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The Determinants of Traffic Citation Revenues on Florida's Clerks of Court and Comptrollers

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Abstract

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by

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JD, Thomas M. Cooley School of Law, 2007

BA, University of Florida, 2004

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

In the wake of budgetary restraints, many local government organizations are examining existing sources of revenue to exhaust available streams without increasing constituents' financial burden. Some of these revenue streams include nontraditional sources, such as traffic citations, yet little research has explored the implications of revenue generated from fines from traffic citations. Using the theory of resource dependence as the foundation, the purpose of this study was to explore the relationship between the estimated population of the county, the unemployment rate of the county, and the personal income per capita against the number of traffic citations issued and the Florida Clerk of Court and Comptroller's (FCCC) revenues and budget attributable to traffic citations for 39 of Florida's counties for the years 2005 - 2014. Data were analyzed using multiple linear regression analyses. The results of this study indicate a statistically significant ($p < .001$) relationship between population and personal income with increases and decreases, respectively, in the issuance of traffic citations and FCCC revenues attributable to traffic citations. Likewise, there was a statistically significant ($p < .001$) relationship between population and personal income with increases in the FCCC budget associated with traffic citations. Unemployment rate was not statistically associated with the issuance of traffic citations, and FCCC revenues and budget attributable to traffic citations. The findings of this study may promote positive social change by providing legislative awareness that the FCCCs continue to be dependent on the bulk of their revenues, and significant portion of their budget, from a nontraditional revenue source; the traffic citation.

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Dedication

By His hand this was writ. To my sons, Jackson Dale, Caden Gardner, and Carter Andrew, I want to paraphrase my father, your grandfather. Listen to the dreams of your heart. Learn to live and follow your adventures, you will be a better, and happier, person for yourself and your relationship with God. Always remember to prepare your heart. It is the cornerstone of your spiritual growth and leadership role for your life. Let it guide you in your relationship with God, and someday through Him, the dreams of your heart will be fruitful and plentiful. Remember to give thanks and praise, even in the turbulent times. Be strong in the Lord, and you will find the Lord is already strong in you.

Acknowledgments

To my beautiful and loving wife, Sarah, thank you for your undying love and support throughout this humbling journey. I could not have done it without you; honor and glory to you. To my parents and sister, your unwavering support through this process helped me find the strength to continue pushing forward. To my chair, Dr. Anne Fetter, my committee member, Dr. Kevin Fandl, and my university research reviewer, Dr. Tanya Settles, I am deeply grateful for the time, energy, efforts, and insight you shared with me during this unforgettable marathon. Without your guidance and support, this journey would have been longer and far less enjoyable.

To my personal friend and mentor, J. Kelly Burnette, thank you for your continued support and enthusiasm about my doctoral work. I have learned so much about law, and life, from you; I am truly grateful. To my high school teachers, especially Mrs. Cindy Rosso and Mr. Ben Woolf, thank you for taking the time to teach a knucklehead like me. I may not remember all of the lessons, but I remember the positive atmosphere, thank you. Lastly, but certainly not least, to the men and women of the Florida Clerk of Court & Comptroller's Offices, my hat goes off to you. Every day you willingly, selflessly, and tirelessly, serve the citizens of Florida and facilitate the administration of justice in the court systems. Thank you.

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Chapter 1: Introduction to the Study

Introduction

In the wake of the Great Recession of 2008, local governments are facing increased budget shortfalls and an increased demand for public services (Nelson, 2012; Swindell, Gerretsen, & Rosentraub, 2014) Increased budget cuts by higher governing authorities have forced many local government organizations to find alternative sources of revenue in addition to more traditional sources (such as real property taxes; Thompson, 2013). Alternate sources of revenue, such as those generated from the issuance of traffic citations, are increasing in both academic popularity and practical applications (Hummel, 2014). Although alternative sources of revenue have increased in popularity, there continues to be a shortage of meaningful scientific research regarding the examination of traffic citations for revenue and budgetary purposes.

As I will discuss in further detail in Chapter 2, current traffic citation academicians have examined governmental organizations having the legal authority to increase or decrease the number of traffic citations issued within their jurisdictions. There are also governmental organizations which rely on the revenues generated from traffic citations but lack the legal authority to issue said citations. For example, a Florida Clerk of Court and Comptroller (FCCC) receives a portion of the revenues generated from traffic citations from the legal administration of the citation through the judicial process but lacks the authority to issue citations. Instead, the 67 FCCCs must rely on local law enforcement to issue traffic citations. Researchers have not examined the reliance relationship between governmental organizations and the issuance of traffic citations. In

this quantitative study, I addressed these issues, narrowed the existing gap in the literature, and addressed social justice.

In Chapter 1 of this study, I will discuss the background of the FCCC's office and provide a brief history of governmental revenues, fiscal sustainability, and the use of traffic citations as an alternative source of revenue. I will introduce the problem statement, purpose of the study, and provide a closer analysis of the issues which I attempted to resolve with the study. I will then briefly introduce the overarching theoretical framework of this study, resource dependence theory (RDT), which I will discuss more thoroughly in Chapter 2.

In Chapter 1, I will also introduce my quantitative research questions and hypotheses. I will further explain my methodology and the three multiple linear regression questions and three dependent variables I used. I preceded each of the regression research questions with a correlational analysis.

Through the research questions, I examined the determinants of traffic citation revenues on the FCCC by analyzing the independent variables (the estimated population of the county, the unemployment rate of the county, and personal income per capita [in dollars]) against the three dependent variables (the number of traffic citations issued in Florida during the decade of 2005–2014, the actual revenues in dollars realized by the FCCC during the same decade, and the percentage of the budget of the FCCCs attributable to traffic citations during the same decade). In this chapter, I will also discuss some of the general terms used throughout this study to ensure reader clarity. Next, I will state the basic assumptions of the study followed by my scope and delimitations. It is

important to note that the assumptions I will discuss in Chapter 1 are different from the statistical assumptions I will discuss in Chapter 3. I then will briefly discuss the limitations of this study and provide an overview of some of the intentional and unintentional biases which may have affected the overall outcome of the study (including some strategies which may help mitigate these potential biases).

