THE INFLUENCE OF THE FEDERAL FINANCIAL AID VERIFICATION PROCESS ON COLLEGE STUDENT ACCESS

By

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To my husband Lance; and to our children, Taylor and Bree

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TABLE OF CONTENTS

page

LIST OF TABLES

LIST OF FIGURES

Abstract of Dissertation Presented to the Graduate School
of the University of Florida in Partial Fulfillment of the
Requirements for the Degree of Doctor of Education

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The federal government is the largest source of financial aid, providing billions of dollars annually to students needing financial assistance in order to gain access to higher education. To ensure accountability over these funds, many rules and regulations have been established that effect the institution and the student. Numerous steps must be completed to process a student's federal aid. Submitting the federal financial aid application is only the first step. Navigating through the process can be overwhelming, leaving many students discouraged and frustrated. This study focused on the federal financial aid regulation, known as the verification process. To determine if this federal requirement influences college access, student enrollment patterns were examined.

CHAPTER 1
INTRODUCTION

Student Financial aid programs are intended to remove financial barriers for students wishing to pursue post-secondary education. The federal government is the largest source of financial aid, providing billions of dollars annually to students in need of financial assistance. Federal financial aid is administered by the U.S. Department of Education, Federal Student Aid Office. Their core mission is to ensure that all eligible individuals benefit from federal financial assistance through grants, work-study, or loans. Every year, the Federal Student Aid Office provides billions in aid to nearly 16 million postsecondary students and their families (NASFAA, 2011a). Despite this annual investment, financial barriers persist; many requirements and regulations must be adhered to, to ensure student eligibility. The purpose of the regulations is to ensure dollars are distributed appropriately; unfortunately, they can make students' experience of an already challenging process even more frustrating (The Institute of College Access and Success, 2010).

Regulations and rules are not unique to the federal financial aid programs. Although regulations and rules are perceived by many Americans as negative or surrounded by "red-tape," this organizational model prevails today. Federal bureaucracies regulate almost all aspects of American life such as interacting with schools, hospitals or government offices. For example, The Federal Reserve controls interest rates; the Federal Deposit Insurance Corporation (FDIC) insures bank deposits; and the Food and Drug Administration (FDA) determines which drugs doctors can prescribe (Dye, 2010). Since public policies are rarely self-executing, bureaucracies are essentially the creators of policy. They are responsible for developing the procedures and rules for implementing the goals of policy. Congress typically announces the goals of a policy in broad terms, sets up an administrative apparatus, and leaves to the bureaucracy the task of

working out the details of the program (Edwards, Wattenberg & Lineberry, 2004). Therefore, policy implementation can be defined as the stage of policymaking between the establishment of a policy and the consequences of the policy for the people whom it affects. Unfortunately these rules may end up creating new obstacles to effective and efficient governing.

Federal regulators issue thousands of pages of rules and regulations, conduct inspections and investigations of complaints, hold hearings, require submission of forms, and levy fines and penalties. Each year nearly 4,000 new rules are added to American life. The Environmental Protection Agency is the leader in making new rules, followed by the Internal Revenue Service (Dye, 2010). These regulations cost money, but the true cost is hard to determine. These costs are passed on to Americans through the direct costs of compliance and the indirect economic costs of devoting resources to compliance; this may add up to $1 trillion per year (Dye, 2010). Economists believe these regulations stymie innovation and productivity while driving up the cost of living (Dye, 2010).

How much government intervention is necessary is an ongoing debate between proponents of laissez-faire ("leave it alone") and those who argue that continual and intense government monitoring is necessary to protect the consumer. Social researchers over the years have provided their thoughts on bureaucracies. Robert K. Merton (1910-2003), a distinguished American sociologist who coined the terms "role model" and "self-fulfilling prophecy" provided his insights on the effect on individuals through his description of bureaucratic personality. For Merton, bureaucratic structures and procedures are established to get certain things done, but sometimes they become ends in themselves. When this happens, we may see the emergence of the "bureaucratic virtuoso," a functionary who closely adheres to all the rules and procedures but hardly accomplishes anything of significance.

Statement of Problem

Since the U.S. Department of Education is the largest provider of student financial aid in the United States, to obtain access to these funds, students are subjected to the adherence of numerous federal regulations. Federal financial aid programs are no different than other governing agencies discussed above and have been criticized for red tape, paper trails, and piles of rules. The National Association of Student Financial Aid Administrators (NASFAA) is a nonprofit membership organization that represents nearly 20,000 financial aid professionals at 2,800 colleges, universities, and career schools across the country. Each year, financial aid professionals help more than 16 million students receive funding for post secondary education (NASFAA, 2011a). One of the many roles of NASFAA is to serve the financial aid community through regulatory analysis. Results from a 2010 NASFAA survey concluded financial aid offices and the student services they provide are being strained by increasing regulatory and administrative burdens. The survey further demonstrated that 9 of 10 of more than 1,000 responding NASFAA members reported having fewer resources to dedicate to critical student services that promote college access and success (NASFAA, 2011a). Services that are falling short due because of the heightened workload are face-to-face counseling, extra attention for target student populations, and outreach efforts. The primary reason cited for such critical shortages were regulatory/compliance workload. Other factors included the following:

- Greater numbers of aid applicants
- More applicants needing their application to be updated due to changes in family finances
- More applications needing to be verified
- Compliance with new, complex, year-round Pell Grant regulations
- New regulations unrelated to the student aid programs,

These findings align with a recent NASFAA review of student aid regulatory language, which found a 40% increase (in word count) of federal regulations governing the student aid programs

over the last decade (NASFAA, 2011b). Justin Draeger (2011), President of NASFAA said “At some point, we must stop and ask to what extent federal regulations and requirements are either hindering college access and success or increasing costs for students”.

As mentioned earlier, the government agency responsible for administering the federal financial aid programs, the Federal Student Aid (FSA) office. The FSA office is responsible for developing, distributing, and processing the Free Application for Federal Student Aid (FAFSA), the fundamental qualifying form used for all federal student aid distribution programs. The FASFA form is also used for many state, regional, and private student aid programs (Office of Federal Student Aid, 2013). Additionally, the FSA office is responsible for enforcing the financial aid rules and regulations required by the Higher Education Act and the U.S. Department of Education, and for managing the outstanding federal student loan portfolio (Office of Federal Student Aid, 2013).

The FSA office’s core mission is to ensure that all eligible Americans benefit from federal financial assistance through grants, loans, or work-study programs for education beyond high school (Office of Federal Student Aid, 2013). The FSA office administers the programs comprising the nation's largest source of student financial aid, in addition to overseeing $864 billion in outstanding student loans. The Federal Student Aid team is committed to making education beyond high school more attainable for all Americans, regardless of socioeconomic status (Office of Federal Student Aid, 2013).

Financial aid plays a vital role in removing financial barriers for students by providing billions of dollars of federal funds. In addition, various studies document the importance of financial aid in college persistence and degree attainment. Studies include Michael Haynes (2008), Mike MacCallum (2008), and Katherine Bird (2006). In addition, numerous reports

annually describe the substantial investment governments, colleges, and universities dedicate to financial aid programs to remove financial barriers for students who otherwise cannot afford college. Some of these key reports are summarized in a NASFAA series (2005). The U.S. Department of Education, National Center for Education Statistics also collects data used to prepare annual reports such as Integrated Postsecondary Education Data System (IPEDS) and the National Postsecondary Student Aid Study (NPSAS). In addition, the U.S. Department of Education, Office of Postsecondary Education prepares annual reports used to quantify the substantial investment of federal financial aid funds. However, only a handful of studies have specifically addressed whether the additional requirements have an influence on student access to higher education, such as the report issued by the Institute of College Access and Success in July 2010. These reports and studies are discussed further in the literature review.

Purpose of Study

Ensuring access to higher education is critical to the completion agenda. The completion agenda as described by O'Banion (2013) is doubling the number of students in the next decade who obtain a higher education degree or certificate. President Barack Obama in his February 24, 2009 address stated:

> … half of the students who begin college never finish. This is a prescription for economic decline, because we know countries that out-teach us today will out-compete us tomorrow. That is why it will be the goal of this administration to ensure that every child has access to a complete and competitive education… (O'Banion, 2013)

Federal financial aid is provided to students in need of financial assistance to increase access to students who cannot afford college. However, since the federal government invests billions of dollars annually in providing financial assistance to students, a number of rules, regulations, and procedures accompany the funds. The lack of information regarding the effects of these federal requirements on college access is regrettable as they may be discouraging

students from completing the process to obtain the needed funds. These federal requirements are complicated and add to an already intimidating and time-consuming process that may cause students to delay enrolling in higher education; or even worse, never enroll at all. In addition, institutions spend inordinate time and money adhering to these federal regulations further reducing the resources available to help students navigate through the financial aid process.

Lack of adherence to federal regulations can also damage the institution. Institutions found negligent in their duties to award federal funds to eligible students may face severe fines, penalties or loss of eligibility to participate in the federal financial aid program. Two colleges in Florida were cited for granting financial aid to students deemed ineligible by the Department of Education during a federal audit.

Florida State College at Jacksonville expects to pay the federal government $4.7 million for problems stemming from grants and loans mistakenly awarded to students over a 2-year period. The money includes a $515,000 penalty for improperly issued student loans. College officials attributed the mistakes to overextended financial aid workers who struggled to keep up with increasing enrollment (DeSantis, 2012).

State College of Florida was found to have awarded federal financial aid to 1,948 ineligible students during the 2008-09 year. The U.S. Department of Education noted significant deficiencies in the college's handling of federal financial aid disbursements to students, and required reimbursement (Kennedy, 2011). State College of Florida must repay $3.2 million plus interest in federal financial aid that it erroneously granted to students.

Justin Draeger (2011), president of NASFAA, said "the sheer size and scope of federal regulations and other administrative burdens have pushed financial aid offices to the breaking point." As for students, getting the required paperwork in order can be a challenge and not all

make it to the end (The Institute of College Access and Success, 2010). Therefore, the purpose of this study was to determine if the verification regulation influences college access. Red Tape Theory was used as the conceptual framework to evaluate the verification process and the potential influence it has on college access.

Research Question

To what extent does the financial aid verification process influence college student access?

Research Hypotheses

1. There is no significant change in the amount of financial aid students receive as a result of being selected for verification.
2. There is no significant relationship between being selected for verification versus not being selected for verification on enrollment.
3. There is no significant relationship between completing verification versus not completing verification on enrollment.

Accessing Financial Aid Funds

There are many steps to the financial aid process. The first step is completing the Free Application for Federal Student Aid (FAFSA). This application may be accessed on-line and submitted electronically to the U.S. Department of Education. The Department of Education uses the information to calculate a student's estimated family contribution (EFC). The EFC is the amount students are able to contribute toward their education. The EFC and the cost of attendance are used to determine need for financial aid. Once this has been completed, the student and the institution receive the information from the Department of Education. The institution then creates a financial aid package based on this information and sends an award letter, notifying students of the financial aid they are eligible to receive. The student can either accept or reject the financial aid offer. Financial aid will be disbursed to the student after the

student has registered and classes have begun: typically, this occurs within the first 2 weeks of classes. However, after receiving the student's FASFA the Department of Education randomly flags applications, for the institution to verify the data submitted on the FASFA. Almost all applicants flagged are PELL eligible and are the lowest income students, who may have little support to help them through the verification process (The Institute of College Access and Success, 2010). The verification process is just one of many federal regulations applicants are subjected to, in determining their eligibility. The verification process can add up to 8 weeks (depending on the time of year) of additional processing time before awarding the student's financial aid (Figure B-1, Figure C-1).

Verification Process

The federal regulation requiring verification was adopted in the 1986-87 award year. This regulation was promulgated because of concern about fraud and abuse and concern that information reported by individuals may not be accurate. Since amounts of eligible aid are based on financial data submitted by individuals the U.S. Department of Education decided it was prudent to verify the information submitted. Since the passage of this regulation known as the verification process, institutions must check the accuracy of information a student or student's parent has given, for those applicants flagged by the U.S. Department of Education. The regulations require colleges and universities to verify, or confirm, the data reported by students and their parent(s) on the FAFSA. Information is verified by requesting additional documentation or a signed statement attesting to the accuracy of the data. The intent of the verification process is also to ensure that eligible students receive all the federal financial aid to which they are entitled; and to prevent ineligible students from receiving financial aid for which they do not qualify.

The federal regulations do not prohibit institutions from using third-party providers to assist in the verification process. However, the institution is responsible for ensuring compliance with the regulations and will be held liable regardless if it uses a third-party provider. In addition to the verification process, institutions are also required to resolve conflicting information even if the student was not selected for verification. Although the regulations provide some guidance on the verification process, institutions are also required to establish written policies and procedures for which the regulations allow institutional discretion or flexibility.

Overall, the purpose of the verification process is to ensure the integrity of the financial aid program to the taxpayer. The main reasons for being selected for verification include random selection, the FAFSA submitted was incomplete, the FAFSA contains estimated information, or the data provided on the FAFSA are inconsistent. If selected, the verification process must be completed before financial aid can be awarded. The institution's Office of Student Financial Aid may be required to verify the following data elements from the FAFSA:

- Adjusted gross income (parent and student, if the student is dependent)
- Taxes paid (parent and student, if the student is dependent)
- Income earned from work (for non-tax filers)
- Certain untaxed income items (parent and student, if the student is dependent)
- Household size
- Number in college (excluding parents for a dependent student)
- Receipt of food stamps/SNAP benefit
- Child support paid
- Any other inconsistent or conflicting information.

Before July 1, 2012, the federal requirements only required the institution to verify 30% of the students selected for verification by the Department of Education. The verification regulations have recently undergone major changes. Effective July 1, 2012, by federal requirement, institutions must verify all students selected for verification. The Department of Education's ultimate goal in the future is to target those students most prone to error. Over the

next several years, a risk model will be developed to refine the selection criteria. It is too early to tell the overall impact of these changes to student enrollment and financial resources, but it could have significant implications and is an area for future research.

Significance of the Study

The study is expected to make at least two contributions to the area of financial aid. First, the study will contribute to the expanding knowledge base regarding the role financial aid serves in removing financial barriers to students attending post-secondary education. As more is known about the relationship of the federal requirements such as the verification process and the influence on student access, it will be possible to more clearly understand whether these requirements are serving the intended purpose or are merely “red-tape”, which will be explored further in the literature review.

Second, this study aimed to determine the return on investment to the taxpayer for institution’s to administer the verification process. This was determined by reviewing the change in financial aid award amounts as a result of the verification process. Results have the potential to reveal significant financial implications to the institution, the federal government, and the taxpayer.

CHAPTER 2
LITERATURE REVIEW

This literature review provides an analysis and examination of the existing literature regarding federal financial aid. In addition, since Red Tape Theory was used as the conceptual framework to evaluate the verification process an overview of the existing literature on Red Tape Theory and the impact on government performance is provided.

After a review of the literature, four common themes emerged regarding financial aid: financial aid's impact on enrollment, persistence and degree attainment; investment in financial aid; financial aid's impact to low-income and minority students; and barriers that may inhibit financial aid application by students

Higher Education and Financial Aid: A Historical Perspective

To gain a better understanding of the importance of higher education in our society, it is helpful to be familiar with the history of higher education and how financial aid has evolved since its inception. Appendix A gives a quick summary of the legislative history pertaining to the federal financial aid regulations. It is equally important to have a basic understanding of the financial aid process of gaining access to federal financial aid funds; therefore a brief overview of this process is provided.

From the beginning, federal student aid policy has been shaped by a commitment to access. The legacy of access to higher education is deeply ingrained in our public values. The democratization of college opportunities in the United States can be traced through two centuries from the land-grant college movement and the establishment of state universities in the l9th century to The Servicemen's Readjustment Act (GI Bill), establishment of community college systems, and explosion of enrollments after World War II. Major phases in the growth of higher education have extended access to new groups in society (Gladieux, 1995).

Federal student aid has clearly been an important force in shaping American postsecondary education since World War II. The first wave of support for higher education institutions began in 1862, when President Lincoln signed into law the land grant bill (Morrill Act). This bill gave states federal lands to establish "Land Grant Colleges" and the Reserve Officers Training Corp (ROTC) (Keesey, 2013). By 1890, publicly supported institutions of higher education had been established in every state, offering programs in agriculture, engineering, home economics, and teacher training. They also forged the expansion of services to the community, with agricultural and general extension divisions (Cohen & Brawer, 2008).

During the first half of the 20th century, student tuition and fees made up the bulk of the operating costs for community colleges, while a limited amount of outside funding was derived from the public school budget. After World War II, and with the passing of Roosevelt's GI Bill, federal funds began to flow into America's community colleges sparking another rapid growth period. Community colleges grew from 521 in 1934 to 650 by 1948 (Cohen & Brawer, 2008). The GI Bill of 1944 provided the first large-scale financial aid packages, and made it possible for students to be reimbursed for their tuition and living expenses. This also marked the beginning of the cultural shift with the non wealthy being granted access to higher education. During this period, the institutional emphasis was on providing training for professionals in local businesses and industries (Cohen & Brawer, 2008).

To cope with the increased number of community colleges, states began to independently develop funding strategies. No federal framework was provided; therefore, methods of funding were left up to the states, allowing them to respond individually to institutional needs, program requirements, workforce projections, and state fiscal capacities (Mullin & Honeyman, 2007). This created much variation among states, and in many places, access and affordability remained

key issues. By 1959, the trend across the states was to reduce local funding and increase tuition and fees, creating added burdens on low-income students (Cohen & Brawer, 2008).

The Basic Educational Opportunity Grant (Pell grant) legislation was proposed and passed in the early 1970s as a means of increasing higher education access to low-income and first-generation students. Senator Claiborne Pell, along with other leaders in Congress, promoted education as vital to the sustainability of the nation, and proposed legislation to provide need based income to undergraduate students. Pell grants promoted access to higher education by granting federal funds to students based on their expected family contribution (EFC). This afforded lower-income and nontraditional students with higher education opportunities. Pell Grants continue to provide the largest single source of federal financial aid (Mellow & Heelan, 2008).

