community colleges have a couple of measures that are related to remediation. Really two steps of their measures. But at the same time, we've been, you know, really leaning on the, to kind of place students differently, to try some different approaches, there's you know, co-requisite courses out there now, so students get credit for enrolling in a credit bearing class, you know, alongside some other academic support. So, but you now, the counter argument to that is while you are skimming all our best students off the top here, so we got these two measures that are all about success and remediation, but that are best students aren't going in, so we are responsive to that. We sort of allowed them to propose some alternative measures that could eventually (uh), phase, those out. And they're going to have the opportunity to (um), to elect some of those alternate measures to students this coming fall. But that's something that's been collected yet, but we've pretty well got all the technical details in that worked out, I think. (Um), way back in 2014 I think also, there was a, basically legislation that said the public colleges would basically, basically grand-father in the performance framework we've already had. Use the five measures you have already been using through a coordinating board. But, add this measure of job placement, so ever since then we have kind of been kicking around how were going to handle that. And I think we finally got some good approaches outlined for the (uh), 2-year schools and 4-year schools. But there also going to pilot this fall. So that we'll get a first year baseline data collected on that. That's going to be something we're going to have to, you know, continue to work on defining over the course of the summer. Your primary data collection is from about mid-October to mid-November each year. Then we put the work sheets out to them, then

check our data, they add theirs, they get updates back, there's a couple of weeks of kind of final checks. And then we hand it over to the (uh), the basically state budget office so they can get the governors recommendations ready in time with the state of the state address in January. So that's kind of our timeframe. So it's the off season right now, but on the other hand we got a couple of things that we really need to work on. (Um), documenting and getting frameworks set up for, because there are going to be some changes for fall.

Q Okay. This job placement metric you were talking about - are they considering that as a quality metric, or do they have something else in mind?

A I mean, you probably can consider it a quality metric as opposed to maybe a process metric. Would that be the other you think?

Q Some of the states I've interviewed, they were concerned that there were not quality metrics. That if they were focused on profit or performance to get funding, instead of academic achievement, then the quality would decline. But if they felt that if they had quality metrics like, the (uh), getting a good job at what's considered a living-wage not a minimum-wage job...

A Yea, I probably would call it a quality metric. So, we also got some metrics around (uh), performance, for example like licensing and certifications exams. Some schools do so well on that, but I don't know if it's necessarily is much of a challenge for them as it could be, but this one would probably be in that same vein.

Q Okay.

A Some things are not completely controllable by the schools. But you know, it's something that the legislature really wants to see, so we really had to kind of figure out how operationally we wanted to align with that. We also do have a fail-safe in that measure too, that basically says that (uh), any year, for any cycle in which the previous year June to June, unemployment increased in the state, we won't collect it. So by at least that measure, it's something we're only going to do when the economy is growing.

Q Is that like a stop-loss clause?

A Kind of, I think. You know we won't collect the data, but also, well, at the very least dollars won't be distributed. I guess I'm not sure whether or not we won't collect the data because we want to maintain trends, but at very least it won't count for funding.

Q Okay. Do you have any data or evidence that the funding formula is achieving what it was intended to achieve?

A Well, was it intended to achieve I guess? (Um), to basically sort of inspire confidence, that there's continuous improvement going on in the system, I mean I think that is probably it. I mean it's fair to say that's the perception there. There have been,

this is the third year in a row we've had a funding increase prescribed under the terms of the system, which I think that's a good sign. You know of course we also got, we can go and look at graduation rates; we can look at persistence, and so on and so forth, so.

Q Okay. Do you know what percentage of the funding is performance based?

A 100 percent of NEW funding. I mean, so you know thinking a 5% increase one year, that's all performance-based, well not quite all, there is performance-based, there is equity adjustments in there too, but effectively all. And then (uh), the next year, hypothetically, if there's no cuts, that becomes part of the base, and then I guess a 100% of new funding is performance based.

Q Okay.

A So it tends to be, for example, (uh), this year I think, well I have the numbers right in front of me right here, were looking at about, something on the order of maybe, \$40 million dollars out of \$967 Million total, that would be about a 4% increase.

Q Okay.

A That sounds about right.

Q Okay. Let's talk about the elements, metrics, and weights. What was the rationale for selecting those elements, progression metrics, and weights?