I will conclude Chapter 1 with a discussion of the need for additional research into the revenues and budgets of the FCCC. In this section, I will make recommendations to explore the potential of sustainable sources of revenue for the FCCC or legislatively revisit governing statutes to prevent reliance on unreliable sources of revenue and foster fiscal sustainability to address social justice. I concluded Chapter 1 with a summary and transition to Chapter 2.

Background

In this section, I will briefly discuss the duties and responsibilities of the FCCC per Florida law. Next, I will provide an elementary overview of the historical revenue issues faced by local governments, and then will discuss the challenges faced by local governments associated with revenue shortfalls and budget cuts with an emphasis on maintaining financial stability. Lastly, I will introduce the concept of traffic citations as an alternative source of unrestricted revenues and include a brief discussion of the extant literature in this new field and the potential for future academic growth.

Florida Clerk of Court and Comptroller (FCCC)

The position of the FCCC is established by Florida's Constitution. Art. V, § 16, Fla. Const. establishes that every county in Florida has an elected clerk of the circuit

court (Clerk duties). Additionally, Art. VII, § 1(d), Fla. Const. establishes the FCCC as the ex-officio clerk of the Board of County Commissioners and is each is charged with being the auditor, recorder, and custodian of all county funds (Comptroller duties). The FCCC is elected for a 4-year term on the same election cycle as the U.S. Presidential elections. Most counties do not set term limits for their Constitutionally-elected officers, but Duval County limits the FCCC to no more than two consecutive terms (Ord. 91-533-606, § 5 (Referendum of November 3, 1992)).

The funding for the FCCC is established by Art. V § 14(b), Fla. Const.:

> All funding for the offices of the clerks of the circuit and county courts performing court-related functions, except as otherwise provided in this subsection and subsection (c), shall be provided by adequate and appropriate filing fees for judicial proceedings and service charges and costs for performing court-related functions as required by general law. Selected salaries, costs, and expenses of the state courts system may be funded from appropriate filing fees for judicial proceedings and service charges and costs for performing court-related functions, as provided by general law.

In essence, the FCCC is funded through its own source revenues. To ensure the FCCC maintains a viable budget, the Florida Legislature established the Florida Clerks of Court Operations Corporation (CCOC) pursuant to § 28.35, Fla. Stat. (2015). The CCOC Executive Board is comprised of eight of the 67 FCCCs and is elected by the FCCCs to serve a 2-year term to review and approve the annual budgets of the FCCC offices (Florida CCOC, 2015). The population size of the county dictates the CCOC election,

ensuring all FCCCs have representation on the CCOC (Florida CCOC, 2015). Furthermore, the CCOC includes members from the Florida Senate, House, and Judicial branches to serve as ex-officio members of the CCOC Board (Florida CCOC, 2015). In total, there are 11 members on the CCOC Executive Board (Florida CCOC, 2015). The CCOC acts under the direct oversight of the Florida Legislature, Florida's governor, Florida's chief financial officer, and Florida's Department of Revenue (Florida CCOC, 2015). In addition to the CCOC, the Clerks of the Court Trust Fund (Trust Fund) acts as a depository for excess charges, fines, and fees above and beyond the CCOC-approved FCCC budget (Florida CCOC, 2015).

Section 28.37, Fla. Stat. (2015) states the FCCC must deposit all fines, fees, services charges, and costs collected by the FCCC in excess of one twelfth of the budget into the Trust Fund. Additionally, at the end of the fiscal year (September 30), the FCCC shall deposit all revenues which exceed their authorized budget amount into the Trust Fund (§ 28.37(3), Fla. Stat., 2015). At this point, the Department of Revenue transfers the funds out of the Trust Fund and into the State's general revenues (§ 28.37(3), Fla. Stat., 2015). The only portion which remains in the Trust Fund is the projected cumulative amount needed to fully fund the FCCC for the upcoming year (§ 28.37(3), Fla. Stat., 2015). There is, however, the Public Records Modernization Trust Fund, which allows the FCCC to retain 10% of the funds which would normally be distributed to the county and municipalities for court-related operational needs and program enhancements, such as advancements in technology (§ 28.37(3), Fla. Stat., 2015).

Essentially, the FCCC is responsible for providing own source revenues. However, there are FCCC offices where their operating costs exceed their annual revenues. These are loosely known as deficit counties. Conversely, some counties are donor counties where their revenues exceed their budget expenditures. FCCC offices which are unable to meet budget requirements are supplemented by the Trust Fund in order to be fully funded. While the Trust Fund supplements deficit counties, the funds used are generated by other FCCC offices through their own source means (Art. V § 14(b), Fla. Const.). The Trust Fund is not funded by any other means except through the collections efforts of the FCCC (§ 28.37, Fla. Stat., 2015). Therefore, it is important to note the Trust Fund does not maintain any level of slack resources or the positive difference between revenues and expenditures which is retained by the organization for future expenses.

Moreover, the duties and responsibilities of the FCCC include maintaining the court registry; processing all civil and criminal cases; collecting and disbursing fines, court costs, forfeitures, fees, and service charges; maintaining custody of all evidence and exhibits entered by the court; jury management; maintaining a public records library, which includes all recorded mortgages, deeds, and descriptions of all county property; and providing accounting services to all departments under the Board of County Commissioners (Clerks Duties & Services, 2015). Clerks Duties and Services (2015) provides a more comprehensive, yet not exhaustive, list of the duties and responsibilities of the FCCC. One of these duties is the administration of uniform traffic citations.

Uniform traffic citations are issued by state, county, and local law enforcement officers to persons, individual or business entity, that have in some fashion or another, been found in violation of Florida's traffic laws by the ticketing officer (§ 316.650, Fla. Stat. (2015). Once issued, the law enforcement officer must remit the citation to the FCCC office in the county jurisdiction where the ticket was issued pursuant to § 316.350, Fla. Stat. (2015). The FCCC is responsible for the administration of the citation through final disposition including collecting any fines, fees, and other costs associated with the citation (318 Fla. Stat. § 11, et seq., 2015). Florida statutes do not provide the FCCC with the authority to issue traffic citations. However, there is a small portion of the citation which may be retained by the FCCC office for budgetary purposes: This varies based on the type of citation the jurisdiction in which the citation was issued (316 Fla. Stat. § 001, et seq., 2015). Therefore, the number of citations issued may influence the revenues generated by the FCCC office as a result of those citations, but this area of government revenue has not been academically examined. This provides the gap in the nomothetical network that I addressed in this quantitative study of secondary data.