For nearly four decades, American college attainment rates remained steady, leading the world with roughly 39% of American adults holding a 2-year or 4-year degree (Matthews, 2009). Around the turn of the 21st century, however, college attainment rates began to show significant increases in almost every industrialized country in the world, except the U.S. (Matthews, 2009). This, coupled with the 2008 Great Recession, forced lawmakers to once again look at higher education as a means of bolstering the economy and preparing a workforce capable of meeting the global demands of the rapidly evolving 21st century knowledge economy. In 2009, President Obama proposed spending $12 billion to improve courses, programs, and facilities at community colleges so they can produce an additional five million graduates by 2020 and reestablish Americans as leaders in higher education (United States Office of the Press Secretary, 2009). The 2011 federal budget proposed continued support of higher education by increasing Pell grants; reforming the student loan program; providing student loan debt forgiveness; increasing

funds to support Science, Technology, Engineering, and Mathematics (STEM) education; reforming the job training system to encourage innovation; and increasing support to minority-serving institutions (United States Office of Management and Budget, 2010).

Financial Aid's Impact on Enrollment, Persistence, and Degree Attainment

Several studies examined the impact of financial aid on enrollment, persistence, and degree attainment. Although the existing literature on the impact of financial aid on enrollment, student persistence, and degree attainment indicates a relationship, the literature disagrees on how much of an impact financial aid really has. For example, The Impact of Financial Aid on Postsecondary Persistence (Haynes, 2008) suggests student borrowing has a negative impact on student retention. A similar study by MacCallum (2008) examined the variations of policies and processes in financial aid offices and related those variations to student outcomes. MacCallum (2008) sought to determine if the variations in institutional polices and processing of financial aid such as verification requirements or student academic progress policies would have an effect on financial aid students. More specifically, MacCallum's study was designed to ascertain if financial aid delivery, financial aid policies, and institutional support of the financial aid office impacted the enrollment rate, retention, and success of the student. He found factors suggesting that financial aid does have an impact on student retention and success. For example, the length of time to process financial aid was positively related to retention; however, verification beyond the minimum requirements was inversely related to enrollment (MacCallum, 2008). Like Haynes' study, MacCallum (2008) said loan borrowing had a direct effect on student retention. For example, in institutions that limited the amount students were allowed to borrow, the institutions tended to have lower retention rates.

Conversely, Baird (2006), examined student enrollment patterns and how other factors such as student preparation (rather than tuition costs or financial aid policy) affected student

enrollment. Baird (2006) concluded that, despite extensive literature on factors affecting student enrollment, a consensus has yet to emerge. Baird's study examines the effects of tuition, financial aid, student preparation, supply (defined as the number of colleges available to students), labor market conditions, family, and community background on student enrollment. Baird cited studies by Ellewood and Kane (2000) and Cameron and Heckman (2001), indicating that high school achievement is the most important factor explaining college enrollments concluding that financial aid polices have a marginal impact on enrollment decisions. In contrast, Baird's study indicated that neither tuition costs nor financial aid have a measurable effect on student enrollment.

Investment in Financial Aid

Both the state and federal government provide financial assistance to students in the form of grants, scholarships, or loans. This annual investment is significant and is in the billions of dollars. The number of students in need of financial assistance to attend a higher education institution has also increased. Total financial aid awarded to students has grown at a faster rate than tuition and fees, with the largest growth in the number of students receiving Pell grants (NASFAA, 2011b). In addition, large gains in student loan borrowing have been reported. What this means for an institution of higher education is the increased number of students receiving financial aid has outpaced the increase in student enrollment. For the 2009-10 year, Pell grants distributed from the federal government totaled $29 billion (U.S. Department of Education, 2010). The U.S. Department of Education (2011) compared the percentages of students receiving some form of financial assistance in 1995-96 versus 2007-08 year. The report shows a 12.7 to 15.6% increase of students receiving financial aid, depending on institutional type. The largest increase was found in public 2-year colleges. In addition, the average amount of financial aid doubled. The investment in financial aid is published annually in numerous reports. These

reports provide valuable information and statistics regarding the substantial investment governments, colleges, and universities dedicate to financial aid programs to remove financial barriers for students who otherwise cannot afford college. Some of these key reports are summarized by NASFAA, which include Trends in Student Aid, Trends in Student Pricing, and an Annual Survey of Colleges conducted by the College Board. The U.S. Department of Education, National Center for Education Statistics also collects data from higher education institutions, to prepare annual reports. The data are collected through surveys such as Integrated Postsecondary Education Data System (IPEDS) and the National Postsecondary Student Aid Study (NPSAS). In addition the U.S. Department of Education, Office of Postsecondary Education prepares annual reports such as the Pell Grant End of Year Report and the Federal Campus Based Programs Data Book.

A recent report, Trends in Student Aid 2011, by the College Board Advocacy & Policy Center, reported that during the 2010-11 academic year, $227.2 billion in financial aid was distributed to students and students borrowed an additional $7.9 billion. This represents a 141% increase over the 2005-06 academic year. Pell grant recipients also increased 75% from the 2005-06 academic year to the 2010-11 academic year, representing $34.8 million dollars distributed for Pell Grants (College Board Advocacy & Policy Center, 2011).

No doubt the federal government has provided financial resources to millions of students pursuing a post secondary education. This substantial investment, after all, is to provide for a stronger society. As evidenced in Education Pays 2010 (College Board Advocacy & Policy Center, 2010) higher education improves people's lives, makes our economy more efficient, and contributes to a more equitable society. However, the federal aid programs are not easily accessible to all. Unfortunately, too many low-income and first-generation students still choose

not to enroll because of financial barriers (College Board Advocacy & Policy Center, 2011). It seems counter-intuitive that the neediest students undergo additional scrutiny in order to be awarded financial aid.

Financial Aid's Impact on Low-Income and Minority Students

Debates over student aid policy have typically centered on whether policy changes would hinder or expand access for disadvantaged students. Above all, the problem of unequal opportunity has proved more difficult than anyone anticipated in the early years of the Higher Education Act. In the late 1960s and early 1970s, widely-cited reports from the Bureau of the Census showed that a college-age youth from a family with an income over $15,000 was nearly five times more likely to be enrolled in higher education than one from a family with an income of less than $3,000 (Gladieux, 1995). The financial aid polices were to address these gaps by removing financial barriers, to promote equal access.

The National Center for Education Statistics (2012) reported that among recent high school graduates, the gap between college-age young people from the lowest-income range (34.82%) and the highest-income range (64.5%) according to the U.S. Census categories in 1975 was 29.7%. Today the gap remains at 29.9% with 52.3% attending from the lowest income category and 82.2% from the highest income category. These figures may suggest improved in access to college opportunities during this period, but the more certain point is that large gaps stubbornly persist.

Other statistics, although improving, continue to show socioeconomic disparities in access to higher education programs among minority students. Although, an overall enrollment of all racial/ethnic groups increased, the enrollment rate of minority students still lags behind that of whites (NCES, 2012). The National Center for Education Statistics (NCES) report indicated an increase between 1980 and 2010 for each racial/ethnic group some 8.5 million or 83% of the

undergraduate enrollment of U.S. residents were White, compared with 9.0 million or 70% in 2000. By 2010, the number of White students had grown to 10.9 million, but the percentage had decreased to 62%. The number of Black undergraduate students who were U.S. residents increased 163% between 1980 and 2010, from 1.0 million (10%) to 2.7 million students (15%). Hispanic and Asian/Pacific Islander enrollments increased 487 and 337%, respectively, from 1980 to 2010. In 1980, Hispanics and Asians/Pacific Islanders represented 4 and 2% of enrollment, respectively, compared to 14 and 6% in 2010. American Indian/Alaska Native enrollment increased from 78,000 to 179,000 students from 1980 to 2010 (1% of total enrollment in each year) (NCES, 2012).

In addition to the statistics, studies have been conducted regarding the impact financial aid has on low income and minority students. A study conducted by Kennamer, Katsinas, and Schumacker (2011), revealed that the increases in federal student aid have not kept pace with the rising costs of tuition and enrollments, thus negatively affecting student retention. The student population most affected by unmet need is low income and minority students. Studies on retention (Tinto, 1997; Zhao and Kuh, 2004) indicate that students who are more engaged or participate in learning communities are more likely to succeed and more likely to stay in college. Students who have unmet needs and are otherwise unable to afford college often times work in order to fill the gap and are therefore unable to participate in college activities. In fact, studies from the American Association of Community Colleges have shown that most community college students work while attending college (Kennamer, Katsinas, and Schumacker, 2011). For most community college students, college activities and events are not something these students have the luxury of participating in. Although federal financial aid is intended so nobody wanting to attend college is denied the opportunity on the basis of finances, the inability of federal aid

programs to keep pace with tuition is negatively impacting student success (Kennamer, Katsinas, and Schumacker, 2011).

To further expand on Kennamer, Katsinas, and Shcumacker's 2011 findings, Long and Riley (2007) argue that the financial aid policy has shifted its emphasis from providing low-income and minority students with sufficient financial aid to defraying costs for middle- and upper-income families because of the increase in merit-based aid versus need-based aid. Long and Riley (2007) said that low-income and minority students, especially those of color, are more likely to face substantial unmet needs after considering income from all sources. Their study identified three barriers to college access: cost, academic preparation, and the complexity of admissions and financial aid processes. Their study, however, focused on costs and the effectiveness of financial aid policy in addressing affordability. Long and Riley said a shift in financial aid policy over the last 15 years increasing emphasis on merit-based aid, has negatively impacted the neediest students. The amount of unmet need has nearly doubled from $3,092 in 1995-1996 to $6,726 in 2003-2004, with 79% of low-income students with unmet need compared to only 13% of high-income students (Long & Riley, 2007). Overall, Long and Riley (2007) concluded that policymakers need to reexamine and remain attentive to the needs of providing access to low-income and minority students. They also urged policy makers to simplify the financial aid application process, to increase student access and success (Long & Riley, 2007).

A different type of study, conducted by Chen and Desjardins (2010), examined socioeconomic differences in financial aid and investigated whether differences existed by race and ethnicity. Overall the study focused on the ways financial aid influences dropout risks among students from different racial and ethnic backgrounds (Chen & Desjardins, 2010). To

accomplish this, the researchers further explored the various types and amounts of aid each group received. Their study aimed to inform policy makers developing financial aid policies to improve equal opportunity in higher education. Their study showed that equalizing educational opportunity for minority and low-income students is still a challenge, and gaps between minorities and Whites could be narrowed to improve access to financial aid.

Despite the significant annual investment by the federal government, many students still experience unmet need. Such gaps in opportunity, and the failure of student aid policies to close them, should probably not come as a surprise. Federal student aid, in its conception, was primarily about helping those who otherwise might not have access to higher education. However, federal policies have become as much (or more) about relieving the economic burden for those who would probably pursue postsecondary programs without such aid. Moreover, state tuition, subsidy, and funding policies are at least as important in determining patterns of enrollment and access as what the federal government can achieve through its investment in student aid.

Existing Barriers that Inhibit Financial Aid Applications

The federal financial aid process has been described as a complex bureaucratic process that is difficult for students to navigate. In addition, the administrative burden placed on institutions to adhere to the many federal requirements is overwhelming, leaving many financial aid offices frustrated and unable to provide necessary help to students. Despite the annual investment to financial aid programs, financial barriers still persist in the form of misperceptions, and lack of communication regarding the financial aid process and the other requirements that must be adhered to after completing the FAFSA. Attempts have been made to gain a deeper understanding of the perceptions regarding financial aid and the process.

Perna (2011) explored high school students' perceptions of financial aid and how those perceptions influence college-related behaviors. Her case study represented fifteen high schools in five different states. Perna's (2011) study revealed most students and parents have a general awareness that financial aid is available based on financial need and other criteria, however these perceptions and expectations of aid are informed by the characteristics of the school. For example, in low- and middle-resource schools, where family resources and college enrollment rates are lower, substantially fewer families are certain about the availability of financial aid to pay for college. Moreover, these schools generally do not have the resources, particularly in terms of school-provided counseling, to educate students and parents about the availability of financial aid (Perna, 2011).

Perna (2011) also noted the limited literature regarding students' perceptions of the financial aid process. Among the limitations of prior research was the practice of considering only actual amounts of financial aid rather than students' knowledge or perceptions of aid. Despite the belief that information about financial aid promotes college enrollment, little is known about the most effective content, timing and/or modes of delivering messages about financial aid (Perna, 2011).

The importance of communicating the financial process and also providing accurate information was a consistent theme that emerged from a study conducted by the College Board in 2010. The College Board is a not-for-profit association commissioned to learn more about students' and parent's knowledge about the importance of college and how to pay for it. The study, *Cracking the Student Aid Code: Parent and Student Perspectives on Paying for College* (2010), found that the lack of information and understanding of college financing is a barrier that is difficult to overcome for many students and families. The system in place today is complex

and makes planning and saving for college feel like cracking an impenetrable code (College Board, 2010). Although many students have aspirations to attend college, their dream and the reality often diverge when they attempt to navigate the financial aid process. Through the College Board's research, it was determined that communicating financial aid information at the right time and in ways that can be easily understood is critical to removing barriers to attending college.

One such study looked at timing and the factors associated with students delaying submission of the FAFSA. The study, conducted by Andrew LaManque (2009), assumes students who complete the FAFSA early versus students who complete the FAFSA late are more likely to be successful in college. LaManque (2009) hypothesized that early filing of the FAFSA was related to the knowledge the student has about college. The implication is that the more knowledgeable students are about college, the financial aid application process, and the benefits of applying early, the more likely they are to complete their FAFSA early (LaManque, 2009). Variation in FAFSA filing was directly related to the student's knowledge about financial aid. A significant number of students (85%) who filed early said they received information from their high school guidance counselor. This finding supports Perna's (2011) study and the importance of high schools in educating prospective students about college. Perna (2011) also found that where family resources and college enrollment rates are lower, substantially fewer families are certain about the availability of financial aid to pay for college. The LaManque study provided data that may help institutions with their outreach efforts and show them where to focus their resources to promote early submission of the FAFSA.

Federal financial aid programs are intended to remove financial barriers to students, students may access higher education to obtain the necessary skills to become productive

citizens. However, for students to access these funds, numerous requirements must be verified to ensure student eligibility, and the onus is on the institution to ensure compliance. In addition, many students are unfamiliar with the process and each step they take is a leap of faith that their efforts are worthwhile (The Institute for College Access and Success, 2010). A study conducted by the Institute of College Access and Success (ICAS) examined students who originally submitted a FAFSA but did not complete the process. The study used financial aid data from thirteen community colleges in California. They found evidence that students selected for verification, who may otherwise be eligible to receive financial aid, did not complete the process. In addition, those students selected for verification were 7% less likely to receive grants, resulting in 1,200 students who would have received Pell Grants (ICAS, 2010). The study also determined that all colleges were verifying more students than required by federal regulations, increasing the overall cost to the institution and the overall processing time of financial aid applications. The thirteen colleges collectively spent between $1.7 million and $2.5 million attempting to verify student information and 63% of students selected for verification saw no change in their financial aid award. In addition, students and financial aid administrators were surveyed regarding the verification process. Many students said they had to drop classes because the verification process took too long. Overall, financial aid administrators said students' eligibility did not change much, and it is unfortunate that students are subjected to the process at all.

The ICAS study raises questions about the validity of the verification process. Further study is needed as the ICAS study was isolated to California. MacCallum's (2008) study also indicated that the financial aid verification process was inversely related to enrollment. Although the literature is mixed about the effect of financial aid on enrollment, persistence, and degree

attainment, it is consistent that students who cannot pay for education will not attend or end up dropping out. The literature is also consistent about the complexity of the financial aid process and the possible effects it may have on delaying financial aid application and student access. Therefore it is important to understand the unintended consequences that financial aid requirements, such as the verification process has on student access. Although, it is important to protect public dollars it should not negatively impact students. Unfortunately, the current process may discourage completion of the financial aid application and ultimately discourage enrollment.

The entire process of completing the FAFSA; submitting additional forms for verification purposes; and determining eligibility barring no omissions, mistakes or delays may take months. Potential students will weigh costs and time versus benefits to determine if applying for financial aid is worthwhile. If the financial aid process is deemed too complicated, time consuming, or laborious, the time and hassle are likely to be higher than the benefits. The complexities of existing financial aid policies make it difficult for those most in need of help (College Board Advocacy & Policy Center, 2011).

Red Tape Theory

Although the word bureaucracy does have negative connotations, benefits to the proverbial "red tape" associated with bureaucracy do exist. For example, bureaucratic regulations that pertain to the FDA take appropriate precautions to safeguard the health of Americans. Even though bureaucracies are typically impersonal, this can be viewed as promoting equal treatment and discouraging favoritism. Bureaucracies have also been criticized for the amount of documentation that is needed to navigate through regulatory compliance. However, the paper trail documents the process so that, if problems arise, data exist for analysis and correction. On the other hand, regulations may be viewed as rules designed to control certain actions by people or as a distinctive statement by the government against the people or a specific

industry; even though regulations are portrayed as a protection for the people. When unexpected situations arise, adherence to rules may inhibit the actions needed to achieve overall goals. Critics of bureaucracy argue that mountains of paper and rules only slow an organization's capacity to achieve stated goals, while costing taxpayers both time and money. The effects of regulation cannot easily be quantified in terms of cost of goods and it is difficult to assess whether the regulation is causing more harm than good.

Is the verification process a bureaucratic process that is merely red tape? To answer this question, it is important to understand Red Tape Theory. Many relate “red tape” with rules, regulations, government, time delays, paperwork and overall frustration. Goodsell (2000) said red tape is the leading pejorative symbol of government bureaucracy in the English language, representing the inefficient workings of government. Of the several bureaucratic problems, red tape is perhaps the most pervasive and damaging because red tape is assumed to make public organizations more arthritic and self-serving, less able to achieve their core missions, and less responsive to users (Brewer & Walker, 2009). This widespread notion of red tape has sparked interest in the research community and has elevated red tape to a researchable phenomenon of public and private administration.

So where did the term red-tape come from and what does it actually mean? Many researchers have begun studying the phenomenon. The term red tape was actually coined from the color of the cord that bound government documents together in the early centuries. Red tape has been defined differently throughout the years. Barry Bozeman is a professor of public policy and his research focuses on public management, organization theory, and science and technology policy. He is also known for his research on red tape theory and bureaucracy. Bozeman provides a summary of the various definitions of red tape that has been used throughout the literature.