A Well, some of that pre-dates me, but I think in general at least, it came out of consensus, it came out of a lot of conversation with the institutions. It came out of, (uh), you know like I said, it came out of different measures and different options, that I think more are reflective of everybody's mission. It came out of the availability of standardized, sort of, (uh), nationally acceptable data sources. Those are probably the big factors.

Q Okay.

A I mean, I do, you know, it came out of legislative mandate in the case of job out, in the case of the job placement measure, so there is some interest as least on quality metric.

Q Okay. If they are weighted or prioritized, is there an order to that? Why were they given the weights?

A The metrics themselves are not weight, are not weighted. They (uh), at the moment there are five, they count 20%. When job outcomes come fully online, there will be six, there count for 16.6%,

Q Okay. I thought you mentioned earlier that a degree was worth 1 point, a STEM degree was worth 1.5.

A (Mm, Hmm).

Q Would you consider that a weight?

A I would, it wouldn't be the whole metric, but it would at least be a weight within a metric, yea. It counts for two. And that's all done by ZIP code. We've got, there is a lot of discussion that came out of, that sort of, what counted for STEM, Health is all but the two-digit 51 codes,

Q Okay. Earlier you mentioned that the funding model had changed, and that you looked at STEM and Health.

A (Mm, Hmm).

Q And this next question deals with why that was changed.

A You know, it's kind of a combination of things. I think STEM and health are just, you know, we want to, we talked about incentivizing, I mean we want to incentivize, (um), programs that are also the, that are making economic value, that are high need in terms of occupational projections. I think that at least generally an attempt to do that. (Um), so a little bit of a rough, (uh), of a blunt instrument, but (uh), you know, apart from just going into it every year and defining what those are going to be, I mean you know if a school really is necessarily going to be able to respond to that. Necessarily, effectively anyway, on a year to year basis, but along those lines. Also I think that, you know, whenever we have conversations about funding and about equity. We hear about how resource intensive some of those programs are. To (uh), you know, for the schools, though I think that there is probably a little bit of reflection of that there to.

Q Okay.

A Yea, I think in the 4-year schools especially, have some of the internal multipliers that they use for equity funding and some other things amongst themselves. (Uh), I think I have heard that, you know, I, they've got like a, there's an engineer's programs that is like a 19 to 1 multiplier (laugh). Which is, which is just, just crazy when you think about it, but I'm sure it comes out a lot in the data internally that they've looked at.

Q One state I interviewed said that they did weigh engineering classes heavily more than English classes, and...

A Oh, Yea, exactly, exactly.

Q And they also referred to it as: size of the program.

A As what?

Q Size of the program.

A Oh, size of the program, yea, yea.

Q Okay. Is there anything you would change concerning this model? Would you toss something out or add it?

A Well, (um), (pause) I am not completely crazy about the fact that it's sort of all or nothing at one tenth of a point. You know improvement, but all of the solutions we talked about are worse (laugh). So I mean, being a data person, I know there's always margin for error, and there is always a little fuzz there. So they say here you get \$200,000 dollars, and here you get zero, I mean I wish that weren't so, but I am not sure exactly what to change it into.

Q Okay. When your office does the budget, do they make a recommendation and then someone else like the governor or the legislature ultimately makes the decision to who gets it?

A We really don't. I mean all we do really is just hand over the number of measures made and that's to the budget office, to the state budget office. The state budget office is under a different department. It's under the state office of administration. And they really develop the budget recommendations out of that. (Um), out of history, out of other new decision items like schools that perform, our board might perform, so, it's not necessarily something that we do. We might make a, we make a recommendation, I think, but it's not THE recommendation. And that's where it could go to some of the equity adjustments get turned into, and that's obviously maybe a little bit even opaque to us.

Q The reason I asked that question, it's not on my sheet, but a couple of states had a concern that in the past, not now, that at one time they would make their recommendation and then the governor would say no, I want money go here, you know, they are building a new building so they need more money for this biennium.

A That happens, and, schools all have lobbyists, and they can get involved in the legislative process too. Now, they will get a special million dollar appropriation for a new program or collaborative on a program, or on something that did not necessarily come through us. You know, we're supposed to approve new programs, but they'll go through the legislature and get a million dollars for a new pharmacy program now, you know (laugh). But, that kind of comes back to us when it already has money attached, so seems like things like that do happen.

Q Okay.

A And you know, they have free speech, free association, so they have every right to be over there, but (um), it's an interesting process sometimes.