Historical Background

Historically, much of the academic reviews and examinations of government budgets have focused on the federal and state governments. Only in recent years have local governments received the same attention (Jones & Stewart, 2012). This may be due in part to an increased public awareness and desire to reduce government expenses below the current operating lines (Baker, 2011). As such, much of the current scholarly and peer-reviewed literature surrounding local government funding has concentrated on the

government's ability to raise revenues through the use of taxation (Jones & Stewart, 2012). Not all local government agencies have this authority. For example, Bock (2014) found the FCCCs must collect their operating funds through service charges, fines, fees, and other court-related financial obligations pursuant to Florida's Constitution. The FCCCs can only collect from the limited number individuals who use the services of the court system, such as persons filing civil suits, recording legal documents, paying civil or criminal fines and fees, or any other court or legal-related business.

This concept is drastically different from other Florida local governmental agencies where the revenues used for budgetary purposes stem from the collection of real property taxes supporting Thompson's (2013) findings that governments rely on property and income taxes to supplement their revenues. In Florida, the funding of the county's fire and rescue services is through this method of taxation (§ 125.01, Fla. Stat. (2015). As such, a real property owner, through his or her property taxes, is funding the services of the fire department irrespective of whether that property owner has ever called upon the services of the fire department. The fire department receives funding from a much larger revenue base, real property owners who may or may not use their services, while the FCCCs must rely exclusively on the limited number of customers who use their services for funding (Bock, 2014).

Fiscal Sustainability

With the inability to raise revenues through the use of taxation, the FCCCs must rely on its abilities to collect court-related financial obligations. Altshuler, Lim, and Williams (2010), Carroll and Stater (2009), and Teixeira and Koryakina (2013) have

suggested that government organizations faced with revenue shortfall should consider diversifying their revenue sources. Unfortunately, the FCCCs cannot create new or alternative revenue sources without the express consent of the Florida Legislature (Fla. A.G. 082-95, 1982)). As a result, the FCCCs must rely on current revenue sources, or the limited resources in the various trust funds, for budgetary funding including the issuance of traffic citations by local governments (Art. V § 14(b), Fla. Const.).

Concordantly, the issue of financial stability in state and local governments has received attention in recent years, especially in its relationship to sources of revenues. Ammons, Smith, and Stenberg (2012) noted the Great Recession of 2008 sharply reduced own source revenues for state and local governments. Nelson (2012) and Ward and Dadayan (2009) found that many state and local governmental organizations are experiencing steep revenue declines but are still required to maintain the same level of services. Local governments must provide their required services while meeting the legal requirement of a balanced budget (Ammons et al., 2012). For example, § 28.22205, Fla. Stat. (2015) requires the FCCCs to convert their administrative systems into an electronic filing system essentially eliminating the requirement to maintain hard copies of court records. While this statute mandated a completion date, it failed to offer the FCCCs a solution as to how to finance the electronic filing project after their budget was established. As a result, the FCCCs must divert previously allocated funds from other areas of their budget to fulfill the state mandates. Secondly, Bock (2014) noted the FCCCs current revenue streams (i.e., the collection of fines, fees, and surcharges from those using the FCCC's services) is relatively unpredictable and can fluctuate greatly

from year to year. Afonso (2013) and Carroll (2009) warned that dependence on unreliable revenue sources can lead to government instability, especially in times of economic downturns. The FCCCs are thus required to fulfill state and public mandates using relatively unreliable sources of revenue.

Traffic Citations as Revenue Sources

One such source of unreliable revenue that has gained recent attention is the issuance of the traffic tickets or traffic citations resulting from a person's lack of adherence to local traffic laws. As Garrett and Wagner (2009) found, some governmental agencies are turning to the issuance of traffic citations as an alternative source of revenue. Makowsky and Stratmann (2009) advanced Garrett and Wagner's findings by concluding that local law enforcement officers in Massachusetts are more likely to issue traffic citations to individuals who reside outside of their jurisdiction. Makowsky and Stratmann (2011) followed up on their 2009 study and examined the number of traffic citations issued and found that passing an override referendum, a referendum placed before the voters of the municipality to increase the amount of traffic citations issued within the municipality, decreased the number of tickets issued by 14.3 tickets if the amount requested was for less than $794,000, but for every $100,000 requested above $794,000 in the referendum resulted in an increase of 1.8 tickets. It is unclear how Makowsky and Stratmann (2011) arrived at the $794,000 amount although it may be an average of the referendum amounts within their sample. Makowsky and Stratmann (2011) also found that the increase in traffic citations was statistically significant and negatively correlated with traffic accidents and related injuries in Massachusetts. Hummel (2014) raised a

concern that the issuance of traffic citations is migrating away from general safety concerns and becoming more of a revenue generating tool. In other words, law enforcement officers are becoming more vigilant in enforcing traffic laws to encourage revenue increases. There is only sparse current scholarly literature empirically supporting this notion.

Makowsky and Stratmann (2009, 2011), Garrett and Wagner (2009), and Hummel (2014), however, focused purely on the rationale behind the issuance of traffic citations by issuing authorities. The authors did not examine the relationship between the issuance of traffic citations and the budget of the local government authorities. Furthermore, the authors did not explore the actual dollar amount of revenues associated with the issuance of traffic citations. While it is important to understand the determinants of issuing traffic citations through variables including employment status, residency status, and race, it constitutes only the first ripple in a series of interconnected ripples, each with its own unique characteristics worthy of study. For example, in Florida, the FCCCs do not have the authority to issue traffic citations but continue to rely solely on their collected revenues for budgetary purposes.