Bozeman refers to Herbert Kaufman, who is widely mentioned throughout the literature on red tape. Although, Kaufman never gives an actual definition of red tape, he says "when people rail against red tape, they mean that they are subjected to too many constraints, which many of the constraints seem pointless, and that agencies seem to take forever to act" (Bozeman, 1993). Vexation, constraint, and delay are common elements of red tape. Prior research has historically viewed red tape as organizational pathology and has been described by researchers as follows:

- Buchanan (1975): excessive constraints that are largely structural in nature
- Rosenfeld (1984): red tape is the sum of government guidelines, procedures, and forms that as are perceived as excessive, unwieldy, or pointless in relation to official decision and policy.
- Baldwin (1990): defines formal and informal red tape. Formal red tape pertains to burdensome procedures; and informal red tape concerns constraints by external factors such as the media, public opinion, and political parties

Although definitions of red tape vary, there are common elements. These include excessive or meaningless paperwork; high degree of formalization and constraint, unnecessary rules, procedures and regulations; inefficiency; unjustifiable delays; and as a result frustration and vexation.

Red tape has a negative connotation tenor and most would not see why it is needed or see the benefits to red tape. Goodsell (1987) said red tape is the most universal rejection symbol, but also a classic condensation symbol, because it incorporates a vast array of subjectively held feelings. Most explanations of red tape in government result from an emphasis on accountability. In the public administration literature provided by Kaufman, red tape may be frustrating, but it sometimes provides social benefits. It does not spring up because of incompetence or malice of bureaucrats, but rather to ensure that government processes are accountable and meet the demands of citizens and interest groups. However, this process protection gives rise to red tape. Kaufman points out that red tape could be avoided if we were willing to reduce the checks and

safeguards now imposed. However, if we were to do away with the safeguards "we would be appalled by the resurgence of the evils and follies it currently prevents" (Bozeman, 1993). In addition, rules and procedures are fallible and error prone and some redundancy might be beneficial.

Looking at regulations through this perspective raises the question: when are extensive rules and procedures considered red tape and when are they justified and beneficial. Bozeman constructed a theory of good and bad rules in bureaucracies and other organizations. Rules are essential to bureaucratic organizations, creating the basis for stability, continuity, equity, and many other valued attributes (Goodsell, 2000). Bozeman distinguishes between "white tape" as the good rules that provide a benefit despite delays and frustrations and red tape; as the dysfunctional rules that fail to help or cause much mischief. Bozeman defined several types of red tape, laying the foundation for future studies attempting to measure the impact of red tape on organizations.

Bozeman said it is often not the number of rules, regulations and procedures that cause problems. The time and energy used by an organization to comply with the rules is the problem. Therefore, red tape can be measured as the delays in the organizations' core activities. Bozeman provides the following formula for measuring red tape:

- **Rule Sum:** the total number of written rules, procedures, and regulations in force for an organization.
- **Compliance requirement:** total resources (time, people, and money) required formally to comply with a rule or regulation.
- **Compliance burden:** total resources (time, money, and people) actually expended in complying with a rule.
- **Rule density:** the compliance burden associated with a set of rules and is defined as: the percentage of the compliance burden (resources devoted to complying with all its rule) to total resources expended.

When determining the impact of red tape on an organization, it is also important to understand the reason a rule was created and whom it affects. This functional object of a rule, according to Bozeman is the reason a rule was created, the problem it seeks to solve, the opportunity it exploits, and rule efficacy (the extent to which a given rule addresses effectively the functional object for which it was designed).

Since red tape affects both the organization enforcing the regulations and the individuals using the services, red tape is viewed through two different lenses. Viewing red tape through the lens of an organization is called organizational red tape and is defined as rules, regulations, and procedures that remain in force and entail a compliance burden for the organization, but have no efficacy for the rules' functional object (Bozeman, 1993). Viewing red tape through the lens of a stakeholder is called stakeholder red tape and is defined as organizational rules, regulations, and procedures that remain in force and entail a compliance burden, but serve no object valued by a given stakeholder group (Bozeman, 1993).

A complicating factor for researchers studying red tape is that rules may help some people but hurt others. Rules and regulations are not inherently good or bad for everyone. A rule may be red tape for one and useful for another (Bozeman, 1993). Therefore red tape is subject-dependent. Rules and procedures have multiple impacts. This view is shared by other researchers. Kaufman said, "One man's red tape is another's treasured procedural safeguard" and Waldo said "One man's red tape is another man's system" (Bozeman, 1993). Rules may also achieve certain values and undermine others, or be reasonably useful but have high opportunity costs (Goodsell, 2000).

Bozeman's research defined two types of red tape: rule-inception red tape (rules born bad and dysfunctional from the origin). These rules have a compliance burden, while not addressing

a functional object. The second type is rule-evolved red tape (rules functional at one time that have turned bad).

Rule-Inception Red Tape

- **Inadequate comprehension:** insufficient understanding of the problem at hand
- **Self-aggrandizement and illegitimate reasons:** serves an individual or group only
- **Negative sum compromise:** a rule established to serve so many diverse functional objectives that the net result is to produce compliance burden, but not enhance any of the functional objects
- **Over control:** the most common, since a common response to uncertainty and ambiguity is to seek control through formalization
- **Negative sum process:** organizational democracy becomes such a source of red tape that the value of participation ends up serving no purpose.

Rule-Evolved Red Tape

- **Rule drift:** meaning and spirit get lost in the organization. It is just a ritual and no one knows the purpose it serves.
- **Rule entropy:** special case of rule drift. Rules get passed down through levels of the organization or individuals.
- **Change in implementation:** rule stays essentially the same but is implemented in different manners
- **Change in functional object:** functional object renders the rule obsolete
- **Change in rule's efficacy:** functional object does not, change but circumstances change that mitigate the rule's usefulness.
- **Rule strain:** organizations with high rule density create strain and inefficient use of resources. Rules that are good but too abundant have a negative effect.
- **Accretion:** rules that build atop one another. If inconsistent, the net effect is damaging. Rules have an impact that is more than the sum of their parts.
- **Misapplication:** rules may be difficult to interpret or apply because they are written poorly or are not communicated to those enforcing the rules.

Rules and regulations may be generated internally or externally. Understanding the sources of red tape is important for an organization. For instance, external sources are likely to

lead to customer defection and client dissatisfaction. Externally imposed rules may become internally imposed red tape (Bozeman, 1993). That is, the original source of rules is not necessarily the original source of the red tape. Bozeman provides four sources of red tape:

- **Ordinary red tape:** red tape that originates inside the organization and has external impacts on clients
- **Intraorganizational red tape:** red tape originates inside the organization and impacts internal constituents
- **External control red tape:** red tape that originates externally but has internal organizational impacts
- **Pass-through ted tape:** red tape that originates externally and has its chief impact on the client or customer, with the organization simply passing it along by implementing.

Bozeman's study (1993) using delays as a measure found that government-owned entities, or private organizations with government ties, exhibited more red tape. This suggests that the chief cause is not government ownership but rather external political authority. Government ownership is positively related to ordinary red tape, external control red tape, and pass-through red tape (Bozeman, 1993). Government organizations have inherent attributes that make them more likely to be subjected to red tape: external control, homogeneity, and number of stakeholders. Typically, they have a large number of external controllers exerting legitimate influence and providing rules.

The most common causes of red-tape in government organizations are accretion, inadequate comprehension, and rule strain. Accretion is problematic, because the procedural safeguards almost invariably involve cross-cutting goals and produce a natural tug of war between agencies. Inadequate comprehension is often problematic too, because those interpreting or applying a procedural safeguard can easily lose sight of the rule. However, most important is rule strain: the sheer number of procedural safeguards produce an extensive compliance burden and for organizations with limited resources (Bozeman, 1993). Educational institutions

experience rule strain, because they have a higher level of formalization and procedural regularity.

Red Tape and Performance

High levels of governmental performance are obviously important to society at large. Thus we must understand the effect of red tape on governmental performance. Such knowledge can be used to improve public service to better society. Brewer and Walker (2009) examined the effects of red tape on governmental performance and whether these effects vary across the constructs' dimensions. The principal source of their data was a survey, which provided perceptual measures of red tape. The major contribution of the study was that it examined the various dimensions of red tape and performance. For instance, they examined whether internal red tape results in quality and efficiency losses and whether external red tape lowers customer satisfaction and perceptions (Brewer & walker, 2009). They also presented evidence showing that red tape is a subject-dependent concept, consistent with Bozeman's formulation of stakeholder red tape.

Brewer and Walker found that an aggregate measure of red tape reduces governmental performance as expected; but the relationship disappears when a full range of control variables are entered. They concluded that the red tape myth may be somewhat overblown and its potential impact on governmental performance may be slightly over estimated, indicating that red tape does not have any salient effects on efficiency. Their study also found that stakeholder perceptions are important. However, Brewer and Walker confirmed that the one-size-fits-all reforms typically introduced and adopted by governments are unlikely to achieve desired results.

Federal regulations exceed 165,000 pages and the desire for greater efficiency in government is one of the most compelling reasons for administrative reforms such as rule simplification and paperwork reduction (Luttner, 2012). Federal agencies, through executive

order, have been charged with improving the retrospective review process by providing meaningful measures of regulations and performance. Randall Lutter, a scholar at Resources for the Future studied the impact of four regulatory agencies: Environmental Protection Agency (EPA), the Food and Drug Administration (FDA), the National Highway Safety Traffic Administration (NHSTA), and the Securities and Exchange Commission (SEC). Luttner (2012) analyzed recent reports on retrospective review and found little evidence of progress toward improving measurement of results. In fact they consistently failed to produce useful measures of regulations and performance. Also, little information was provided to determine if benefits exceeded cost.

The study also concluded that it was impossible to judge how well existing regulations work, even by the agencies' own reports on retrospective review. Challenges with the retrospective review: agencies' lack of impartiality in reviewing their own regulations, inappropriately narrow focus, and failure to promote steps to better measure regulations actual benefits versus costs (Luttner, 2012). Luttner offered suggestions in improving the retrospective review process, saying a wholesale approach focused on regulatory programs rather than individual regulations may provide more useful and efficient measures of effectiveness.

Pandey and Coursey (2007) offered a model that tests red tape for organizational effectiveness. Through their model, they argued that red tape is directly related to organizational effectiveness and the culture of the organization can moderate this impact on performance (Bozeman & Feeney, 2012). This is consistent with Walker and Brewer's finding that different programs and services report variances in red tape and can have different effects, depending on the perceptions of red tape.

Despite many government reforms aimed to reduce red tape (in the United States and abroad), the literature barely addresses the relationship between red tape and performance. “This disconnect is so important that Rainey and Steinbauer (1999) refer to the lack of tests in red tape on organizational performance as the elephant in the room” (Bozeman & Feeney, 2012, p. 115). It is regrettable that the literature on red tape theory and its impact on performance for individuals and organizations are limited. Red tape may impede efficiencies within organizations and affects employee and customer satisfaction, by having employees focused on tasks that create excessive paperwork that serve no functional purpose, but create delays and reduce performance (Bozeman & Feeney, 2012). If an organization has a high level of red tape, it may cause systemic negative effects on performance.

Red Tape Research

Studies of red tape usually involve a survey instrument asking respondents to assess the level of red tape in their organizations. Criticisms of red tape research include overreliance on survey data. Another criticism is the overemphasis of organizational effectiveness as a negative outcome of red tape, while not taking into account other important factors of red tape such as accountability, transparency, equity, and fairness (Feeney, 2012). Researchers of red tape recognize gaps in the research and have considered ways to improve measures and data. For example, Feeney (2012) examined how language used in survey questions may influence responses about perceptions of red tape. Feeney’s (2012) study investigated whether question wording triggers an overall negative response and how the word usage might be related to perceived red tape. Feeney used a survey instrument that randomly assigned four types of red tape measures. When respondents took the survey, they were randomly assigned one of these measures. Feeney’s study concluded that question wording and definitions provided in the red tape questionnaire influenced respondents’ assessments of organizational red tape. Feeney

(2012) said when no definition is provided, higher levels of red tape are reported, because respondents have a broader definition of red tape, and the term “red tape” elicits strong negative connotations. Feeney (2012) said, to strengthen the validity of red tape research, future red tape measures should eliminate the term “red tape” and replace it with terms such as “rules and regulations”.

Although the research has produced some mixed results and the validity of red tape measures has been questioned, researchers of red tape have surmounted these challenges to offer a significant amount of empirical work in a short time (Riccucci, 2012). Despite general recognition of the importance of “red tape” in organizations’ behaviors and impacts and the lack of empirical rigor, some red tape studies report no impact on government performance, while other research disagrees. Red tape is universally seen as something problematic that must be overcome. In fact, the concept of red tape seems fundamentally based on the notion that red tape has corrosive effects on governmental performance (Brewer & Walker). Unfortunately measuring the impact of regulations on society as a whole to determine if they are “white tape” or “red tape” (as defined by Bozeman) has proved challenging. Debates will continue about whether government intervention is necessary through regulatory requirements. The political left proposes to combat red tape by decentralizing public service and instilling an entrepreneurial spirit in government. The political right offers a harsher set of remedies that includes wholesale deregulation of business and increased contracting and privatization of public services (Brewer & Walker, 2009). Much research on red tape is still needed, especially because previous research is neither deep nor rich enough (Riccucci, 2012).

Joseph Russo (2010) a director of student financial aid strategies at University of Notre Dame since 1978, has testified before the United States Congress on financial aid policy. Russo

indicates that the promulgation of regulations, however well intentioned, has resulted in enormous administrative and financial burdens. The regulations create conundrums, because their purpose does not always line up with those of the institution (Russo, 2010). So, is the federal financial aid regulations "red tape", as defined by Bozeman? Have students accessing federal financial funds fallen victim to red tape? This study addressed these questions and the question proposed by NASFAA president Justin Draeger; "At some point, we must stop and ask to what extent federal regulations and requirements are either hindering college access and success or increasing costs for students. To answer these questions this study applied red tape theory to federal financial aid regulations, by examining the verification process. The verification process, although intended to ensure that students are eligible to receive financial aid, adds another step to an already intimidating process that adds substantial amount of time and money in processing student's financial aid, while leaving many students feeling frustrated. This process has added significantly to the cost of administration and is the primary reason for the confusion and complexity, and the discouragement many applicants experience (Russo, 2010).

Drawing on the literature on red tape theory this study contributes to the knowledge on red tape theory. This study also contributes to the knowledge on the effectiveness of the federal regulation in verifying financial aid applicants' information. To determine if the verification process influences college access, two aspects of the process were examined. The first aspect examined the change in the financial aid award amount as a result of the verification process, to ascertain whether the verification process was beneficial in determining the amount a student was eligible to receive. The second aspect examined student access, by examining enrollment patterns for students subjected to the verification process.

CHAPTER 3
METHODOLOGY

In the previous section, an introduction to the research was presented. This included a description of the study's research problem, the research purpose and research hypotheses that directed the data analysis. A brief overview of the history of financial aid and the financial aid process was also provided. In addition, a review of relevant literature related to financial aid and red tape theory established a background supporting the study. The intent of this section is to describe the methodology that was utilized for the research effort. Included in the section is a description of the study setting, research design, study sample, and data collection methods, procedures, and analysis efforts. The focus of the analysis was on financial aid students selected for verification by the U.S. Department of Education for the 2011-12 and 2012-13 academic years and enrollment status for the respective fall terms.

Purpose of Study

This research study aimed to determine if the verification regulation influences college access, by examining the effect on college student access. To accomplish this, student enrollment patterns were examined. This study was built on a study conducted in 2010 by the Institute of College Access and Success (ICAS), which showed evidence that students selected for verification, who may otherwise be eligible to receive financial aid, did not complete the process. The ICAS study analyzed data for students who received a Pell eligible EFC versus those who actually received Pell and categorized the results by those selected for verification versus those not selected for verification. This study expanded on the ICAS study by comparing enrollment patterns for those selected versus not selected for verification to determine if the verification process hinders college access.

Research Question

The conceptual framework for the research question arose from a review of the literature on red tape theory. In addition, there is relatively little research on students who begin the financial aid process but do not see it to the end. This study focused on the influence of the financial aid verification process on college access by examining student enrollment patterns.

- **RQ1:** To what extent does the financial aid verification process influence college student access?

To address the research question, several analyses were required. The first analysis determined whether students selected for verification had a change in their financial aid award amount, as a result of being selected for verification. Essentially, as a result of being selected for verification, did the financial aid amount the student was eligible to receive increase, decrease, or stay the same? The next analysis determined if students selected for financial aid verification are less likely to enroll in college. Essentially, are students selected for verification less likely to enroll, compared to students not selected for verification? The last analysis determined the likelihood of students enrolling upon completion of verification. For students completing the process, additional factors (such as gender, age, race, socioeconomic status and the month the FASFA was submitted) were also analyzed, to determine if any relationship existed using those variables as predictors of enrollment.

Study Setting

In its broadest conceptualization, this study was intended to address the population of students selected for verification in the United States. However, the vast diversity of educational institutions and financial aid process and other related variables would make for a monumental undertaking. Therefore, it was necessary to delimit the setting from which a sample for the study was drawn. The community college's traditional open-door philosophy encourages all students

who have graduated high school, obtained a GED, or is 18 years or older to enter college providing access to students who never dreamed of attending (O'Banion, 2013). Success and survival of the community college is seen critically linked to the sustainability of the nation's workforce and economy. Therefore, this study sample included students attending a public community college, who applied for federal financial aid by submitting a FASFA during the 2011-12 and 2012-13 academic years and enrolled for the respective fall term.

Research Design

This study used a correlational research design described by Dooley (2001), measuring the independent variable rather than setting it. Further, the design used a cross-sectional correlation, measuring the independent and dependent variables at the same time. Therefore, the study plan involved gathering information about the student. No manipulation of the variables by the researcher was possible; instead any determined differences stem from differences in results in the measurement efforts according to age, gender, race, socioeconomic status, and the month the FASFA was submitted.

Population

In Florida, community and state colleges are the primary point of access to higher education, with 66% of the state's high school graduates pursuing postsecondary education beginning at a Florida college (Florida Department of Education, 2012). Therefore this study focused on a public college in the State of Florida. The college selected for this study was established in 1961. With 679 full-time and part-time employees, and 16,000 credit and noncredit students taking classes each year, the business of the college makes a significant impact on the local economy. Students are most likely to enter the local workforce after completing their college studies.