Q What do you feel are the top three metrics and why?

A (Hmm, pause) Well, (pause) I think (uh), I think degree production is where we're trying to end up. I mean, I think that's an important one obviously. I think that (uh), (pause) you know, persistence, freshman student success is an important one. You are not going to complete a degree if you don't stay a freshman to sophomore year. I think the job; the job placement metric is going to be really interesting actually. I think that the, that our pilots, (uh), that our pilots going to really be instructive. And of course, there's been a lot of conversations about what the (uh), what's going to be the success criteria for that are, we don't necessarily need to do that this year, but what's the point if we are going to have dollars attached were going to have to. But I think it is going to be (uh), interesting and, (uh), useful measure.

Q Okay, Great.

A I think even though schools had some resistance to it earlier, I think it so far as it does show that they, that it does, (uh), show as a quality measure for them. And that the numbers are reasonably good, it does count in the long run.

Q Alright. Is there any else you would like to add at this time?

A Not off the top of my head, I think that's all the trouble I know how to get into (laugh).

Q Okay. Well, this concludes the interview portion of the survey. I would like to remind you at the conclusion of my study; I will send you an executive summary report of my findings. And I would like to thank you very much for your participation and support. And as I am going through my notes and compiling the data, if I have any questions or need clarification, can I e-mail you a question?

A Yea, absolutely. Let me know if you need anything else or other questions come up.

Q Alright, that's all I have and I appreciate your help, thank you very much! Have a great day!

A No problem, you are very welcome!

Q Thank you, Bye!

A Bye!

END OF INTERVIEW

### Research Participant P38

Q Before we begin, do you have any questions about my study, methodology, or anything?

A No.

Q Okay. Based on your e-mail survey, you indicated the model I sent was current and accurate. Is that still true?

A Yes.

Q Okay. What do you feel are the strengths of this model?

A I think the strengths of our model is that it accurately reflects the performance measures that have been identified as being important (um), to our state regents, or coordinating board, and (um), the, to our governors administration.

Q Okay. What weaknesses can you identify with the model, and why would you consider those weaknesses?

A (Um), I think the weaknesses are that (um), (pause), that, let me think about the weaknesses, (pause), I think the weaknesses would probably be that (um), (pause), that, there's, in, in down economic times, like we, we find ourselves in right now, (um), there's (um), you know, and during budget cuts, the model really doesn't, (um), help really move forward on those performance measures.

Q Okay. I've see that at a couple of states that I've interviewed.

A Sure.

Q Were there any difficulties implementing this funding model?

A (Um), I think that a difficulty was making sure we had buy-in from all levels of our higher Ed system. From research institutions all the way down to our 2-year colleges.

Q Just as, this question is not on my sheet, but as a follow on, did the institutions have any input into what metrics and elements they would be used in the funding model?

A Yes. Actually, the state regents put together a budget formula committee that was comprised of some representatives of our institutions. And they met monthly, if not twice monthly, oh, I would say at least over a year at least 13 - 14 months, you know, to review the problems they saw with our current model at that time. (Um), and then agreed upon those measures that they would be (um), agreed upon those performance measures



that were finally concluded. So, yes, that was, and then they took the recommendation to the state regents for approval.

Q Okay. Do you have any data or evidence that this funding formula is achieving what it was intended to achieve?

A (Um), I believe we do. I think over the last, let's see, it's, four years, FY17 will be five years, and (um), I think for the most part you can see progress (um), from our institutions on many of those measures, not all of them, and there are little, (um), you know, (um), rises and falls within that period of time. But I think overall, I think that the system is heading in the right direction.

Q Okay. Talk to me about the elements, metrics, and weights. Do you know what was the rationale for selecting these elements, metrics, and weights?

A Well, there were a couple that we wanted to, if look at the elements and weights, there are a couple that are, what we consider to be kind of front-loaded, (um), kind of ease into (um), the, (pause) the performance formula. You know we wanted to give them time to plan on you know, what was going to work best for their students and their campuses on how to achieve, and to meet their goals on their list of complete college America goals, or you know, graduation rates, those types of things. (Um), so we tried to maybe provide and, a little bit more weight on you know, reporting, and you know, (uh), campus plans and different types of things. And then as we moved further into year second, for you know, year three, year four, shifted them really towards those weights to now beyond the what we call the usual suspects: complete college America goals, graduation rates, (um), retention rate, you know, first 24 hours completion rate, we're trying to get those weights where (um), it really focuses on the actual goals now. But in the beginning, (um), we tried to do just, probably to weight a little more for planning efforts.