Instead, local law enforcement agencies remit their traffic citations to the FCCC for judicial processing and, like the local law enforcement agencies, the FCCC is able to retain a portion of the traffic citation fee amount but only after that fee has been paid (§ 318.18, Fla. Stat. (2015). The FCCC does not earn revenues on citations which remain unpaid, although they have incurred expenses from statutory administration of the citation such as personnel hours. Unfortunately, scholars have not continued their

investigations beyond the initial determination of issuance and abruptly halt before the payment stage where the issuance of citations is converted into realized revenues for the government. In this quantitative study, I addressed this existing gap in the literature.

Problem Statement

In the wake of budgetary restraints, many local government organizations are microscopically examining existing sources of revenue in efforts to exhaust all available streams without increasing the financial burden on their constituents. These examinations are beginning to include nontraditional sources of revenue such as those gained from the issuance of traffic citations. For example, Garrett and Wagner (2009) conducted the first quantitative study demonstrating a statistically significant and positive relationship between the number of traffic citations issued and local fiscal health. Garrett and Wagner's study was followed by Makowsky and Stratmann's (2009, 2011) and Hummel's (2014) studies, demonstrating local governments tend to issue more traffic citations when faced with fiscal health concerns. These authors limited their examinations to governmental organizations which have the authority to increase the number of traffic citations issued through various political means such as referendums or by ticketing nonconstituents. Concordantly, they did not examine the demographic factors which influence the number of traffic citations issued as compared to whether the same demographic factors influence actual revenues realized as a result of the issuance of traffic citations.

There are government organizations, like the FCCC, that do not have the legal authority to increase the number of traffic citations issued but statutorily rely on traffic

citation revenues for budgetary purposes. Academic studies have not examined this relationship. Moreover, Garrett and Wagner (2009), Makowsky and Stratmann (2009, 2011), and Hummel (2014) noted there are other demographic factors, such as the local unemployment rate, estimated population size, and personal income per capita that influence the number of traffic citations issued. Bock (2014) indirectly supported this argument by noting "decreases in the number of traffic citations issued by law enforcement agencies combined with the inability of defendants to pay fines and court costs has adversely impacted on court-related revenues" (p. 5). Bock's statement regarding the inability of defendants to pay fines and court costs indicates a need to examine the relationship between local unemployment rate, estimated population size, and personal income per capita against the number of traffic citations and the FCCC's revenues.

The findings of Garrett and Wagner (2009), Makowsky and Stratmann (2009, 2011), and Hummel (2014) provide a solid foundation for the formulation of academic studies related to traffic citations revenues. Unfortunately, these findings cannot generalize to organizations such as the FCCC that lack the authority to increase the number of traffic citations issued. Thus, there is a lack of academic understanding how the local unemployment rate, estimated population size, and personal income per capita might impact the number of traffic citations issued and the actual revenues realized by organizations like the FCCCs. In this quantitative study, I used secondary data collected by the FCCC to address these issues.

Purpose

In this quantitative study, my purpose was to analyze the nature of the relationship of demographic factors and the issuance of traffic citations and traffic citation revenues of the FCCC through the theoretical lens of Pfeffer and Salancik's (1978) RDT. As I will discuss in more detail later in this study, Pfeffer and Salancik suggested that organizations are dependent upon their environments to obtain the resources necessary for their survival. Hawkins (2011) discussed RDT in applications associated with land use policy planning; Hond, Bakker, and Doh (2012) investigated RDT in nongovernmental organizations; Malatesta and Smith (2011) examined RDT in private vendor contracts; and Sosin (2012) explored RDT in nonprofit agencies, but prior to this study, there has not been scientifically-based research conducted that has examined the relationship between RDT and the issuance of traffic citations.

Garrett and Wagner (2009) suggested that additional quantitative studies are needed to focus on the revenues gained from the issuance of traffic citations to optimally understand the relationship between traffic citations issued and government revenues. I used secondary data from the Florida Department of Highway Safety and Motor Vehicles (FDHSMV) to find the number of traffic citations issued in Florida, by county, on a yearly basis. These data are readily available via website portals maintained by the FDHSMV. Additionally, I used secondary data from the FCCCs to determine what percentages of their budgets resulted from the issuance of traffic citations and also to determine the dollar amount of actual revenues related to traffic citations. In this quantitative study the crux was threefold: (a) to determine the demographic factors

(unemployment rate, personal income per capita, and estimated population size of the county) that influence the issuance of traffic citations; (b) to determine the demographic factors that influence the dollar amount of actual revenues generated by the issuance of traffic citations for the FCCC; and (c) to determine the demographic factors that influence the percentage of the FCCC budget attributable to traffic citations. These questions focused on the issuance of traffic citations during the decade 2005–2014. Understanding the intricacies of this relationship and how economic and demographic factors impact changes in the issuance of traffic citations and other the revenues for the FCCC can aid public leaders practice fiscally responsible administration (Cooper, 2012).

Summary of Research Questions

There were three research questions in total that guided this study. Three correlational questions supported each of the three main research questions. First, I conducted a correlational analysis between each of the three independent variables and one of the dependent variables resulting in one set of the three supporting questions. In this study, the number of traffic citations remitted to the FCCC was the first dependent variable I analyzed. Once I completed the correlational analysis, I conducted a multiple linear regression analysis to determine how well the three independent variables predicted the dependent variable. I conducted the second set of analyses in like manner with the exception that the second dependent variable replaced the first dependent variable. The second dependent variable I examined was the actual dollar revenues realized by the FCCC from traffic citations. Likewise, I conducted the third set of analyses in like manner with the exception that the third dependent variable replaced the

second dependent variable. The third dependent variable I examined was the percentage of the budget of the FCCC attributable to traffic citations.

The first research question focused on the Dependent Variable 1, the number of traffic citations issued (Y_1). The second research question focused on the Dependent Variable 2, revenue in actual dollars (Y_2), and the third research question focused on the Dependent Variable 3, percentage of the budget (Y_3). Table 1 summarizes the research questions. The research questions and hypotheses are expanded on in greater detail in Chapter 3.