The college selected has seen the effects of changes in the economy, with more students pursuing higher education. Although college enrollment decreased 10% for the Fall 2012 term, overall enrollment increased 52% over the 2009 to 2011 academic years. Financial aid students represented 50% of the student population for the Fall 2011 term and 48% for Fall 2012. The data reflect that, although student enrollment increased 52% over a three-year period, financial aid applicants, increased 173% for the same time frame.

The college serves nearly 24,000 students annually, and also serves the largest geographic region in the state of Florida, covering 5,700 square miles. To ensure access to its students, it has three full-service campuses and a center in the most populated counties. The institution has a traditional open-door college mission and prides itself on welcoming all students with a high school diploma or equivalent. The institution is dedicated to meeting students at their academic level and providing a true pathway to educational success. The college was among 5 of 28 colleges that began offering bachelor's degree as part of a State Pilot Program to bolster and support Florida's economic productivity and competitiveness, by increasing access to affordable baccalaureate degrees. Most of its students are traditional undergraduate students, enrolling in the Associate of Arts programs. The composition of the student body is as follows:

- Full-Time, 33%; Part-Time, 67%
- Students ≤ 24 years old, 64.2%; students > 24 years old, 35.8%
- Female, 59.7%; Male, 39.4%
- White, 58.0%; Hispanic/Latino, 22.9%; African American, 10.9%; Other minorities, 3.5%

Students who submitted a FASFA for the 2011-12 and 2012-13 academic year were used, in order to determine the population size. Since, the U.S. Department of Education selects students for verification through a random selection process, no further random assignment of

the population was needed. The entire population meeting the specified criteria was examined during the study. Although data were pulled from one institution, due to the diverse geographic region the college serves and the diversity in the student population, the data analysis yielded sufficient representation from various groups for the purposes of this study.

Data Collection

The intent of this study was to determine the impact of federal financial aid regulations on college student access. There are numerous federal financial aid regulations. To narrow the focus, this study was limited to requirements pertaining to verification of student information by the institution. Enrollment was used to measure student access. Therefore, this study attempted to follow the financial aid process from submission of the FAFSA by the student, through the ultimate goal of enrollment, to determine whether the verification process hinders access. Previously collected data were used to measure two independent variables, one dependent variable, and five moderator (demographic) variables. These are outlined below.

Independent variable: Verification, the independent variable in this study, was obtained by collecting information on whether the student was selected by the Department of Education for verification. This information was obtained by gathering data previously collected by the participating institution. The population was divided into three groups: students selected for verification, students selected for verification who completed the process and students selected for verification who did not complete the process. Two separate analyses were performed using students selected for verification and students who completed verification as the independent variables.

Dependent variable: The dependent variable in this study was enrollment. Enrollment in this study was used as the measure for access. This information was obtained by gathering data

previously collected by the participating institution. The dependent variable, enrollment was cross-referenced with the independent variable groups.

Moderator variables: In addition to the above independent and dependent variables, five secondary independent or moderator variables were considered. According to Dooley (2001), a moderator variable adjusts the casual connection between other variables. This occurs when the effect of one variable depends on the level of another. Thus, moderator variables can determine the extent to which the relationship between two major variables is influenced by secondary factors. In this study, the moderator variables of age, gender, race, socioeconomic status, and the month the FASFA was submitted.

Data gathering plans: To test these hypotheses, I drew on secondary sources of data already collected by the institution. The data included information from the institutions' student database as well as the financial aid database, in order to follow the student's progress through the financial aid process. Data collected for this study included, but were not limited to information such as the institution's total FASFAs, students' verification flag, student demographics, student enrollment data, and amount of financial aid award per student. These were the central data sets of the study.

To gather the necessary data elements to conduct this study, a review of the computer system the college uses for processing financial aid was necessary. The college uses the Banner computer system, recognized as a global leader in education-focused services, technologies, and expertise. The Banner computer system is designed specifically for higher education institutions and has been around since 1968. Banner has 2,400 customers and is used in forty countries. Banner is used by both public and private institutions, from associate's-degree granting institutions to research institutions. Of the top fifty public colleges and universities on the 2012

US News and World Report's rankings, 92% are Banner clients. In addition, 70% of the twenty largest degree-granting college and university campuses in the United States are Banner clients.

To access data from the Banner system, a computer program was developed to extract the necessary data elements. An introductory letter from the researcher asking for the institution's cooperation was sent to the college. The letter described the research and its importance, and asked for the support of the appropriate administrator.

Data Analysis

Several types of analysis were used for this study. First, descriptive statistics on the population were provided based on age, gender, race, socioeconomic status, and month the FASFA was submitted. Second, to determine the impact on student access and the verification process, a logistical regression analysis was used to compare enrollment rates for students selected versus not selected for verification. Logistical regression was used to determine if enrollment patterns were influenced by being selected for verification. Logistical regression was chosen for this study as it does not assume a linear relationship between dependent and independent variables, but rather calculates the probability of success in the form of an odds ratio. In addition, logistical regression provides data to determine the strength and relationship of the variables (in this study, verification and enrollment). Logistical regression analysis was also used to compare enrollment rates for students who completed verification. This data was further analyzed using variables for prediction based on age, gender, race, socioeconomic status, and month the FASFA was submitted, to determine any significant relationship between completing verification and those variables. The last analysis used descriptive statistics providing the frequency of change in the amount of the award the student received as a result of being selected for verification.

Research Hypotheses

Specific hypotheses tested are shown below in null form: H_o1 and H_o2 were tested at a minimum significance level of .05.

- **H_o1:** There is no significant difference in the amount of financial aid a student receives after verification.
- **H_o2:** There is no significant difference between being selected versus not being selected for verification on enrollment.
- **H_o3:** There is no significant difference between completing versus not completing verification on enrollment.

A secure database was created to organize the information collected. Student and institution identity was not be revealed and names of participants were not used in any reports. To ensure trustworthiness, credibility, and rigor of the study, data were collected using triangulation. This means information was obtained from multiple sources, such as institution, financial aid staff, Department of Education, and documentation and literature. In addition, results of the data were analyzed and discussed with another member, to ensure the same conclusions were drawn from the data gathered.

Limitations

Aspects of the research design limit the conclusions that may be drawn from the study. There are several limitations to the study. First, the study was limited to an analysis of students who applied for financial aid at a public community/state college in Florida and therefore limits the generalizability. While the study sample should be quite diverse, the fact remains that certain segments of this population were not included. As at any other institution, students attending a public community/state college represent a diverse group. However, differing institutional policies and resources may impact the results. Another potential limitation is that this study only considered the financial aid verification process and not other federal eligibility requirements

that could impact student's eligibility to receive financial aid, such as academic progress standards pertaining to grade point average (GPA) and progression requirements (pace of completion). In addition the use of regression analysis is limited to the variable analyzed and does not consider other factors that may also influence students decisions to enroll such as personal factors, including but not limited to, marriage, pregnancy, unforeseen health issues, death, job or relocation. This study also did not consider the student's knowledge of the financial aid process which could have an impact on the results of the data.

CHAPTER 4
RESULTS

This chapter provides an overview of the findings from the statistical examination of the study, showing the results of the data gathered as outlined in Chapter 3. The purpose of this study aimed determine the influence the verification regulation has on college access. In order to address this issue the following research question was developed:

- To what extent does the financial aid verification process influence college student access?

To address the research question several hypotheses were developed. All hypotheses are stated in null form. The first hypothesis, involved comparing the change in the financial aid award amount as a result of being selected for verification utilizing descriptive statistics and the frequency of change. In order to measure student access for the second and third hypotheses enrollment patterns were used. The second hypothesis, enrollment patterns were not significantly associated with being selected for verification were compared to students not selected for verification. The third hypothesis, completing verification was also not significantly associated to enrollment. In addition, all students who completed the verification process were further analyzed to determine if age, gender, race, socio-economic status, and the month the FASFA was submitted was significant to predict completion of verification. To test the research question and resulting hypotheses, logistical regression analysis was employed. All tests and analysis were conducted utilizing data from a public state college for the 2011-12 and 2012-13 academic years fall term only. For the statistical analysis, the statistical software package for the social sciences SPSS version 21 was used. The descriptive statistics and regression results for all hypotheses are shown in order.

Descriptive Statistics

Aggregate data (*N*=17,991) for the 2011-12 academic year and (*N*=17,409) for the 2012-13 academic year of students selected versus not selected for verification appear normally distributed with no large deviations (Table 4-5). Students verification status for the 2011-12 academic year were students selected for verification (*n*=7,239), and students not selected for verification (*n*=10,752) (Table 4-5) and for the 2012-13 academic year students selected for verification (*n*=6,720), and students not selected for verification (*n*=10,689) (Table 4-5). Students selected for verification in the 2011-12 academic year had an overall mean age of (*M*=26.31), 63.7% of students were female and 51.3% were white. This is consistent with the entire population that shows the overall mean age of (*M*=25.72), 63.6% are female and 52.8% are white (Figures 4-1 through 4-3). Similarly, the student demographic data for the 2012-13 academic year for students selected for verification had an overall mean age of (*M*=25.18), 63.3% of the students selected for verification were female and 46.8% were white. These percentages are again consistent with the demographic information of the entire population (Figures 4-1 through 4-3).

A further breakdown of the student demographic data is provided in three categories, students selected for verification that completed the process, students who completed verification and enrollment status in the fall term and students who did not complete verification and enrollment status in the fall term. Student demographic information includes, age, gender, race, socio-economic status, and month the FASFA was submitted.

Table 4-13 provides data for students selected for verification and completion status. For 2011-12, students completing verification (*N*=4,456), and students not completing verification (*N*= 2,783). For 2012-13, students completing verification (*N*=3,508) and students not completing verification (*N*=3,212).

Table 4-11 provides demographic data for students who completed the verification process and their enrollment status in the fall term. For 2011-12, students enrolled (*N*=3,663), and students not enrolled (*N*=793). For 2012-13, students enrolled (*N*=2,860), and students not enrolled (*N*=648).

Table 4-12 provides demographic information for students who did not complete verification and enrollment status in the fall. For 2011-12, students enrolled (*N*=689), and students not enrolled (*N*=2,094). For 2012-13, students enrolled (*N*=662), and students not enrolled (*N*=2,550). An analysis of each demographic is provided below.

Age

Selected and completed verification status. The categories assigned for the various age groups were determined utilizing how data is captured in regards to age on the Integrated Postsecondary Education Data System (IPEDS) report. For 2011-12, the overall mean age for completed verification (*M*=26.83), and not completed verification (*M*=25.46) (Table 4-2). For 2012-13, the overall mean age for completed verification (*M*=25.70), and not completed verification (*M*=24.62) (Table 4-2). Data also revealed that students above the age of 25 have a higher completion percentage with the age range of 20 to 21, representing the lowest completion of 56.1 and 44.3% for both the 2011-12 and 2012-13 years (Table 4-10).

Completed verification and enrollment. For 2011-12, the overall mean age of completed verification (*M*=26.83), enrolled (*M*=26.70), and did not enroll (*M*=27.42) (Table 4-2). For 2012-13, the overall mean age of completed verification (*M*=25.7), enrolled (*M*=25.5), and not enrolled (*M*=26.61) (Table 4-3). Overall, students who completed verification and did not enroll were typically a year older than students who did enroll. The data also shows that students who are nineteen and below have the highest enrollment percentage compared to the other age categories (Table 4-11).

Did not complete verification and enrollment. The overall mean age of students not completing verification (*M*=25.46), enrolled (*M*=23.20), and did not enroll (*M*=26.20) (Table 4-4). For 2012-13, the overall mean age for students not completing verification (*M*=24.62), enrolled (*M*=22.70), and not enrolled (*M*=25.11) (Table 4-4). For 2011-12 and 2012-13 year's students in the 18 to 19 age category represented the largest portion of the population that did not complete verification, 22.9 and 26.2% for the respective years (Table 4-2). However, students in the 18 to 19 category are among the highest who still end up enrolling than those reported in other age categories, 32.2 and 28.9% for 2011-12 and 2012-13 respectively (Table 4-12).

Gender

Selected and completed verification status. For both the 2011-2012 and 2012-13 academic years females represented the larger portion of being selected for verification 63.7 and 63.3% as compared to 35.4 and 35.8% for males (Table 4-2). This is consistent with the aggregate data as females represent approximately 63% of the total population for both years. However, females and males completed verification at a similar rate. For 2011-12, 63% of females completed while 59.1% of males completed. Similarly for 2012-13, 52.4% of females completed compared to 52.3% of males completed (Table 4-10). This suggests that gender is not a factor in prediction for completing the verification process.

Completed verification and enrollment. For both the 2011-12 and 2012-13 academic years females represented the larger portion of completed verification and enrolling 64.6 and 62.6%, compared to 34.4 and 36.7% for males (Table 4-3). However, the percentage of females and males who complete verification and enroll are similar with males slightly higher than females. For 2011-12, 81.6% of females completed and enrolled while 83.2% of males completed and enrolled. Similarly for 2012-13, 80.4% of females completed and enrolled compared to 83.5% of males completed and enrolled (Table 4-11).

Did not complete verification and enrollment. Consistent with other categories, for both 2011-12 and 2012-13, females represented a larger portion of the population who did not complete verification (Table 4-4). However, the percentage of males who did not complete verification and still enrolled is higher than females. For 2011-12, 26.0% of males who did not complete verification still enrolled versus 24.0% of females. Similarly for 2012-13, 24.3% of males who did not complete verification still enrolled compared to 18.5% of females (Table 4-12).

Race

Selected and completed verification status. Whites represent the majority of the selected for verification population for both the 2011-12 and 2012-13 years at 51.3 and 46.8% respectively (Table 4-2). The completion percentage for each race is provided in Table 4-10 and reveals that Whites, Hispanics and African American completed at nearly the same rate for both years.

Completed verification and enrollment. Whites represent the majority of the completed and enrolled population for both the 2011-12 and 2012-13 years, 51.3 and 48.3% respectively (Table 4-3). The completion and enrollment percentage for each race is provided in Table 4-11 and reveals that African American's have the lowest completed and enrolled percentage, 76.6 and 77.5% for the 2011-12 and 2012-13 years. Hispanics are among the highest percentage, 82.3 and 79.4% for the respective years.

Did not complete verification and enrollment. Whites represent the majority of the population who did not complete verification for both the 2011-12 and 2012-13 year's (Table 4-4). Table 4-12 provides the breakdown by race for students who did not complete verification and enrollment status. African American's are among the lowest percentage of enrollment, 21.0 and 18.6% for the 2011-12 and 2012-13 years respectively. On the other hand Hispanics are

among the highest percentage that still enroll even though they did not complete verification, 25.6 and 21.3% for the respective years (Table 4-12).

Socio-Economic Status

Selected and completed verification status. Adjusted gross income (AGI) as reported on the FASFA was used in categorizing socio-economic status. These categories were divided into four groups, less than $25,000, $25,000-$49,999, $50,000-$74,999 and greater than $75,000. AGI of less than $25,000 represented the largest population selected for verification, 48.0 and 52.7% for the 2011-12 and 2012-13 years (Table 4-2). AGI for $50,000-$74,999, represents the largest completion percentage of 68.3 and 61.6% for the respective years (Table 4-10). Comparing this group to the AGI of less than $25,000, those in the higher income range completed between 8 to 11% higher.

Completed verification and enrollment. AGI of less than $25,000 represented the largest population of completed and enrolled at 46.7 and 50.0% for the 2011-12 and 2012-13 years (Table 4-3). AGI greater than $75,000, represents the largest completion percentage of 86.7 and 96.8% for the respective years (Table 4-11).

Did not complete verification and enrollment. AGI of less than $25,000 represented the largest population of students who did not complete verification (Table 4-4). The income bracket with the largest percentage that still enrolled without completing verification was the greater than $75,000 category, 31.3 and 23.8% for 2011-12 and 2012-13 respectively. (Table 4-12). The AGI range $25,000-$49,999 had the lowest enrollment percentage for both years 19.3 and 14.7% (Table 4-12).

Month FASFA Submitted

Selected and completed verification status. Data revealed the number of students selected for verification was consistent regardless of the month the FASFA was submitted (Table

4-2). However, data also revealed that students who submitted the FASFA after June had a 10% lower completion percentage (Table 4-10).

Completed verification and enrollment. Students who submitted the FASFA prior to June, completed verification, and enrolled represented the majority of the population (Table 4-3). Students that submitted the FASFA after June and completed verification enrolled at a lower percentage, 14.4 and 9.1% lower versus submitting the FASFA prior to June (Table 4-11).

Did not complete verification and enrollment. Table 4-4 provides the breakdown by month the FASFA was submitted and how many students did not complete verification. While Table 4-12 provides the comparisons by month the FASFA was submitted and whether students enrolled even though they did not complete verification. Data revealed students submitting the FASFA in July and August that did not complete the verification process had higher percentages of enrollment as compared to the prior months. For instance, in the 2011-12 year 38.1% of students who submitted the FASFA in August and did not complete verification enrolled versus 12.7% who submitted the FASFA in January (Table 4-12). Likewise for 2012-13, 31.1% of students who submitted the FASFA in August and did not complete verification enrolled versus 16.2% who submitted the FASFA in January (Table 4-12).

Research Hypothesis One

The research problem guiding this hypothesis examined the impact of the verification process on the amount of federal financial aid the student was eligible to receive. This analysis was accomplished by comparing the student's estimated family contribution (EFC) before and after verification. The EFC is the amount the student is able to contribute toward his or her education. Academic years 2011-12 and 2012-13 were used for data analysis. The population consisted of students who submitted the FASFA before September 1st of the academic year and completed verification. The total population of students who completed verification for the 2011-

12 academic year (*N*=4,456) and the 2012-13 academic year (*N*=3,508) were divided into three groups: decrease in EFC, increase in EFC, and no change to EFC. The frequency of the change in EFC was recorded for each group.