Q Okay. If the metrics are weighted, how and why were the various metrics weighted, ordered, or prioritized?

A It was really just, (um), kind of, trying to reflect - the priorities in the system. And so we really tried to you know, the weights are going to be the ones that get the most discussion. We think to help move the (P38) economy along, you know, faster. And you are going to see those, and plus it's easy for the public to understand graduation rates, they understand retention rates, they understand (uh), you know, first 24 hour completions. So, we tried to get the weights to actually reflect the priorities of the system in the state.

Q Okay. Is there anything you would change concerning the model? Would you toss-out or add a metric?

A (Um), I don't, I think if I could maybe shift it a little bit. I'm, kind of going back to my previous answer when we were talking about when we tried to, you know, front-

load the weights. You to know more planning. Really, if you really think about it, kind of what we noticed over the last year or two, especially when you are in a, you know, a declining budget situation. Planning becomes more important than ever. And so I would probably go back in and, and weigh it, and have that weight equal throughout the four or five years more for planning out. Because it's just, it's that it seems to drive just about everything else. So I would probably leave the planning weight in at current levels and adjust accordingly.

Q Okay. What do you feel are the top three metrics and why?

A (Um), I think our top three (um), are graduation rates, again going back it's something that easily it explainable. It is (um), always important, (um), and looked at by our governor and our legislative members. And I think it, it, shows the easy, the easiest and quickest way to show success of an institution. (Um), my second one I think would be, (uh), the next two would be completion of (uh), the first 24 hours. Studies have shown us that you know, the quicker a student can complete those 24 hours, the more likely they will achieve their associates degree, and or you know, their bachelors. And so I think that's another reason, and because the state that we are in. I mean (P38) is, I mean we are relatively poor state, (um), you know, even if you take into consideration the energy industry here. But, we do have some weights on Pell grants, retention. Because there are a lot of students that (um), receive Pell grants, and are Pell grant eligible. We have a lot of first generation college-going students, and so I think (um), you know, efforts in planning by these institutions to help students with those issues is another one of the top ones.

Q Okay. Is there any information you would like to add at this time?

A (Um), no I don't think so.

Q Okay. At the conclusion of my study, I will send you an executive summary report of my findings.

A Okay.

Q At this time I would like to thank you for your participation and support.

A Absolutely, glad you're doing it!

Q Thank you! As I am going through my notes and compiling my report, if I have a question or need clarification, is it OK if I e-mail you?

A Absolutely, Absolutely!

Q Okay, well we're done, and thank you very much!

A Thank you!

Q Bye!

END OF INTERVIEW

APPENDIX N:

Institutional Review Board (IRB) Exemption Report



*Institutional Review Board (IRB)  
for the Protection of Human Research Participants*

**PROTOCOL EXEMPTION REPORT**

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**PROTOCOL NUMBER:** 03352-2016                      **INVESTIGATOR:** Richard N. Knepp

**PROJECT TITLE:** Identifying Research-Based Parameters for Developing Public Higher Education Outcomes-Based Funding Models

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**INSTITUTIONAL REVIEW BOARD DETERMINATION:**

This research protocol is **exempt** from Institutional Review Board oversight under Exemption Category(ies) 2. You may begin your study immediately. If the nature of the research project changes such that exemption criteria may no longer apply, please consult with the IRB Administrator ([irb@valdosta.edu](mailto:irb@valdosta.edu)) before continuing your research.

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**ADDITIONAL COMMENTS/SUGGESTIONS:**

Although not a requirement for exemption, the following suggestions are offered by the IRB Administrator to enhance the protection of participants and/or strengthen the research proposal:

N/A

If this box is checked, please submit any documents you revise to the IRB Administrator at [irb@valdosta.edu](mailto:irb@valdosta.edu) to ensure an updated record of your exemption.

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*Elizabeth W. Olphie*                      *4/6/16*                      *Thank you for submitting an IRB application.*  
Elizabeth W. Olphie, IRB Administrator                      Date                      Please direct questions to [irb@valdosta.edu](mailto:irb@valdosta.edu) or 229-259-5045.

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Revised: 12.13.12