Table 1

A Summary of Research Questions

Research Question	Question Type	Independent Variable(s)	Dependent Variable
1	Multiple Linear Regression	Estimated Population in 1,000s (x_1); The unemployment rate in % (x_2); and Personal income per capita in $1,000s ($x_3$)	The number of traffic citations remitted to the FCCC during the decade 2005–2014 (Y_1)
2	Multiple Linear Regression	All of the Above (x_1, x_2, and x_3)	The actual dollar revenues realized by the FCCC during the decade 2005–2014 (Y_2)
3	Multiple Linear Regression	All of the Above (x_1, x_2, and x_3)	The percentage of the budget for the FCCC during the decade 2005–2014 (Y_3)

Theoretical Framework

Pfeffer and Salancik (1978) proffered RDT and argued that it is impossible to comprehensively understand an organization without first understanding the context in which it operates. RDT has been refined by scholars to illustrate organizations cannot truly be self-reliant but must rely on resources provided by the environment (i.e., other organizations; Shafritz, Ott, & Jang, 2010). The more resources that are available, the less dependent the organization becomes on outside sources of revenue. Conversely, the fewer the resources that are available, the more dependent the organization becomes on

others. Mayer, Wang, Egginton, and Flint (2012) demonstrated the rarity of the resource dictates the dependency level stemming to the need to develop relationships with the external environment through the use of nonprofit organizations.

Hond et al. (2012) and Newswander and Newswander (2012) illustrated organizations lacking resources seek to develop and manage relationships, informal or formal, with the organizations which can supply the desired resources. In Florida, the nature of the relationship is statutory, whereby the local governments issue traffic citations and then remit those citations to the FCCC for processing, disposition, and collection (§ 316.650, Fla. Stat., 2015). Under RDT, the existence of an external relationship between the FCCCs and traffic citation issuing authority is statutorily established. As such, in this study I determined the extent to which the FCCC is financially dependent on the issuance of traffic citations (i.e., what portion of the FCCC budget stems from traffic citations revenues).

Shafritz et al. (2010) contended that organizations are comprised of complex interconnections elaborately intertwined with their environments and their internal and external processes and outputs with which they continuously interact. Changes to any of these elements directly, or indirectly, impact the elements of the collaborative organizations advancing Newswander and Newswander's (2012) contention that public organizations must pay special attention to the concepts of interdisciplinarity. More specifically, traffic citations issued by law enforcement agencies affect the revenues gained by the FCCCs. Any changes in the amount of traffic citations issued increases or

decreases the available pools from which the FCCCs can draw upon their revenues for budgetary purposes advancing the theoretical concept of resource dependency.

Nature of the Study

The quantitative methodologies I used for this dissertation were the correlation and multiple linear regression approaches. According to Creswell (2013), the quantitative approach focuses on the collection and analysis of empirical data. The lack of live participants for this study rendered the potential use of the qualitative approach moot. Instead, in this study I focused on secondary data: The collection of traffic citations, estimated population sizes, unemployment rates, personal income per capita (in dollars), and budget and revenue related data. Lastly, the qualitative approach was not appropriate for this study as it is generally subjective in nature whereas this study of secondary data required the objective analysis of statistical data necessitating the use of the quantitative approach.

Conversely, many scholars choose their methodology prior to the formulation of their research questions and attempt to manipulate their research questions to "fit" their preferred methodology, this process is inappropriate. Instead, the research questions (i.e., the issue(s) needing to be answered/resolved) should drive the selection of the methodology, not vice versa . Granted, the true nature of the research questions cannot be determined without some initial effort in drafting the problem statement and purpose of the study. Together, the research questions, purpose, and problem statement dictate the appropriate methodology (Simon, 2011). As such, the research questions necessitate the use of the quantitative method.

Definitions

Great Recession: The academically recognized United States' economic turmoil beginning in 2008 and ending in 2010 (Scorsone & Plerhoples, 2010).

Local law enforcement: Law enforcement officers at the municipal, county, and state levels of government and not including federal law enforcement officers.

Municipal: Any level of government below the county level (i.e., town, village, city, township, etc..

Own source revenues: Revenues generated as a result of internal collections processes and not derived from the external environment .

Resource(s): Any material resource such as money or human resources, information, and social or political support (legitimacy), personnel, financial resources, information and knowledge, and organizational prestige (Hawkins, 2011; Verbruggen, Christiaens, & Milis, 2011).

Traffic citation(s): Any civil citation issued by law enforcement officials as a result of a violation in the local traffic laws. Citations may be either moving or nonmoving violations.

Assumptions

In this study, I made several assumptions related to the overall study, which are not to be confused with the statistical assumptions associated with a particular quantitative design used (which I will discuss in Chapter 3), although there may be instances where the two sections overlap. One of the most basic assumptions of this study was that the secondary data collected are reliable on its face. In other words, the

recordkeeping of the state of Florida, the individual FCCC offices, and other sources are immaculate and free of errors. The second main assumption is that the instruments used in the collection of the data are free from errors.

While the independent variables and the traffic citation statistics could be easily collected through online sources and did not require a collection instrument, the requisition of FCCC budgetary information required a public records request. A copy of this request is in Appendix A. This request is statutorily based and valid on its face. The last assumption was the FCCCs have maintained copies of their annual budgets extending back to 2005 which, in fact, they had.

Scope and Delimitations

One of the delimitations of this study was the years under examination. In this study, I was only concerned with the decade of 2005 - 2014 and did not extend beyond this range. It is unclear whether the state of Florida has traffic citation data in an electronic format prior to 2005. Manual traffic citation data would require an arduous amount of effort on the part of the researcher and state officials to supply the appropriate information for this study. As a result, this study excluded information prior to 2005. The cap at 2014 is cognizant of the time required of the FCCCs to remit the data to the state and its availability for publishing to the general public.

Secondly, the population under study was limited to the FCCCs. While local law enforcement plays an essential role in the study through the issuance of citations, a qualitative study was more appropriate to determine the rationale behind the issuance, or lack thereof, of the citations, which was beyond the scope of this study. An empirical

analysis can verify the results of qualitative studies, which may reveal a multitude of reasons which local law enforcement issue citations.