Results were consistent for both academic years. For the frequency of EFC outcome after verification, 29 cases in Fall 2011 and 22 cases in Fall 2012 did not fit in any of the three categories (decreased, increased, and no change). This was because there were null cases for EFC for either the pre or post data. For the 2011-12 academic year, of the 4,456 students selected who completed verification, 4,220 (94.7%) experienced no change in EFC after completing verification. For the 2012-13 academic year, of the 3,508 students selected who completed verification, 3,331 (95.0%) experienced no change in EFC after completing verification (Table 4-19). These results suggest that after the verification process was completed, the information originally provided was correct, resulting in no change to the students EFC. In addition, the EFC amount before and after verification was compared for each year. During the 2011-12 year the pre-verification amount (*M*=2,147.32) and post verification amount (*M*=2,130.93) resulted in a net change of -.76% (Table 4-20). For the 2012-13 academic year the pre-verification amount (*M*=1,898.38) and post verification amount (*M*=1,818.37) resulted in a net change of -4.21% (Table 4-20). Similar to the results of the pre and post EFC data above, these results suggest, that overall there was little change in the amount of financial aid the student was eligible to receive on completion of the verification process.

Research Hypothesis Two

The research problem guiding this hypothesis examined the impact that being selected for verification has on college student access by comparing enrollment patterns of students selected versus not selected for verification. To ensure reliability of the data two academic years were analyzed, 2011-12 and 2012-13. The population consisted of students submitting the FASFA

prior to September 1st of the academic year. Total population for the 2011-12 academic year (*N*=17,991) and the 2012-13 academic year (*N*=17,409) were divided into two groups, students selected for verification (*N*=7,239) and (*N*=6,720), students not selected for verification (*N*=10,752) and (*N*=10,689) for the respective years (Table 4-5). The enrollment patterns of each group were compared. Students selected for verification for the 2011-12 and 2012-13 years, 4,352 (60.1%) and 3,522 (52.4%) enrolled for fall for the respective years. Students not selected for verification, 6,839 (63.6%) and 6,447 (60.3%) enrolled for fall respectively (Table 4-6). Without providing statistical analysis, the data suggests that being selected for verification does not significantly influence enrollment as students selected versus not selected for verification enrolled at similar rates.

To further analyze the data to predict the effect of being selected for verification has on enrollment, a logistic regression analysis was conducted using selected for verification as a predictor. The model revealed that the overall effect of selection for verification is statistically significant. For 2011-12 and 2012-13, a test of the full model against a constant only model was statistically significant, indicating that the predictor as a set reliably distinguished between selected for verification and not selected for verification (χ=22.341, p<.000 with df=1) and (χ=105.082, p<.000 with df=1) respectively (Table 4-7). Prediction success overall was 62.2% and 57.3% respectively for 2011-12 and 2012-13 (Table 4-8). The Wald criterion demonstrated that being selected for verification made a significant contribution to prediction (p=.000) for both the 2011-12 and 2012-13 years (Table 4-9). For 2011-12, EXP(B)value, .863, indicates when a student is selected for verification, the student is 13.7% less likely to enroll for fall (Table 4-9). Consistent with 2011-12, the EXP(B) value, .725 for 2012-13, indicates when a student is selected for verification, the student is 27.5% less likely to enroll for fall (Table 4-9).

Therefore, the null hypothesis that there was no significant difference in students enrolling due to being selected versus not being selected for verification was rejected. Although further research would need to be conducted to determine the actual cause for student not enrolling, one possible explanation drawing upon red tape theory suggests that the federal verification requirement is overwhelming creating time delays resulting in frustration, causing students to not finish the financial aid process.

Research Hypothesis Three

The research problem guiding this hypothesis examined the effect that completing verification has on enrollment by comparing students who completed versus did not complete verification. The same two academic years, 2011-12 and 2012-13 were used for data analysis. The population consisted of students that submitted the FASFA prior to September 1st of the academic year. The total population of students selected for verification for the 2011-12 academic year (*N*=7,239) and the 2012-13 academic year (*N*=6,720) were divided into two groups, students completed verification (*N*=4,456) and (*N*=3,508), students not completing verification (*N*=2,783) and (*N*=3,212) for the respective years (Table 4-13). The enrollment patterns of each group were compared. Students completing verification for 2011-12 and 2012-13 years, 3,663 (82.2%) and 2,860 (81.5%) enrolled in fall for the respective years. Students not completing verification, 689 (24.8%) and 662 (20.6%) enrolled in fall respectively (Table 4-14).

Logistic regression analysis was conducted to predict the effect that completing verification has on enrollment using completion as a predictor. The model revealed that the overall effect of completing verification is statistically significant. For 2011-12 and 2012-13 a test of the full model against a constant only model was statistically significant, indicating that the predictor as a set reliably distinguished between completing verification and not completing verification (χ=2448.412, p< .000 with df=1) and (χ=2675.093, p<.000 with df=1) respectively

(Table 4-15). Logistical regression analysis uses a prediction model to determine the log odds that one variable has on another, for this analysis the variables were verification complete and enrollment. The prediction success that completing verification leads to enrollment overall was 79.5% and 80.5% respectively for the 2011-12 and 2012-13 academic years (Table 4-16). The Wald criterion also demonstrated that completing verification made a significant contribution to prediction (p=.000) for both the 2011-12 and 2012-13 years (Table 4-17).For 2011-12, an EXP(B)value, 14.039 indicates that when a student completes verification, the student is 14 times more likely to enroll in fall (Table 4-17). Consistent with 2011-12 , the EXP(B) value, 17.001 for 2012-13indicates that when a student completes verification, the student is 17 times more likely to enroll in fall (Table 4-17). Therefore, the null hypothesis that there is no significant difference in completing versus not completing verification on enrollment was rejected.

In addition, a logistic regression analysis was conducted from the population of students selected for verification to determine the likelihood of completion using age, gender, race, socio-economic status, and month the FASFA was submitted as predictors. For the 2011-12 and 2012-13 years, results were not consistent as to the significance of the predictor variables except for age, socio-economic status, and the month the FASFA was submitted. Although age and socio-economic status overall as predictors were statistically significant (p=.000), none of the ranges used to further define the variables were significant (Table 4-18). However, the Wald criterion demonstrated that the month the FASFA was submitted made a significant contribution to prediction (p=.000) and EXP(B) value: 1.504 for January-March and 1.482 for April-June for the 2011-12 year (Table 4-18). This indicates that when a student submits the FASFA during these months, the student is 1.5 and 1.4 times more likely to complete the verification process than if

submitted after June. For the 2012-13 year, the data revealed similar patterns for prediction (p=.000) and EXP(B) value: 1.644 for January-March and 1.566 for April-June (Table 4-18). This indicates that when a student submits the FASFA during these months, the student is 1.6 and 1.5 times more likely to complete the verification process than if submitted after June.

Table 4-1. Total population descriptive statistics

Age	Fall 2011						Fall 2012					
	Total population		Selected for verification		Not selected for verification		Total population		Selected for verification		Not selected for verification	
	n	%	n	%	n	%	n	%	n	%	n	%
Mean Age	25.72	---	26.31	---	25.32	---	25.57	---	25.18	---	25.81	---
Under 18	952	5.3%	380	5.2%	572	5.3%	920	5.3%	398	5.9%	522	4.9%
18 - 19	4346	24.2%	1613	22.3%	2733	25.4%	4180	24.0%	1809	26.9%	2371	22.2%
20 - 21	2909	16.2%	1033	14.3%	1876	17.4%	2904	16.7%	1109	16.5%	1795	16.8%
22 - 24	2661	14.8%	1021	14.1%	1640	15.3%	2593	14.9%	918	13.7%	1675	15.7%
25 - 29	2582	14.4%	1130	15.6%	1452	13.5%	2604	15.0%	892	13.3%	1712	16.0%
30 - 34	1567	8.7%	729	10.1%	838	7.8%	1452	8.3%	544	8.1%	908	8.5%
35 - 39	1098	6.1%	525	7.3%	573	5.3%	1052	6.0%	423	6.3%	629	5.9%
40 - 49	1409	7.8%	636	8.8%	773	7.2%	1282	7.4%	495	7.4%	787	7.4%
50 - 64	434	2.4%	161	2.2%	273	2.5%	403	2.3%	123	1.8%	280	2.6%
65 & Over	11	0.1%	4	0.1%	7	0.1%	11	0.1%	5	0.1%	6	0.1%
Unknown	22	0.1%	7	0.1%	15	0.1%	8	0.0%	4	0.1%	4	0.0%

Gender	Fall 2011						Fall 2012					
	Total population		Selected for verification		Not selected for verification		Total population		Selected for verification		Not selected for verification	
	n	%	n	%	n	%	n	%	n	%	n	%
Female	11444	63.6%	4608	63.7%	6836	63.6%	10982	63.1%	4254	63.3%	6728	62.9%
Male	6382	35.5%	2561	35.4%	3821	35.5%	6274	36.0%	2403	35.8%	3871	36.2%
Unknown	165	0.9%	70	1.0%	95	0.9%	153	0.9%	63	0.9%	90	0.8%

Table 4-1. Continued

Race/ ethnicity	Fall 2011						Fall 2012					
	Total population		Selected for verification		Not selected for verification		Total population		Selected for verification		Not selected for verification	
	n	%	n	%	n	%	n	%	n	%	n	%
Hispanic or Latino	4459	24.8%	1766	24.4%	2693	25.0%	4571	26.3%	1955	29.1%	2616	24.5%
American Indian or Alaskan Native	53	0.3%	21	0.3%	32	0.3%	54	0.3%	24	0.4%	30	0.3%
Asian	258	1.4%	105	1.5%	153	1.4%	275	1.6%	96	1.4%	179	1.7%
Black or African American	2773	15.4%	1258	17.4%	1515	14.1%	2668	15.3%	1150	17.1%	1518	14.2%
Native Hawaiian or Pacific Islander	34	0.2%	18	0.2%	16	0.1%	34	0.2%	16	0.2%	18	0.2%
White	9503	52.8%	3715	51.3%	5788	53.8%	8833	50.7%	3148	46.8%	5685	53.2%
Two or More	115	0.6%	42	0.6%	73	0.7%	162	0.9%	51	0.8%	111	1.0%
Unknown	796	4.4%	314	4.3%	482	4.5%	812	4.7%	280	4.2%	532	5.0%

Month FASFA submitted	Fall 2011						Fall 2012					
	Total population		Selected for verification		Not selected for verification		Total population		Selected for verification		Not selected for verification	
	n	%	n	%	n	%	n	%	n	%	n	%
January	1266	7.0%	496	6.9%	770	7.2%	1499	8.6%	721	10.7%	778	7.3%
February	2210	12.3%	985	13.6%	1225	11.4%	2496	14.3%	1145	17.0%	1351	12.6%
March	2877	16.0%	1192	16.5%	1685	15.7%	2681	15.4%	1080	16.1%	1601	15.0%
April	2535	14.1%	1031	14.2%	1504	14.0%	2473	14.2%	877	13.1%	1596	14.9%
May	2822	15.7%	1111	15.3%	1711	15.9%	2638	15.2%	943	14.0%	1695	15.9%
June	2632	14.6%	1007	13.9%	1625	15.1%	2314	13.3%	822	12.2%	1492	14.0%
July	2033	11.3%	803	11.1%	1230	11.4%	1919	11.0%	666	9.9%	1253	11.7%
August	1616	9.0%	614	8.5%	1002	9.3%	1389	8.0%	466	6.9%	923	8.6%

Table 4-1. Continued

Adjusted gross income	Fall 2011						Fall 2012					
	Total population		Selected for verification		Not selected for verification		Total population		Selected for verification		Not selected for verification	
	n	%	n	%	n	%	n	%	n	%	n	%
Less than $25,000	8723	48.5%	3477	48.0%	5246	48.8%	8659	49.7%	3543	52.7%	5116	47.9%
$25,000 - $49,999	2687	14.9%	1569	21.7%	1118	10.4%	2625	15.1%	1045	15.6%	1580	14.8%
$50,000 - $74,999	791	4.4%	483	6.7%	308	2.9%	742	4.3%	284	4.2%	458	4.3%
Greater than $75,000	390	2.2%	62	0.9%	328	3.1%	375	2.2%	52	0.8%	323	3.0%
Unknown	5400	30.0%	1648	22.8%	3752	34.9%	5008	28.8%	1796	26.7%	3212	30.0%

Table 4-2. Selected for verification descriptive statistics

Age	Fall 2011						Fall 2012					
	Selected for verification		Completed verification		Did not complete verification		Selected for verification		Completed verification		Did not complete verification	
	n	%	n	%	n	%	n	%	n	%	n	%
Mean Age	26.31	---	26.83	---	25.46	---	25.18	---	25.7	---	24.62	---
Under 18	380	5.2%	219	4.9%	161	5.8%	398	5.9%	217	6.2%	181	5.6%
18 - 19	1613	22.3%	977	21.9%	636	22.9%	1809	26.9%	966	27.5%	843	26.2%
20 - 21	1033	14.3%	580	13.0%	453	16.3%	1109	16.5%	491	14.0%	618	19.2%
22 - 24	1021	14.1%	585	13.1%	436	15.7%	918	13.7%	431	12.3%	487	15.2%
25 - 29	1130	15.6%	719	16.1%	411	14.8%	892	13.3%	466	13.3%	426	13.3%
30 - 34	729	10.1%	487	10.9%	242	8.7%	544	8.1%	310	8.8%	234	7.3%
35 - 39	525	7.3%	337	7.6%	188	6.8%	423	6.3%	263	7.5%	160	5.0%
40 - 49	636	8.8%	435	9.8%	201	7.2%	495	7.4%	286	8.2%	209	6.5%
50 - 64	161	2.2%	114	2.6%	47	1.7%	123	1.8%	75	2.1%	48	1.5%
65 & Over	4	0.1%	3	0.1%	1	0.0%	5	0.1%	3	0.1%	2	0.1%
Unknown	7	0.1%	0	0.0%	7	0.3%	4	0.1%	0	0.0%	4	0.1%

Gender	Fall 2011						Fall 2012					
	Selected for verification		Completed verification		Did not complete verification		Selected for verification		Completed verification		Did not complete verification	
	n	%	n	%	n	%	n	%	n	%	n	%
Female	4608	63.7%	2901	65.1%	1707	61.3%	4254	63.3%	2227	63.5%	2027	63.1%
Male	2561	35.4%	1513	34.0%	1048	37.7%	2403	35.8%	1256	35.8%	1147	35.7%
Unknown	70	1.0%	42	0.9%	28	1.0%	63	0.9%	25	0.7%	38	1.2%

Table 4-2. Continued

Race/ ethnicity	Fall 2011						Fall 2012					
	Selected for verification		Completed verification		Did not complete verification		Selected for verification		Completed verification		Did not complete verification	
	n	%	n	%	n	%	n	%	n	%	n	%
Hispanic or Latino	1766	24.4%	1144	25.7%	622	22.3%	1955	29.1%	1048	29.9%	907	28.2%
American Indian or Alaskan Native	21	0.3%	13	0.3%	8	0.3%	24	0.4%	20	0.6%	4	0.1%
Asian	105	1.5%	75	1.7%	30	1.1%	96	1.4%	47	1.3%	49	1.5%
Black or African American	1258	17.4%	800	18.0%	458	16.5%	1150	17.1%	619	17.6%	531	16.5%
Native Hawaiian or Pacific Islander	18	0.2%	10	0.2%	8	0.3%	16	0.2%	8	0.2%	8	0.2%
White	3715	51.3%	2247	50.4%	1468	52.7%	3148	46.8%	1640	46.8%	1508	46.9%
Two or More	42	0.6%	23	0.5%	19	0.7%	51	0.8%	25	0.7%	26	0.8%
Unknown	314	4.3%	144	3.2%	170	6.1%	280	4.2%	101	2.9%	179	5.6%

Month FASFA submitted	Fall 2011						Fall 2012					
	Selected for verification		Completed verification		Did not complete verification		Selected for verification		Completed verification		Did not complete verification	
	n	%	n	%	n	%	n	%	n	%	n	%
January	496	6.9%	291	6.5%	205	7.4%	721	10.7%	387	11.0%	334	10.4%
February	985	13.6%	624	14.0%	361	13.0%	1145	17.0%	618	17.6%	527	16.4%
March	1192	16.5%	786	17.6%	406	14.6%	1080	16.1%	608	17.3%	472	14.7%
April	1031	14.2%	649	14.6%	382	13.7%	877	13.1%	488	13.9%	389	12.1%
May	1111	15.3%	724	16.2%	387	13.9%	943	14.0%	495	14.1%	448	13.9%
June	1007	13.9%	620	13.9%	387	13.9%	822	12.2%	432	12.3%	390	12.1%
July	803	11.1%	442	9.9%	361	13.0%	666	9.9%	307	8.8%	359	11.2%
August	614	8.5%	320	7.2%	294	10.6%	466	6.9%	173	4.9%	293	9.1%

Table 4-2. Continued

Adjusted gross income	Fall 2011						Fall 2012					
	Selected for verification		Completed verification		Did not complete verification		Selected for verification		Completed verification		Did not complete verification	
	n	%	n	%	n	%	n	%	n	%	n	%
Less than $25,000	3477	48.0%	2109	47.3%	1368	49.2%	3543	52.7%	1777	50.7%	1766	55.0%
$25,000 - $49,999	1569	21.7%	1024	23.0%	545	19.6%	1045	15.6%	616	17.6%	429	13.4%
$50,000 - $74,999	483	6.7%	330	7.4%	153	5.5%	284	4.2%	175	5.0%	109	3.4%
Greater than $75,000	62	0.9%	30	0.7%	32	1.1%	52	0.8%	31	0.9%	21	0.7%
Unknown	1648	22.8%	963	21.6%	685	24.6%	1796	26.7%	909	25.9%	887	27.6%

Table 4-3. Completed verification: descriptive statistics

Age	Fall 2011						Fall 2012					
	Completed verification		Enrolled		Did not enroll		Completed verification		Enrolled		Did not enroll	
	n	%	n	%	n	%	n	%	n	%	n	%
Mean Age	26.83	---	26.7	---	27.42	---	25.7	---	25.5	---	26.61	---
Under 18	219	4.9%	192	5.2%	27	3.4%	217	6.2%	197	6.9%	20	3.1%
18 - 19	977	21.9%	856	23.4%	121	15.3%	966	27.5%	835	29.2%	131	20.2%
20 - 21	580	13.0%	465	12.7%	115	14.5%	491	14.0%	394	13.8%	97	15.0%
22 - 24	585	13.1%	450	12.3%	135	17.0%	431	12.3%	331	11.6%	100	15.4%
25 - 29	719	16.1%	575	15.7%	144	18.2%	466	13.3%	357	12.5%	109	16.8%
30 - 34	487	10.9%	392	10.7%	95	12.0%	310	8.8%	238	8.3%	72	11.1%
35 - 39	337	7.6%	280	7.6%	57	7.2%	263	7.5%	211	7.4%	52	8.0%
40 - 49	435	9.8%	364	9.9%	71	9.0%	286	8.2%	234	8.2%	52	8.0%
50 - 64	114	2.6%	88	2.4%	26	3.3%	75	2.1%	61	2.1%	14	2.2%
65 & Over	3	0.1%	1	0.0%	2	0.3%	3	0.1%	2	0.1%	1	0.2%
Unknown	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%

Gender	Fall 2011						Fall 2012					
	Completed verification		Enrolled		Did not enroll		Completed verification		Enrolled		Did not enroll	
	n	%	n	%	n	%	n	%	n	%	n	%
Female	2901	65.1%	2366	64.6%	535	67.5%	2227	63.5%	1791	62.6%	436	67.3%
Male	1513	34.0%	1259	34.4%	254	32.0%	1256	35.8%	1049	36.7%	207	31.9%
Unknown	42	0.9%	38	1.0%	4	0.5%	25	0.7%	20	0.7%	5	0.8%

Table 4-3. Continued

Race/ ethnicity	Fall 2011						Fall 2012					
	Completed verification		Enrolled		Did not enroll		Completed verification		Enrolled		Did not enroll	
	n	%	n	%	n	%	n	%	n	%	n	%
Hispanic or Latino	1144	25.7%	941	25.7%	203	25.6%	1048	29.9%	832	29.1%	216	33.3%
American Indian or Alaskan Native	13	0.3%	9	0.2%	4	0.5%	20	0.6%	19	0.7%	1	0.2%
Asian	75	1.7%	67	1.8%	8	1.0%	47	1.3%	39	1.4%	8	1.2%
Black or African American	800	18.0%	613	16.7%	187	23.6%	619	17.6%	480	16.8%	139	21.5%
Native Hawaiian or Pacific Islander	10	0.2%	8	0.2%	2	0.3%	8	0.2%	8	0.3%	0	0.0%
White	2247	50.4%	1880	51.3%	367	46.3%	1640	46.8%	1380	48.3%	260	40.1%
Two or More	23	0.5%	19	0.5%	4	0.5%	25	0.7%	19	0.7%	6	0.9%
Unknown	144	3.2%	126	3.4%	18	2.3%	101	2.9%	83	2.9%	18	2.8%

Month FASFA submitted	Fall 2011						Fall 2012					
	Completed verification		Enrolled		Did not enroll		Completed verification		Enrolled		Did not enroll	
	n	%	n	%	n	%	n	%	n	%	n	%
January	291	6.5%	242	6.6%	49	6.2%	387	11.0%	323	11.3%	64	9.9%
February	624	14.0%	524	14.3%	100	12.6%	618	17.6%	525	18.4%	93	14.4%
March	786	17.6%	673	18.4%	113	14.2%	608	17.3%	509	17.8%	99	15.3%
April	649	14.6%	555	15.2%	94	11.9%	488	13.9%	405	14.2%	83	12.8%
May	724	16.2%	607	16.6%	117	14.8%	495	14.1%	417	14.6%	78	12.0%
June	620	13.9%	526	14.4%	94	11.9%	432	12.3%	333	11.6%	99	15.3%
July	442	9.9%	317	8.7%	125	15.8%	307	8.8%	223	7.8%	84	13.0%
August	320	7.2%	219	6.0%	101	12.7%	173	4.9%	125	4.4%	48	7.4%

Table 4-3. Continued

Adjusted gross income	Fall 2011						Fall 2012					
	Completed verification		Enrolled		Did not enroll		Completed verification		Enrolled		Did not enroll	
	n	%	n	%	n	%	n	%	n	%	n	%
Less than $25,000	2109	47.3%	1712	46.7%	397	50.1%	1777	50.7%	1430	50.0%	347	53.5%
$25,000 - $49,999	1024	23.0%	826	22.5%	198	25.0%	616	17.6%	470	16.4%	146	22.5%
$50,000 - $74,999	330	7.4%	267	7.3%	63	7.9%	175	5.0%	145	5.1%	30	4.6%
Greater than $75,000	30	0.7%	26	0.7%	4	0.5%	31	0.9%	30	1.0%	1	0.2%
Unknown	963	21.6%	832	22.7%	131	16.5%	909	25.9%	785	27.4%	124	19.1%

Table 4-4. Did not complete verification: descriptive statistics

Age	Fall 2011						Fall 2012					
	Did not complete verification		Enrolled		Did not enroll		Did not complete verification		Enrolled		Did not enroll	
	n	%	n	%	n	%	n	%	n	%	n	%
Mean Age	25.46	---	23.2	---	26.2	---	24.62	---	22.7	---	25.11	---
Under 18	161	5.8%	57	8.3%	104	5.0%	181	5.6%	50	7.6%	131	5.1%
18 - 19	636	22.9%	205	29.8%	431	20.6%	843	26.2%	244	36.9%	599	23.5%
20 - 21	453	16.3%	151	21.9%	302	14.4%	618	19.2%	147	22.2%	471	18.5%
22 - 24	436	15.7%	106	15.4%	330	15.8%	487	15.2%	78	11.8%	409	16.0%
25 - 29	411	14.8%	71	10.3%	340	16.2%	426	13.3%	53	8.0%	373	14.6%
30 - 34	242	8.7%	33	4.8%	209	10.0%	234	7.3%	31	4.7%	203	8.0%
35 - 39	188	6.8%	28	4.1%	160	7.6%	160	5.0%	20	3.0%	140	5.5%
40 - 49	201	7.2%	33	4.8%	168	8.0%	209	6.5%	32	4.8%	177	6.9%
50 - 64	47	1.7%	5	0.7%	42	2.0%	48	1.5%	7	1.1%	41	1.6%
65 & Over	1	0.0%	0	0.0%	1	0.0%	2	0.1%	0	0.0%	2	0.1%
Unknown	7	0.3%	0	0.0%	7	0.3%	4	0.1%	0	0.0%	4	0.2%

Gender	Fall 2011						Fall 2012					
	Did not complete verification		Enrolled		Did not enroll		Did not complete verification		Enrolled		Did not enroll	
	n	%	n	%	n	%	n	%	n	%	n	%
Female	1707	61.3%	409	59.4%	1298	62.0%	2027	63.1%	374	56.5%	1653	64.8%
Male	1048	37.7%	272	39.5%	776	37.1%	1147	35.7%	279	42.1%	868	34.0%
Unknown	28	1.0%	8	1.2%	20	1.0%	38	1.2%	9	1.4%	29	1.1%

Table 4-4. Continued

Race/ ethnicity	Fall 2011						Fall 2012					
	Did not complete verification		Enrolled		Did not enroll		Did not complete verification		Enrolled		Did not enroll	
	n	%	n	%	n	%	n	%	n	%	n	%
Hispanic or Latino	622	22.3%	159	23.1%	463	22.1%	907	28.2%	193	29.2%	714	28.0%
American Indian or Alaskan Native	8	0.3%	0	0.0%	8	0.4%	4	0.1%	2	0.3%	2	0.1%
Asian	30	1.1%	7	1.0%	23	1.1%	49	1.5%	19	2.9%	30	1.2%
Black or African American	458	16.5%	96	13.9%	362	17.3%	531	16.5%	99	15.0%	432	16.9%
Native Hawaiian or Pacific Islander	8	0.3%	2	0.3%	6	0.3%	8	0.2%	2	0.3%	6	0.2%
White	1468	52.7%	396	57.5%	1072	51.2%	1508	46.9%	311	47.0%	1197	46.9%
Two or More	19	0.7%	4	0.6%	15	0.7%	26	0.8%	7	1.1%	19	0.7%
Unknown	170	6.1%	25	3.6%	145	6.9%	179	5.6%	29	4.4%	150	5.9%

Month FASFA submitted	Fall 2011						Fall 2012					
	Did not complete verification		Enrolled		Did not enroll		Did not complete verification		Enrolled		Did not enroll	
	n	%	n	%	n	%	n	%	n	%	n	%
January	205	7.4%	26	3.8%	179	8.5%	334	10.4%	54	8.2%	280	11.0%
February	361	13.0%	58	8.4%	303	14.5%	527	16.4%	68	10.3%	459	18.0%
March	406	14.6%	80	11.6%	326	15.6%	472	14.7%	84	12.7%	388	15.2%
April	382	13.7%	91	13.2%	291	13.9%	389	12.1%	72	10.9%	317	12.4%
May	387	13.9%	86	12.5%	301	14.4%	448	13.9%	90	13.6%	358	14.0%
June	387	13.9%	112	16.3%	275	13.1%	390	12.1%	96	14.5%	394	15.5%
July	361	13.0%	124	18.0%	237	11.3%	359	11.2%	107	16.2%	252	9.9%
August	294	10.6%	112	16.3%	182	8.7%	293	9.1%	91	13.7%	202	7.9%

Table 4-4. Continued

Adjusted gross income	Fall 2011						Fall 2012					
	Did not complete verification		Enrolled		Did not enroll		Did not complete verification		Enrolled		Did not enroll	
	n	%	n	%	n	%	n	%	n	%	n	%
Less than $25,000	1368	49.2%	315	45.7%	1053	50.3%	1766	55.0%	347	52.4%	1419	55.6%
$25,000 - $49,999	545	19.6%	105	15.2%	440	21.0%	429	13.4%	63	9.5%	366	14.4%
$50,000 - $74,999	153	5.5%	36	5.2%	117	5.6%	109	3.4%	19	2.9%	90	3.5%
Greater than $75,000	32	1.1%	10	1.5%	22	1.1%	21	0.7%	5	0.8%	16	0.6%
Unknown	685	24.6%	223	32.4%	462	22.1%	887	27.6%	228	34.4%	659	25.8%

Table 4-5. Selected for Verification: frequency

Year	Selected for verification	Frequency	Percent	Valid percent
2011-12	No	10752	59.8	59.8
	Yes	7239	40.2	40.2
	Total	17991	100.0	100.0
2012-13	No	10689	61.4	61.4
	Yes	6720	38.6	38.6
	Total	17409	100.0	100.0

Table 4-6. Selected for verification and enrolled: frequency

Year	Selected for verification	Enrolled	Frequency	Percent	Valid percent
2011-12	No				
		No	3913	36.4	36.4
		Yes	6839	63.6	63.6
		Total	10752	100.0	100.0
	Yes				
		No	2887	39.9	39.9
		Yes	4352	60.1	60.1
		Total	7239	100	100
2012-13	No				
		No	4242	39.7	39.7
		Yes	6447	60.3	60.3
		Total	10689	100.0	100.0
	Yes				
		No	3198	47.6	47.6
		Yes	3522	52.4	52.4
		Total	6720	100.0	100.0

Table 4-7. Omnibus tests of model coefficients: logistic regression

Year		Chi-square	df	Sig.
2011-12	Step	22.341	1	.000
	Block	22.341	1	.000
	Model	22.341	1	.000
2012-13				
	Step	105.082	1	.000
	Block	105.082	1	.000
	Model	105.082	1	.000

Dependent variable: enrolled fall. Single covariate: selected for verification

Table 4-8. Classification table: logistic regression

			Predicted		
			Enrolled in fall		Percentage
Year	Observed		No	Yes	correct
2011-12	Enrolled in fall				
		No	0	6800	.0
		Yes	0	11191	100.0
	Overall percentage				62.2
2012-13	Enrolled in fall				
		No	0	7440	.0
		Yes	0	9969	100.0
	Overall percentage				57.3

The cut value is .500. Predictors: enrolled fall

Table 4-9. Variables in the equation: logistic regression

Year		B	S.E.	Wald	df	Sig.	Exp(B)
2011-12	Selected for verification	-.148	.031	22.374	1	.000	.863
	Constant	.558	.020	775.901	1	.000	1.748
2012-13	Selected for verification	-.322	.031	105.049	1	.000	.725
	Constant	.419	.020	448.279	1	.000	1.52

Variable: selected for verification

Table 4-10. Selected for verification completion percentages: descriptive statistics

Age	Fall 2011			Fall 2012		
	Selected for verification	Completed verification	Did not complete verification	Selected for verification	Completed verification	Did not complete verification
	n	%	%	n	%	%
Mean Age	26.31	---	---	25.18	---	---
Under 18	380	57.6%	42.4%	398	54.5%	45.5%
18 - 19	1613	60.6%	39.4%	1809	53.4%	46.6%
20 - 21	1033	56.1%	43.9%	1109	44.3%	55.7%
22 - 24	1021	57.3%	42.7%	918	46.9%	53.1%
25 - 29	1130	63.6%	36.4%	892	52.2%	47.8%
30 - 34	729	66.8%	33.2%	544	57.0%	43.0%
35 - 39	525	64.2%	35.8%	423	62.2%	37.8%
40 - 49	636	68.4%	31.6%	495	57.8%	42.2%
50 - 64	161	70.8%	29.2%	123	61.0%	39.0%
65 & Over	4	75.0%	25.0%	5	60.0%	40.0%
Unknown	7	0.0%	100.0%	4	0.0%	100.0%

Table 4-10. Continued

Gender	Fall 2011			Fall 2012		
	Selected for verification	Completed verification	Did not complete verification	Selected for verification	Completed verification	Did not complete verification
	n	%	%	n	%	%
Female	4608	63.0%	37.0%	4254	52.4%	47.6%
Male	2561	59.1%	40.9%	2403	52.3%	47.7%
Unknown	70	60.0%	40.0%	63	39.7%	60.3%

Race/ ethnicity	Fall 2011			Fall 2012		
	Selected for verification	Completed verification	Did not complete verification	Selected for verification	Completed verification	Did not complete verification
	n	%	%	n	%	%
Hispanic or Latino	1766	64.8%	35.2%	1955	53.6%	46.4%
American Indian or Alaskan Native	21	61.9%	38.1%	24	83.3%	16.7%
Asian	105	71.4%	28.6%	96	49.0%	51.0%
Black or African American	1258	63.6%	36.4%	1150	53.8%	46.2%
Native Hawaiian or Pacific Islander	18	55.6%	44.4%	16	50.0%	50.0%
White	3715	60.5%	39.5%	3148	52.1%	47.9%
Two or More	42	54.8%	45.2%	51	49.0%	51.0%
Unknown	314	45.9%	54.1%	280	36.1%	63.9%

Table 4-10. Continued

FASFA submission month ranges	Fall 2011			Fall 2012		
	Selected for verification	Completed verification	Did not complete verification	Selected for verification	Completed verification	Did not complete verification
	n	%	%	n	%	%
Jan - Mar	2673	63.6%	36.4%	2946	54.8%	45.2%
Apr - June	3149	63.3%	36.7%	2642	53.6%	46.4%
July - Aug	1417	53.8%	46.2%	1132	42.4%	57.6%
Adjusted gross income	Fall 2011			Fall 2012		
	Selected for verification	Completed verification	Did not complete verification	Selected for verification	Completed verification	Did not complete verification
	n	%	%	n	%	%
Less than $25,000	3477	60.7%	39.3%	3543	50.2%	49.8%
$25,000 - $49,999	1569	65.3%	34.7%	1045	58.9%	41.1%
$50,000 - $74,999	483	68.3%	31.7%	284	61.6%	38.4%
Greater than $75,000	62	48.4%	51.6%	52	59.6%	40.4%
Unknown	1648	58.4%	41.6%	1796	50.6%	49.4%

Table 4-11. Completed verification enrolled percentages: descriptive statistics

Age	Fall 2011			Fall 2012		
	Completed verification	Enrolled	Did not enroll	Completed verification	Enrolled	Did not enroll
	n	%	%	n	%	%
Mean Age	26.83	---	---	25.7	---	---
Under 18	219	87.7%	12.3%	217	90.8%	9.2%
18 - 19	977	87.6%	12.4%	966	86.4%	13.6%
20 - 21	580	80.2%	19.8%	491	80.2%	19.8%
22 - 24	585	76.9%	23.1%	431	76.8%	23.2%
25 - 29	719	80.0%	20.0%	466	76.6%	23.4%
30 - 34	487	80.5%	19.5%	310	76.8%	23.2%
35 - 39	337	83.1%	16.9%	263	80.2%	19.8%
40 - 49	435	83.7%	16.3%	286	81.8%	18.2%
50 - 64	114	77.2%	22.8%	75	81.3%	18.7%
65 & Over	3	33.3%	66.7%	3	66.7%	33.3%
Unknown	0	n/a	n/a	0	n/a	n/a

Gender	Fall 2011			Fall 2012		
	Completed verification	Enrolled	Did not enroll	Completed verification	Enrolled	Did not enroll
	n	%	%	n	%	%
Female	2901	81.6%	18.4%	2227	80.4%	19.6%
Male	1513	83.2%	16.8%	1256	83.5%	16.5%
Unknown	42	90.5%	9.5%	25	80.0%	20.0%

Table 4-11. Continued

Race/ ethnicity	Fall 2011			Fall 2012		
	Completed verification	Enrolled	Did not enroll	Completed verification	Enrolled	Did not enroll
	n	%	%	n	%	%
Hispanic or Latino	1144	82.3%	17.7%	1048	79.4%	20.6%
American Indian or Alaskan Native	13	69.2%	30.8%	20	95.0%	5.0%
Asian	75	89.3%	10.7%	47	83.0%	17.0%
Black or African American	800	76.6%	23.4%	619	77.5%	22.5%
Native Hawaiian or Pacific Islander	10	80.0%	20.0%	8	100.0%	0.0%
White	2247	83.7%	16.3%	1640	84.1%	15.9%
Two or More	23	82.6%	17.4%	25	76.0%	24.0%
Unknown	144	87.5%	12.5%	101	82.2%	17.8%

FASFA completion month ranges	Fall 2011			Fall 2012		
	Completed verification	Enrolled	Did not enroll	Completed verification	Enrolled	Did not enroll
	n	%	%	n	%	%
Jan - Mar	1701	84.6%	15.4%	1613	84.1%	15.9%
Apr - June	1993	84.7%	15.3%	1415	81.6%	18.4%
July - Aug	762	70.3%	29.7%	480	72.5%	27.5%