Limitations

One of the limitations of the multiple linear regression design was the inability to account for all of the predictor variables that might influence the outcome variable. There may be variables which influenced the FCCC's budget and revenues related to traffic citations that were not included in this study. Secondly, there was the potential for the independent variables to be highly correlated with one another. Fortunately, none of the independent variables were highly correlated with one another upon analysis. Another limitation was the possibility that the design model would not be able to differentiate whether one particular independent variable or another influenced the dependent variable. As I will discuss in Chapter 4, each model improved upon the previous model allowing for influential differentiation. Lastly, a limitation with linear multiple regression designs is that the relationship between the independent variables is nearly indistinguishable. Through the correlational analyses I was able to determine the independent variables were not highly correlated with one another, improve the overall model with each introduction of an independent variable, and establish that the relationships between the independent variables were distinguishable.

Concordantly, there are a limited number of core scholarly publications related to the issuance of traffic citations and local government revenues. At the suggestion of my chair, I contacted the authors of the current literature and inquired as to whether they had anything in press or knew of any other authors that may have conducted similar

unpublished studies. In 2016, I received responses from at least one of the authors on each of the core publications. The general consensus was they did not have any articles currently in press related to this topic and were unaware of any other scholars working on articles concerning traffic citations and local government revenues. Thus, there is limited academic guidance in this area of research.

With any research project, there is the potential, intentional or unintentional, for researcher bias. Fortunately, Walden University's dissertation process includes the participation of disinterested faculty members. The chair and committee member for the dissertation committee provide the first line of defense against eliminating any potential bias. Secondly, the University appoints a university research reviewer (URR) to review the dissertation in its entirety. The URR is the only person on the committee not selected by the student, further bolstering neutrality and safeguarding against bias. In theory, there is no direct contact between the doctoral candidate and the URR. The chair facilitates all communication in order to increase the third party reliability and validity of the evaluation. Therefore, in this quantitative study, I took reasonable measures to minimize any bias or other limitations to effectuate scholarly research.

Significance

Based on the results of this study, revenue generated from the issuance of traffic citations consistently forms an average of 37% of the FCCC's annual budget and revenues. Future research into the other areas of the FCCC's budget and revenue sources is required to formulate a comprehensive knowledge base of the factors which also influence the FCCC's budget and revenues. Additionally, there may need to be studies

which determine the elasticity of traffic citations as a revenue source for local governments beyond the FCCC.

Likewise, the FCCC is the gatekeeper to the Florida judicial system. As gatekeepers, all court-related documentation must be processed and administered through the FCCC (Clerks Duties & Services, 2015). The FCCC funds this constitutional and statutory obligation through own source revenues (Art. V § 14(b), Fla. Const.). Delays in the processing and administration of court-related documentation may slow the administration of justice and indirectly impact a citizen's due process rights. For example, Bock (2014) indicated that in 2013, approximately 84% of the expenditures for the Clerk and Comptroller for Palm Beach County, Florida were related to personnel services. Naturally, the fluctuation of own source revenues directly and indirectly impacts this significant portion of the budget.

As I will discuss in Chapter 2, governmental organizations like the FCCC, when faced with budget deficits, cut personnel, services, and other expenditures to meet their legal obligations of maintaining a balanced budget. The cutting of personnel, public services, and other operating expenses increases the length of the lines at the FCCC offices, increases the time period before a case is heard before a judge, and may go as far as delaying the release of incarcerated inmates after judicially-ordered release. At the practitioner level, a thorough understanding of how demographic and economic factors relate to the budget percentage and revenues in dollars linked to traffic citations could aid the FCCCs in promulgating sound strategic, operational, and tactical budget and revenue planning. This planning would provide the FCCCs with the tools necessary to anticipate

and mitigate revenue fluctuations, advance the administration of Florida's judicial system, and ultimately, provide Florida's citizenry timely access to the judicial system while upholding Florida's Constitutional due process rights, embodying positive social change.

Summary of Chapter 1 and Transition to Chapter 2

The inclusion of traffic citations as a source of government revenue has gained interest in recent years, yet this area continues to be understudied. More specifically, researchers have focused on governmental entities that have the legal authority to issue traffic citations. To date, scholarly researchers have not contemplated the existence of governmental organizations which rely on traffic citation revenues but lack the authority to issue said citations. This reliance falls squarely within the realm of RDT.

The independent predictor variables for this study were demographic factors, including the unemployment rate, personal income per capita, and population sizes of the county that may influence the number of traffic citations issued, the revenues in dollars of the FCCCs, and the percentage of the FCCC budget which was associated with traffic citations. These secondary data were gathered from various governmental agencies and correlationally analyzed prior to submission to the multiple linear regression design. As I discussed in this chapter, I assumed the secondary data were free from errors and other biases which might influence the outcome of the study. The inclusion of a three member dissertation committee helped eliminate any potential biases, internal or external, which could have posed problems for this study.

Ultimately, the goal of this study was to comprehensively understand the determinants of the FCCC's budget and revenues as they relate to traffic citations. Understanding these determinants can aid scholar-practitioners in formulating strategic, operational, and tactical plans for the FCCC offices to advance the administration of justice in Florida's judicial system and ensure fundamental due process rights are being upheld. Likewise, in this study, I identified current revenue issues faced by local governments. Concordantly, in Chapter 2, I will provide a more comprehensive review of the current literature on the topic, followed by Chapter 3, in which I will outline the methodology for this study. In Chapter 4, I will provide the results of the multiple regression analysis and conclude with the interpretations and recommendations in Chapter 5.

Chapter 2: Literature Review

Introduction

In this chapter, I will provide a comprehensive introduction to extant and scholarly literature as it relates to my study's research problem and questions. In this review, I will provide an overview of the extant literature related to RDT, some of the revenue challenges faced by local governments, and the use of traffic citations as a source of revenue. Scholars have focused on the association between the issuance of traffic citations and government fiscal health but have not addressed the actual revenues gained from traffic citations or the relationship they have with the budget of local governments. Lastly, scholars have yet to contemplate organizations, like the FCCC, who do not have the authority to issue traffic citations but rely on their revenues.

In the first section of this literature review, I will examine the current scholarly literature surrounding Pfeffer and Salanick's (1978) RDT. I will show how organizations are dependent on their environment for resources to maintain survivability. I will also show that dependence on resources is rooted in the criticality and scarcity of the resources. My literature review of current academic works will reveal that organizations attempt to control, or predict, the uncertainty of the environment. Lastly, I will discuss the formation of collaborative relationships between an organization and its environment in order to acquire necessary resources.