Adjusted gross income	Fall 2011			Fall 2012		
	Completed verification	Enrolled	Did not enroll	Completed verification	Enrolled	Did not enroll
	n	%	%	n	%	%
Less than $25,000	2109	81.2%	18.8%	1777	80.5%	19.5%
$25,000 - $49,999	1024	80.7%	19.3%	616	76.3%	23.7%
$50,000 - $74,999	330	80.9%	19.1%	175	82.9%	17.1%
Greater than $75,000	30	86.7%	13.3%	31	96.8%	3.2%
Unknown	963	86.4%	13.6%	909	86.4%	13.6%

Table 4-12. Did not complete verification enrolled percentages: descriptive statistics

Age	Fall 2011			Fall 2012		
	Did not complete verification	Enrolled	Did not enroll	Did not complete verification	Enrolled	Did not enroll
	n	%	%	n	%	%
Mean Age	25.46	---	---	24.62	---	---
Under 18	161	35.4%	64.6%	181	27.6%	72.4%
18 - 19	636	32.2%	67.8%	843	28.9%	71.1%
20 - 21	453	33.3%	66.7%	618	23.8%	76.2%
22 - 24	436	24.3%	75.7%	487	16.0%	84.0%
25 - 29	411	17.3%	82.7%	426	12.4%	87.6%
30 - 34	242	13.6%	86.4%	234	13.2%	86.8%
35 - 39	188	14.9%	85.1%	160	12.5%	87.5%
40 - 49	201	16.4%	83.6%	209	15.3%	84.7%
50 - 64	47	10.6%	89.4%	48	14.6%	85.4%
65 & Over	1	0.0%	100.0%	2	0.0%	100.0%
Unknown	7	0.0%	100.0%	4	0.0%	100.0%

Gender	Fall 2011			Fall 2012		
	Did not complete verification	Enrolled	Did not enroll	Did not complete verification	Enrolled	Did not enroll
	n	%	%	n	%	%
Female	1707	24.0%	76.0%	2027	18.5%	81.5%
Male	1048	26.0%	74.0%	1147	24.3%	75.7%
Unknown	28	28.6%	71.4%	38	23.7%	76.3%

Table 4-12. Continued

Race/ ethnicity	Fall 2011			Fall 2012		
	Did not complete verification	Enrolled	Did not enroll	Did not complete verification	Enrolled	Did not enroll
	n	%	%	n	%	%
Hispanic or Latino	622	25.6%	74.4%	907	21.3%	78.7%
American Indian or Alaskan Native	8	0.0%	100.0%	4	50.0%	50.0%
Asian	30	23.3%	76.7%	49	38.8%	61.2%
Black or African American	458	21.0%	79.0%	531	18.6%	81.4%
Native Hawaiian or Pacific Islander	8	25.0%	75.0%	8	25.0%	75.0%
White	1468	27.0%	73.0%	1508	20.6%	79.4%
Two or More	19	21.1%	78.9%	26	26.9%	73.1%
Unknown	170	14.7%	85.3%	179	16.2%	83.8%

FASFA completion month ranges	Fall 2011			Fall 2012		
	Did not complete verification	Enrolled	Did not enroll	Did not complete verification	Enrolled	Did not enroll
	n	%	%	n	%	%
Jan - Mar	972	16.9%	83.1%	1333	15.5%	84.5%
Apr - June	1156	25.0%	75.0%	1227	21.0%	79.0%
July - Aug	655	36.0%	64.0%	652	30.4%	69.6%

Table 4-12. Continued

Adjusted gross income	Fall 2011			Fall 2012		
	Did not complete verification	Enrolled	Did not enroll	Did not complete verification	Enrolled	Did not enroll
	n	%	%	n	%	%
Less than $25,000	1368	23.0%	77.0%	1766	19.6%	80.4%
$25,000 - $49,999	545	19.3%	80.7%	429	14.7%	85.3%
$50,000 - $74,999	153	23.5%	76.5%	109	17.4%	82.6%
Greater than $75,000	32	31.3%	68.8%	21	23.8%	76.2%
Unknown	685	32.6%	67.4%	887	25.7%	74.3%

Table 4-13. Students completing verification: frequency

Year	Completed	Frequency	Percent	Valid percent
2011-12	No	2783	38.4	38.4
	Yes	4456	61.6	61.6
	Total	7239	100.0	100.0
2012-13	No	3212	47.8	47.8
	Yes	3508	52.2	52.2
	Total	6720	100.0	100.0

Table 4-14. Students completing verification and enrolled: frequency

Year	Completed	Enrolled	Frequency	Percent	Valid percent
2011-12	No				
		No	2094	75.2	75.2
		Yes	689	24.8	24.8
		Total	2783	100.0	100.0
	Yes				
		No	793	17.8	17.8
		Yes	3663	82.2	82.2
		Total	4456	100	100
2012-13	No				
		No	2550	79.4	79.4
		Yes	662	20.6	20.6
		Total	3212	100.0	100.0
	Yes				
		No	648	18.5	18.5
		Yes	2860	81.5	81.5
		Total	3508	100.0	100.0

Table 4-15. Omnibus tests of model coefficients: logistic regression

Year		Chi-square	df	Sig.
2011-12	Step	2448.412	1	.000
	Block	2448.412	1	.000
	Model	2448.412	1	.000
2012-13				
	Step	2675.093	1	.000
	Block	2675.093	1	.000
	Model	2675.093	1	.000

Dependent variable: enrolled fall. Single covariate: verification complete.

Table 4-16. Classification table: logistic regression

Year	Observed		Predicted: Enrolled in fall: No	Predicted: Enrolled in fall: Yes	Percentage correct
2011-12	Enrolled in fall				
		No	2094	793	72.5
		Yes	689	3663	84.2
	Overall percentage				79.5
2012-13	Enrolled in fall				
		No	2550	648	79.7
		Yes	662	2860	81.2
	Overall percentage				80.5

The cut value is .500. Predictors: enrolled fall.

Table 4-17. Variables in the equation: logistic regression

Year		B	S.E.	Wald	df	Sig.	Exp(B)
2011-12	Verification complete	2.642	.059	2015.361	1	.000	14.039
	Constant	-1.112	.044	640.578	1	.000	0.329
2012-13	Verification complete	2.833	.062	2114.931	1	.000	17.001
	Constant	-1.349	.044	955.824	1	.000	0.26

Variable: verification complete

Table 4-18. Moderating variables logistic regression variables in the equation

Year		B	S.E.	Wald	df	Sig.	Exp(B)
2011-12	Age Range			54.2	9	.000	
	Age Range (1)	-.791	1.159	.465	1	.495	.453
	Age Range (2)	-.669	1.156	.335	1	.563	.512
	Age Range (3)	-.851	1.156	.542	1	.462	.427
	Age Range (4)	-.805	1.156	.484	1	.487	.447
	Age Range (5)	-.539	1.156	.218	1	.641	.583
	Age Range (6)	-.399	1.157	.119	1	.730	.671
	Age Range (7)	-.515	1.158	.198	1	.657	.598
	Age Range (8)	-.327	1.158	.080	1	.778	.721
	Age Range (9)	-.213	1.168	.033	1	.856	.809
	Constant	1.099	1.155	.905	1	.341	3
2012-13	Age Range			71.328	9	.000	
	Age Range (1)	-.224	.918	.060	1	.807	.799
	Age Range (2)	-.269	.914	.087	1	.768	.764
	Age Range (3)	-.636	.915	.483	1	.487	.530
	Age Range (4)	-.528	.915	.332	1	.564	.590
	Age Range (5)	-.316	.915	.119	1	.730	.729
	Age Range (6)	-.124	.917	.018	1	.892	.883
	Age Range (7)	.092	.918	.010	1	.921	1.096
	Age Range (8)	-.092	.917	.010	1	.920	.912
	Age Range (9)	.041	.931	.002	1	.965	1.042
	Constant	.405	.913	0.197	1	.657	1.5

Table 4-18. Continued

Year		B	S.E.	Wald	df	Sig.	Exp(B)
2011-12	Adjusted Gross Income			22.216	3	.000	
	Adjusted Gross Income (1)	.497	.256	3.761	1	.052	1.644
	Adjusted Gross Income (2)	.695	.260	7.172	1	.007	2.004
	Adjusted Gross Income (3)	.833	.272	9.363	1	.002	2.301
	Constant	-.065	.254	0.064	1	.800	0.938
2012-13	Adjusted Gross Income			35.423	3	.000	
	Adjusted Gross Income (1)	-.383	.285	1.813	1	.178	.682
	Adjusted Gross Income (2)	-.028	.290	.009	1	.924	.973
	Adjusted Gross Income (3)	.084	.308	.074	1	.785	1.088
	Constant	.389	.283	1.899	1	.168	1.476

Year		B	S.E.	Wald	df	Sig.	Exp(B)
2011-12	FASFA Month Range			44.818	2	.000	
	FASFA Month Range (1)	.408	.067	37.415	1	.000	1.504
	FASFA Month Range (2)	.393	.065	36.790	1	.000	1.482
	Constant	.151	.053	8.064	1	.000	1.163
2012-13	FASFA Month Range			52.62	2	.000	
	FASFA Month Range (1)	.497	.071	49.513	1	.000	1.644
	FASFA Month Range (2)	.449	.072	39.199	1	.000	1.566
	Constant	-.306	.060	25.931	1	.000	0.736

Table 4-19. Estimated family contribution: frequency of change

Year		Frequency	Percent	Valid percent	Cumulative percent
2011-12	Valid	29	.7	.7	.7
	Decreased	98	2.2	2.2	2.9
	Increased	109	2.4	2.4	5.3
	No Change	4220	94.7	94.7	100.0
	Total	4456	100.0		
2012-13	Valid	22	.6	.6	.6
	Decreased	106	3.0	3.0	3.6
	Increased	49	1.4	1.4	5.0
	No Change	3331	95.0	95.0	100.0
	Total	3508	100.0	100.0	

Table 4-20. Pre and post estimated family contribution: descriptive statistics

Year		N	Minimum	Maximum	Mean	Std. deviation
2011-12	Pre verification EFC	4433	0	40808	2147.32	3251.758
	Post verification EFC	4450	0	40808	2130.93	3235.749
	Valid N (listwise)	4427				
2012-13	Pre verification EFC	3491	0	85374	1898.38	3932.294
	Post verification EFC	3503	0	85374	1818.37	3815.461
	Valid N (listwise)	3486				

Table 4-21. Pre and post estimated family contribution percent change

Year	Pre verification	Post verification	Percent change
2011-12			
Fall 2011	2147.32	2130.93	-0.76%
2012-13			
Fall 2012	1898.38	1818.37	-4.21%

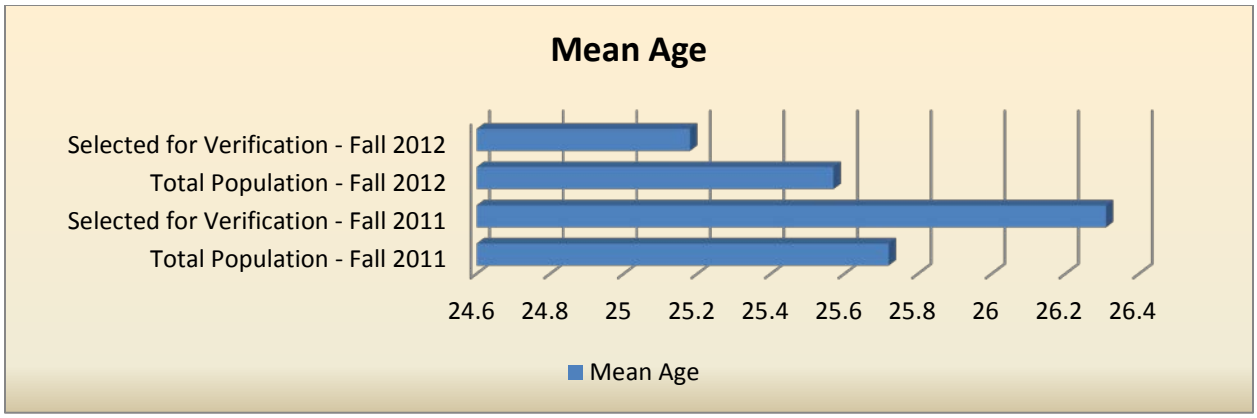

Figure 4-1. Mean age: aggregate descriptive statistics comparison

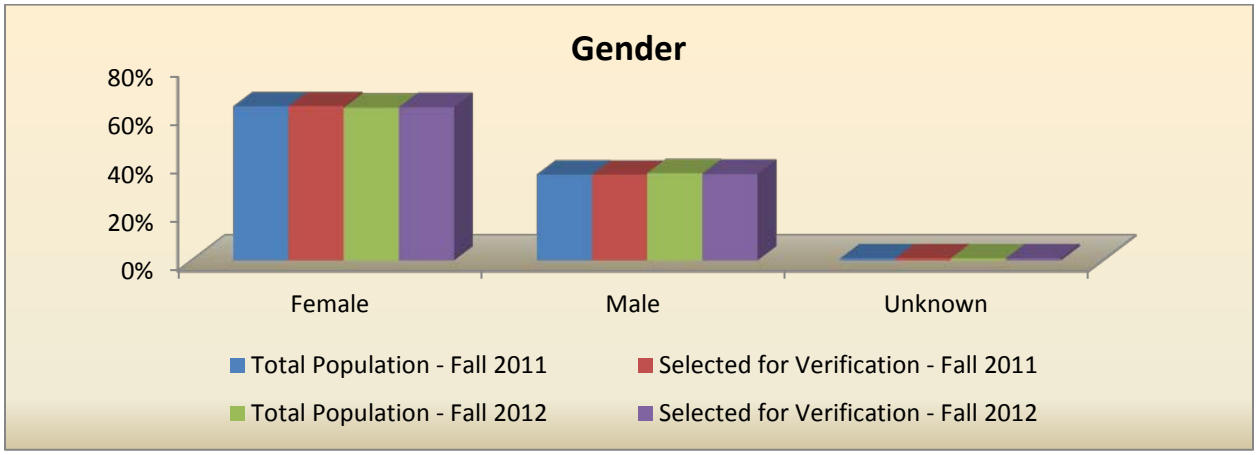

Figure 4-2. Gender: aggregate descriptive statistics comparison

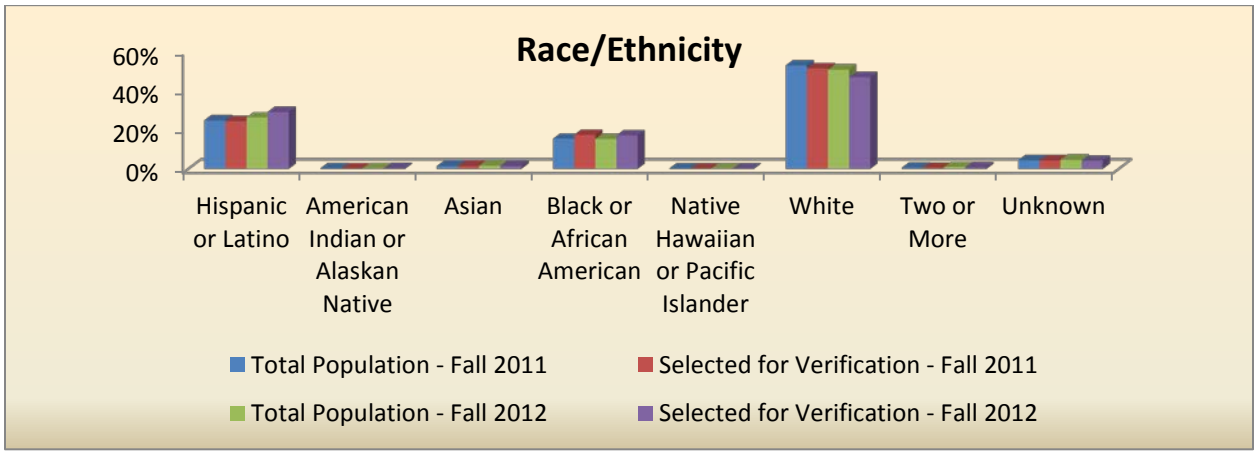

Figure 4-3. Race/ethnicity: aggregate descriptive statistics comparison

CHAPTER 5
CONCLUSION

The purpose of the study was to determine if the verification process influences college access, for students seeking federal financial aid. The lack of information regarding the effects of these federal requirements is regrettable, because it could be preventing many students from pursuing their education goals. These federal requirements are complicated and add to an already intimidating and time-consuming process that may delay students from enrolling in higher education (The Institute of College Access and Success, 2010). The potential impact of the federal financial aid verification process on college student access has been examined via enrollment patterns in a literature review and through quantitative analysis. This chapter will conclude the study with a discussion of the results, suggestions for future research and implications to higher education.

Discussion of Results

The overall hypothesis guiding this study stated that college access was not influenced by the verification process. To determine if the verification process influenced college access, two aspects of the process were examined. The first aspect focused on the change in the financial aid award amount as a result of the verification process to ascertain whether the verification process makes a difference in the determination of the amount a student is eligible to receive. The second aspect pertained to student access by examining enrollment patterns for students who were selected for verification and for students who completed verification. This inquiry was examined through statistical analysis of the significance of association between enrollment and the independent variables and the analysis of student demographic data over a 2-year period.

Verification and Award Amount

Data were analyzed before and after the verification process to determine if there was a difference in the student's EFC. Results of the data revealed that overall 95% of students experienced no change in the amount of financial aid they were eligible to receive. In addition the financial aid award amount was compared before versus after verification for each year. For the 2 years analyzed, the award amounts changed by less than 5%. Results of the study support the findings of the ICAS (2010) study that the Verification requires colleges and universities to verify, or confirm, the data reported by students and their parent(s) on the FAFSA. Information is verified by requesting additional documentation or a signed statement attesting to the accuracy of the data. Institutions may either perform the verification internally or use a third-party provider. Both options require additional funds to administer and could exceed $100,000 depending on the size of the institution. For students, obtaining the additional documentation can be time-consuming and it delays the determination of financial aid eligibility. For instance one aspect of verification requires the student or student's parents to submit IRS tax transcripts to verify wages. The tax transcript could take 2 to 4 weeks to receive. Based on the results of the study, overall the data submitted by individuals who completed the verification process was accurate or changes were insignificant to affect the amount the student was eligible to receive.