In the next section of Chapter 2, I will address some of the challenges local governments face in regards to revenue streams. This section will include the impact(s) of the Great Recession of 2008 on government revenues and the concepts of revenue slack,

revenue diversification, and cutback budgeting as strategies to mitigate uncertainty in the external environment. Overreliance on any particular revenue source may create future financial hardships for a governmental organization, and as a result, many government organizations are seeking nontraditional sources of revenue to supplement budget deficits such as the revenues gained from traffic citations.

Concordantly, the use of traffic citations as a revenue stream has only received scholarly attention in the last few years. This may be due in part to the increased sensitivity towards raising revenues through additional taxes. Furthermore, scholars have noted there is a relationship between the number of traffic citations issued and local government fiscal health. Governments faced with budget deficits increase the number of traffic citations issued, primarily to nonresidents, potentially as a result of both local unemployment rates and tourism (Garrett & Wagner, 2008). This form of tax exporting is gaining in popularity as a significant source of revenue (Makowsky & Stratmann, 2009). Lastly, I will review an article in which researchers continue to debate whether the primary objective of issuing traffic citations is revenue based or as a result of public safety concerns.

Literature Search Strategy

I began this literature review in 2013 and continued to seek related studies throughout the many dissertation stages (up until publication). I used several notable databases during the search, including EBSCOhost, Google Scholar, ProQuest, SAGE Political Science Collection (SAGE Premier), LegalTrac, Lexis Nexis Academic, Dissertations and Theses via Walden University's Library, Palm Beach County Public

Library, and other sources. Outside of seminal works, I limited the scope of the literature review to the years 2009–2016, as required by the Walden University (2015) dissertation policies. I also included scholarly publications which repeatedly cited Garrett and Wagner (2009) in their review of the literature. The keyword search terms I used to locate literature included: *resource dependency theory*, *resource dependence theory*, *RDT*, *government*, *Clerk of Court*, *revenue(s)*, *slack resources*, *elasticity*, *traffic ticket(s)*, *traffic citation(s)*, and other assorted terms and combinations thereof.

Resource Dependency Theory (RDT)

The concept of RDT was first proffered by Pfeffer and Salancik (1978) and provided the seminal work in this area. RDT contends that no organization is truly self-reliant and must rely on the external environment for required resources (Pfeffer & Salancik, 1978). As such, one of the main objectives of RDT is to provide a better understanding of how organizations acquire these resources from their environment (Sowa, 2009). Furthermore, RDT seeks to examine how organizations can maintain survivability and prosperity without becoming overly dependent on their external environment for resources (Sowa, 2009).

As a result, scholars using RDT strive to predict or explain the actions, or inactions, of organizational administrators when addressing organizational interests, such as obtaining resources. Scholars have noted that organizations are not entirely autonomous but are constrained by the environment as a consequence of their resource needs (Verschuere & Corte, 2014). In essence, an organization is not free to pursue organizational goals and desired ends without the aid of the external environment. Pfeffer

and Salancik (1978) contended an organization must seek resources from external sources in order to meet these organizational objectives. Unfortunately, Pfeffer and Salancik (2003) argued the dependence on external resources creates an element of uncertainty.

My review of the academic literary works in the field revealed the term *resources* has been defined and generally accepted, with minor variations, by the academic community. In regards to nonprofit organizations, the term, resources, has been defined as material resources such as monetary or human resources, information, and social or political support (legitimacy; Verbruggen et al., 2011). Likewise, resources have been defined in land use planning studies as personnel, financial resources, information and knowledge, and organizational prestige (Hawkins, 2011). Additionally, these have been used to explain RDT in applications associated with nongovernmental organizations (Hond et al., 2012), private vendor contracts (Malatesta & Smith, 2011), nonprofit agencies (Sosin, 2012), social enterprises (Teasdale, 2012), early care and education (Sowa, 2009), and corporate governance (Rivas, 2012). However, in this study, I focused solely on the financial resources aspect of RDT.

Through the literature review, I have learned that organizations develop relationships, informal or formal, with external organizations in order to effectuate the acquisition of required resources. For example, Hond et al. (2012) argued organizations develop collaborative relationships with external organizations when they lack essential resources. These relationships are designed to advance organizational interests, such as

organizational survival and prosperity (Hawkins, 2011). There are several methods through which organizations obtain their required resources.

Organizations can obtain resources through organizational advocacy (Mosley, 2012); soliciting private vendors for services (Malatesta & Smith, 2011); the development of supplier relationships (Fink, James, & Hatten, 2011); and obtaining funds from the government, private funding, or other fees (Verbruggen et al., 2011). Hawkins (2011) also argued organizations may require resources to be provided to them by other governmental agencies, including those hierarchically superior to them. Academicians have revealed the availability and accessibility of resources can influence the formation of collaborative relationships (Sowa, 2009).

Concordantly, the level of dependence on the external environment can be associated with the terms criticality, resource management, and scarcity. Criticality can be generally defined as how essential the resource is to the organization's survival, while resource management is how the organization's leaders use the resources and scarcity is the rarity of the resource (Ackingbola, 2013). An increase in the criticality of a resource or how scarce the resource is can increase the dependence upon the resource (Mayer et al., 2012). Furthermore, mismanagement of the current resources can increase the need for additional resources to replace the lost resources. This dependence introduces a level of uncertainty, which can be either internally or externally created (Rivas, 2012). Organizations attempt to develop strategies which to allow them to assert more control over their environment and to reduce this level of uncertainty (Drees & Heugens, 2013).

The element of environmental uncertainty is one of the more notable aspects of RDT and often a subject for academic research. For example, researchers contend when the environment becomes uncertain; organizations may seek closer relationships with their resource providers (Fink et al., 2011). Likewise, uncertainty can be the result of changes in the flow of resources or institutional pressures (Verbruggen et al., 2011). The flow of resources is directly related to scarcity, but institutional pressures can be the result of mandates issued by funding organizations (Verbruggen et al., 2011). The implementation of the electronic filing system for the FCCC is an example of an institutional mandate. Ultimately, organizations that can effectively manage uncertainty have an increased chance of survival (Rivas, 2012).