Enrollment and Verification

Two hypotheses were developed, differing by independent variables to compare enrollment patterns. The first hypothesis uses selected for verification as the independent variable while the second hypothesis used completed verification as the independent variable. Analysis of the results indicated that enrollment was significantly associated with the verification process for both independent variables. Although the results indicate a significant association with enrollment the association for each hypothesis is interpreted differently.

Under the second hypothesis using selected for verification as the independent variable it was observed that enrollment was negatively associated with being selected for verification meaning that students are less likely to enroll after being selected for verification. The analysis revealed that 13.7% of students were less likely to enroll in Fall for the 2011-12 year and 27.5% less likely to enroll in Fall for the 2012-13 versus students who were not selected for verification. Although the actual reasons for students not enrolling have not been identified and would be an area for future research, drawing upon red tape theory suggests one possible reason is the verification process is time consuming, overwhelming, and serves as a barrier for students receiving their financial aid. These findings are consistent with prior research such as the study conducted by the Institute of College Access and Success that concluded there is evidence that students' who are selected for verification and who may otherwise be eligible to receive financial aid did not complete the process (The Institute for College Access and Success, 2010). Federal student aid in its conception was primarily about helping those who otherwise might not have access to higher education. Unfortunately the additional regulations such as the verification process may have created additional barriers that leave many students frustrated resulting in students not enrolling. These results suggest that this federal requirement while aimed at preventing fraud and abuse may at the same time discourage applicants who just need help paying for college (The Institute for College Access and Success, 2010).

The last hypothesis used completed verification as the independent variable and it was observed that completing verification exhibited itself to be positively associated with enrollment and students are more likely to enroll upon completing the verification process. The data revealed that when a student completed verification, the student was fourteen times more likely to enroll for Fall for the 2011-12 year and seventeen times more likely to enroll for Fall for the

2012-13 year. It can be inferred from this data that students who spend the time navigating through the requirements of the verification process are committed to enroll and will see the process through to the end. The results are so significant that institutions should consider reviewing their internal policies and processes to develop strategies and provide resources to assist students in completing the verification process to bolster enrollment. For instance, communicating and providing information earlier to students so that they are aware of the necessary requirements such as the verification process and are prepared prior to completing the FASFA.

Two-Year Trends

The FASFAs submitted for two academic years (2011-12 and 2012-13) captured a 2-year trend in the relationship of enrollment to each independent variable. Results of the study revealed that over the 2-year period on average 39% (6,979 students) were selected for verification. Of those 44% (3,042 students) did not enroll in the upcoming fall semester.

Results of the data also revealed that on average 43% of students selected for verification did not complete the process (approximately 3,000 students). Of those, 77% (2,322 students) did not enroll in the upcoming fall semester. However, over the same time period, on average 82% of students who completed the verification process enrolled in the upcoming fall semester (3,261 students).

In addition, students selected for verification who completed the process were further analyzed over a 2-year period to determine if additional factors (such as age, race, gender, socio economic status, and the month the FASFA was submitted) were variables that impacted completion of the verification process. Over the 2-year period age, socio-economic status, and the month the FASFA was submitted were consistent factors in determining whether a student completed the verification process. Although age and socio-economic status overall as

predictors were statistically significant, the ranges used to further define the variables were not significant. This means a particular age range or income range could not be identified. Further analysis would be required to determine the actual age and income that would be statistically significant. The month the FASFA was submitted, however, was determined to be a significant variable in prediction of enrollment. For both years data were collected, students who submitted the FASFA before June were 1.4 to 1.6 times more likely to complete the verification process than if submitted after June.

These findings support prior research that communicating information about financial aid early is critical to student success. The study *Cracking the Student Aid Code: Parent and Student Perspectives on Paying for College* (2010) found that lack of information and understanding of college financing is a difficult barrier for many students and families. Through the College Board's research, it was determined that communicating financial aid information at the right time and in ways that can be easily understood is critical to removing barriers to attending college. A study by LaManque (2009) showed that students who complete the FAFSA early versus late are more likely to be successful in college. LaManque (2009) hypothesized that early filing of the FAFSA was related to the knowledge the student has about college. The implication is that the more knowledgeable students are about college, the financial aid application process, and the benefits of applying early; the more likely they are to complete their FAFSA early (LaManque, 2009).

Verification and Red-Tape

Red Tape Theory was used as the framework, to examine the federal verification process as discussed in the literature review. Under Red-Tape Theory, rules and regulations are created to ensure that government processes are accountable (Bozeman, 1993). According to the theory, elements of red tape include, meaningless paperwork, formalization, unnecessary rules,

inefficiency, unjustifiable delays, and frustration. Applying red tape theory to the verification regulation, results of the study suggest that the verification process has characteristics of red tape.

Drawing upon red tape theory, the verification process may be characterized as rule-evolved red tape (a rule functional at one time that has since gone bad; Bozeman, 1993). Of the many reasons given to explain rule-evolved red-tape, the two most pertinent to the financial aid regulations are rule strain and rule accretion. In rule strain, the number of rules creates an extensive compliance burden. In rule accretion, rules build atop one another and, if inconsistent, the net effect could be damaging (Bozeman, 1993). The premise for providing financial assistance is to remove financial barriers for those pursuing higher education. However the verification process, through rule accretion appears to be creating additional barriers for many students who would otherwise be eligible. While well-intended, this regulation may be doing more harm than good placing additional burdens in processing federal aid that may be discouraging students who need help rather than preventing fraud and abuse.

Is the verification regulation red tape? Unfortunately, there is not a concrete answer to this question. As described in the theory, rules and regulations are not inherently good or bad for everyone. A rule may be red tape for one and useful for another (Bozeman, 1993). Therefore red tape is dependent on the views and perceptions of the users. Kaufman said, “One man’s red tape is another’s treasured procedural safeguard” (Bozeman, 1993). Looking at regulations through this perspective raises the question: when are extensive rules and procedures considered red tape and when are they justified and beneficial. Bozeman distinguishes between “white tape” as the good rules that provide a benefit despite delays and frustrations and red tape; as the dysfunctional rules that fail to help or cause much mischief. Regardless of the answer to the

question, (Is the verification regulation red tape?) the results of the study suggest that the verification process may be hindering college access and warrants further research to determine the actual cause of students who may be eligible to receive financial assistance but do not finish the process and ultimately do not enroll.

Directions for Future Research

This study presents multiple options for future studies. Specifically, the model developed in obtaining the data could be replicated at other higher educational institutions that vary in size, student population, and institutional type, to further examine the association between the verification process and enrollment.

As this study applied to quantitative analysis only, the study design may have masked other circumstances that could account for students not completing the verification process and not enrolling. In order to adequately determine if the verification process was a contributing factor to a students decision to not enroll, a qualitative or mixed-methods research study would contribute to the dialogue. Additional variables need to be accounted for such as personal factors including, marriage, pregnancy, job or unforeseen medical issues. Future studies could examine whether a student's prior experiences or knowledge of financial aid is a contributing factor to completion of verification. Additionally, examining first-year students versus returning students could determine differences explaining the results. This study was also limited to enrollment at one institution and did not consider whether the student enrolled at another institution. A future study accounting for enrollment at another institution would also add to the results of this study.

Another area for future research is a further examination of student demographic information. For instance this study only analyzed student demographic information as predictors of completion of the verification process. Student demographic information could be examined as a predictor for students who did not complete the verification process; or it could be examined

as a predictor of enrollment for students who completed versus did not complete the verification process.

This study focused on the influence of the verification process on the student's financial aid award amount. However the cost to the institution of administering the program was not considered, nor did the study consider the potential lost tuition revenue for students who did not enroll. Therefore, another area for future research would be to determine the true cost to the institution of complying with the verification requirement.

Another direction for meaningful research is analyzing the additional documentation required for verification, to ascertain which information is the most error- prone and typically requires correction. Results from such a study could inform policy makers of the type of information that affects financial aid eligibility, thereby collecting meaningful documentation that supports the intended purpose of the verification process in preventing fraud and abuse of financial aid funds.

Implications for Higher Education

Institutional Level

Educational institutions that offer federal financial aid must adhere to federal regulations in order to provide federal aid to their students. Results from this study indicate that students selected for verification are less likely to enroll. However, once they complete the process, their chances for enrollment are significantly higher. Unless federal policy changes regarding the verification process, one way to increase enrollment is to ensure that students selected for verification complete the process. This would require institutions to provide additional resources in the financial aid department, focusing on assisting students in completing the verification process. The difficulty, however, is balancing the distribution of resources with declining state funds and the demand to keep tuition costs low.

Higher Education Research

Several research studies (Perna, 2011) have focused on a variety of theoretical and methodological approaches to examine students' college choice and the variables that impact students' decisions to enroll. This study provides new knowledge that Red Tape Theory may be an additional framework that effects college access and student choice. For example, drawing on Red-Tape Theory and the results of this study one could conclude that the verification requirement meets the definition of red-tape and significantly impacts college student access.

Federal Level

Results of this study suggest that the verification process may not be accomplishing the goal of preventing fraud and abuse, but rather creating additional barriers that hinder college access. The verification regulation while well-intended, needs to be reviewed by policy makers to ensure that the additional information requested promote accountability for financial aid funds. As mentioned earlier, Justin Draeger said, "At some point, we must stop and ask to what extent federal regulations and requirements are either hindering college access and success or increasing costs for students (NASFAA, 2011).

APPENDIX A
HIGHER EDUCATION AND FINANCIAL AID LEGISLATIVE HISTORY

1862 Land Grant College Act (Morrill Act)
1944 Serviceman's Readjustment Act (GI Bill)
1958 National Defense Education Act
1963 Health Professions Educational Assistance Act
1964 Nurse Training Act
1964 Economic Opportunity Act
1965 Higher Education Act (HEA)
1968 HEA Amendments
1972 HEA Amendments
1976 HEA Amendments
1978 Middle Income Student Assistance Act
1980 HEA Amendments
1981 Omnibus Reconciliation Act
1986 HEA Amendments
1991 Justice Department anitrust action against Overlap Group
1992 HEA Amendments
1993 National and Community Service Trust Act
1993 Omnibus Reconciliation Act
1996 HEA Amendments
1997 Taxpayer Relief Act
1998 HEA Amendments
2001 Economic Growth and Tax Relief Reconciliation Act
2006 Deficit Reduction Act
2007 College Cost Reduction Act
2008 Ensuring Continued Access to Student Loans (ECASLA)
2008 Higher Education Opportunity Act (HEA reauthorization)
2009 Student Aid and Fiscal Responsibility Act
2010 Health Care and Education Reconciliation Act

APPENDIX B
FINANCIAL AID PROCES FLOWCHART

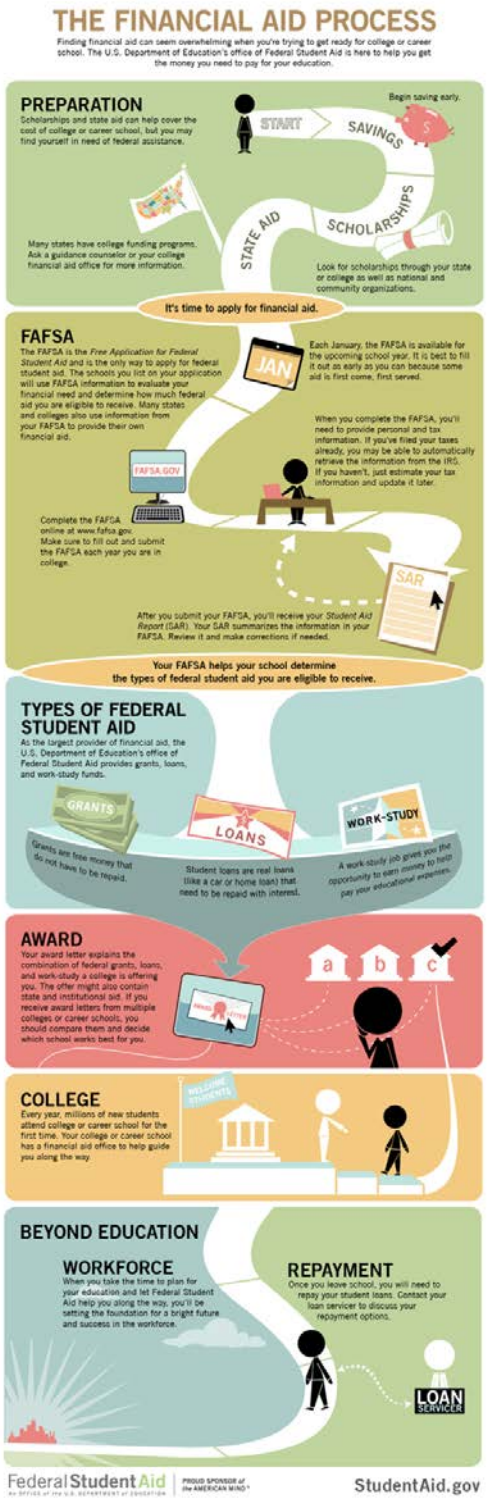

Figure B-1. Financial Aid Process Flowchart

APPENDIX C
ACCESSING FINANCIAL AID FUNDS FLOW CHART

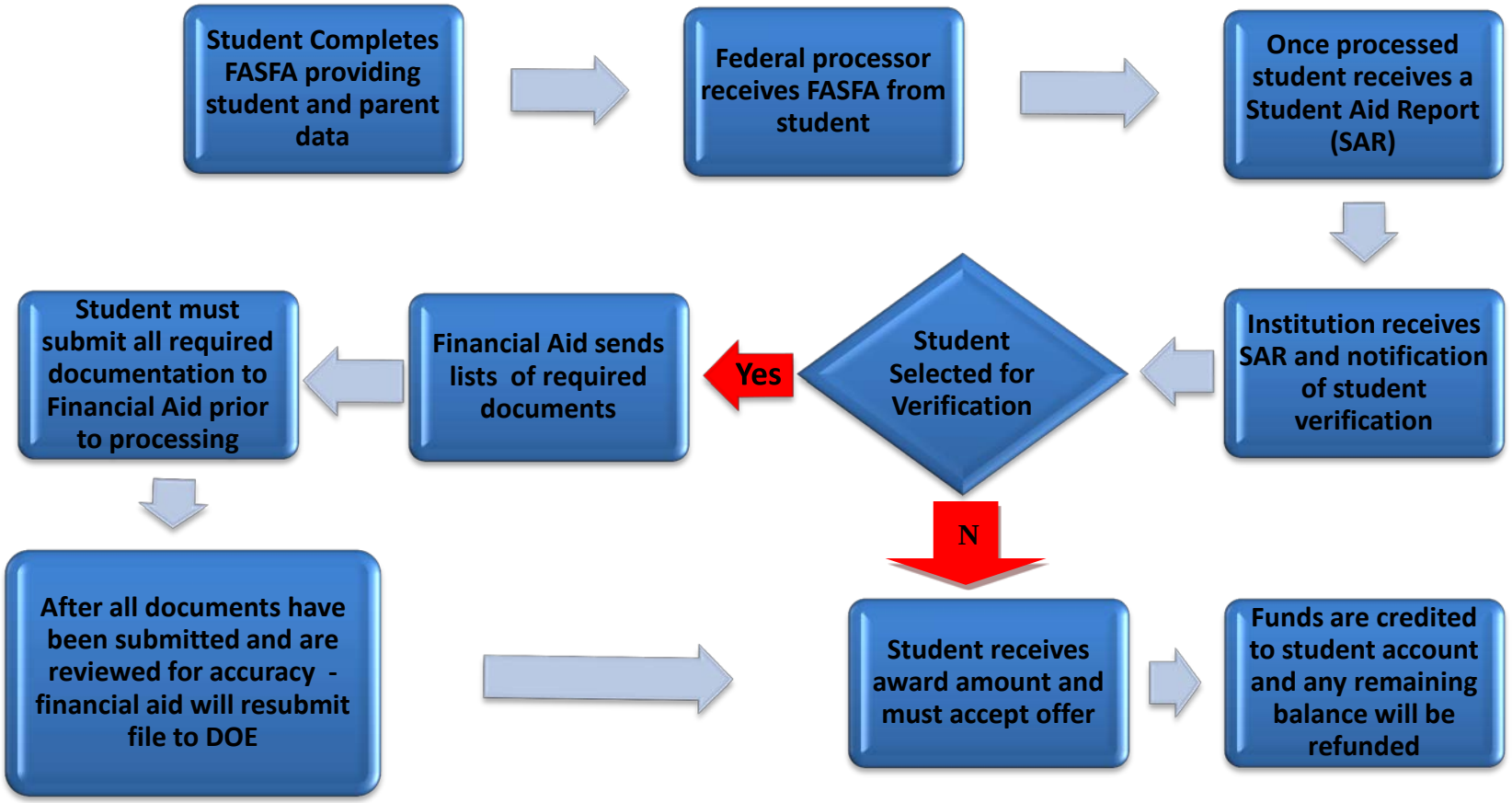

Figure C-1. Flowchart for accessing financial aid funds

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BIOGRAPHICAL SKETCH

Gina Baratta Doeble was born in Omaha, Nebraska. An only child, she grew up mostly in Phoenix, Arizona graduating from high school in 1991. She earned her Bachelor of Science in Accounting from Arizona State University (ASU) in 1996 and earned a Master of Science in Accounting and Taxation from Florida Gulf Coast University (FGCU) in 2003. Gina began working in higher education finance in 1999 and received her Doctor of Education in Higher Education Administration in 2014.

Upon graduating in May 2003 with her masters, Gina earned her Certified Public Accountant (CPA) licensure in the State of Florida. Gina's career in accounting has been primarily focused in government accounting, with the last 15 years dedicated to higher education finance and administration. Gina began supervising the Financial Aid department 4 years ago. She has reorganized the department to increase service to students and has held focus groups with students to understand the financial aid process from their perspective. Gina is committed to improving the services provided to students to assist them through the financial aid process.

Gina is also affiliated with several community activities, participates in numerous professional organizations and serves as a member of the Florida State Funding Formula Committee for state colleges, and is the current Chair of the State's Council of Business Affairs for the Florida College System. Gina is passionate about her work and thrives on assisting students in pursuing their educational goals as well as mentoring staff to achieve their career aspirations.