One of the main presumptions of RDT is that an organization desires to maintain survivability (Fink et al., 2011). Verbruggen et al. (2011) advanced this notion and argued organizations that can manage the flow of resources increase their likelihood of survival. Verbruggen et al. further argued that the management of resources is rooted in autonomy and the ability to manage external dependencies. Organizations that can manage the flow of resources are said to have an element of "power" (Hillman, Withers, & Collins, 2009). Essentially, power is the degree in which an organization can dictate the flow of resources to advance their own interests (Hillman et al., 2009). Increased power and autonomy means increased survivability. Conversely, organizations lacking power demonstrate an increased dependence on the environment for resources and an increase in uncertainty.

For example, Malatesta and Smith (2011) argued that an unexpected decrease in the number of resource suppliers increases the dependency upon those resources. In like sense, the number of resource suppliers can remain constant but a decrease in the resource output will have the same effect. An increase in dependence could force the organization into an economic hostage situation, whereby an organization is forced to produce goods and services on the terms of the supplier in exchange for resources (Sosin, 2012). An example could be the increase in the cost of the resources for the organization simply due to the supplier's knowledge of the resource's scarcity. Concordantly, organizations that depend heavily on a limited number of resource suppliers or resources are likely to experience stronger constraining influences from their environment (Verbruggen et al., 2011). Therefore, the ultimate goal of an organization is to acquire resources without becoming overly dependent upon the external environment, or in other words, to reduce uncertainty.

Organizations cannot be entirely autonomous and must rely on the external environment for their resources. Furthermore, reliance on the environment comprises an element of uncertainty, so organizations seek to establish relationships to mitigate uncertainty and acquire the resources needed for their survival. Under the current RDT literature, the establishment of relationships is an active process guided by resource criticality and scarcity. However, RDT scholars have yet to expand into areas where the relationships are statutorily created. Criticality and scarcity continue to play a significant role in statutorily-created relationships with the major difference emanating from the

legal requirement on where resource must be obtained. In this study, I attempted to address this nuance.

In like sense, RDT's main focus is rooted in understanding the external environment in which the organization operates, including attempts at managing the environment. As such, a general understanding of the environment is needed in order to fully address all the components of RDT. Therefore, in the following section, I will discuss some of the revenue challenges faced by local governments and their efforts to maintain organizational survivability.

Revenue Challenges

One of the key components of RDT is to understand the environment in which an organization operates. For my purpose, this understanding includes the revenue challenges faced by subnational governments. More specifically, I reviewed the different types of revenues governments rely upon for financial stability via revenue diversification and the strategies used by local governments to mitigate revenue shortfalls. As I will point out later in this chapter, scholars have not yet conducted analyses on organizations that are unable to diversify their revenue sources due to legal mandates.

To begin, the last decade has been a tumultuous time for local government revenues. Academicians have dubbed the period of 2008–2010 as the Great Recession (Ammons et al., 2012; Scorsone & Plerhoples, 2010; Thompson, 2013). Scorsone and Plerhoples (2010) argued the national economic turmoil of the Great Recession is the largest recession since the Great Depression ended in 1939. Concordantly, Ammons et al.

(2012) found government funding derived from own-source revenues significantly dropped during this period.

However, the drop in revenues does not necessarily dictate a reduction in services provided by the local government. Nelson (2012) found organizations are experiencing steep revenue declines but are expected to maintain the same, or higher, level of public services. Furthermore, there is a general expectation that governmental organizations continue to meet the legal requirements of a balanced budget in the face of maintaining these demanded services (Ammons et al., 2012; Swindell et al., 2014). Unfortunately, some governmental organizations are unable to maintain their levels of services in an efficient manner.

Judge Edmon (2012) found clerical shortages in the California court system delayed the administration of justice, the lines in the courthouse were getting longer, and the wait time to be heard before a judge for a traffic citation was nearly 3 months. This concept supports Levine and Scorsone's (2011) argument that significant changes in government revenues could impact the type and quality of the public services provided. Levine and Scorsone further argued governments struggling to maintain public services have long-standing effects for the public whereby the cost of government may increase and individuals initially attracted to government service may find employment elsewhere. Ultimately, government organizations have to realign their revenues or reduce public services (Afonso, 2013). To combat revenue losses, local governments are exploring the concept of revenue diversification.

Revenue diversification simply means the revenues generated by a governmental organization stem from a multitude of sources instead of relying on a select few revenue streams. From the educational aspect, Teixeira and Koryakina (2013) argued revenue diversification includes revenue sources obtained outside of government appropriation. Academicians note the idea behind revenue diversification is to draw from a wider range of resources in the hopes of facing lower fiscal volatility over time (Carroll & Stater, 2009) thus reducing uncertainty. As a result, organizations attempt to diversify away from financial instability (Carroll & Stater, 2009). Conversely, not all organizations have the ability to be creative in their revenue diversification strategies.

For example, governmental organizations may be highly restricted by state and local laws in regards to revenue sources (Afonso, 2013). In other words, the revenue sources are static, remaining unchanged even in the wake of revenue shortfalls. Thus, governmental organizations increase their reliance on the revenue sources that they can draw from. There are some governmental resources, however, that produce revenues which tend to remain relatively unchanged by economic downturns.

One of the most notable sources of revenues for local governments is derived from *ad valorem*, or real property, taxes. Afonso (2013) argued real property taxes are inelastic, meaning they remain relatively unaffected by external stimulants. Other sources of revenue, such as sales tax and traffic citations are elastic and can fluctuate depending on the local economy and the degree of enforcement of traffic laws. Thompson (2013) supported the argument that local government rely mainly on property tax revenues for funding, but Swindell, Gerretsen, and Rosentraub (2014) found property tax revenues are

on the decline. With the relatively inelastic source of revenue on the decline, the importance of understanding government revenue is heightened, placing a greater emphasis on revenue diversification.

Yan (2011) supported this contention and noted a decline in real property taxes is paving the way for needed government revenue diversification. Concordantly, Afonso (2013) contended governmental organizations are seeking less traditional forms of revenue due to tax revolts in several states. Other governments, however, are continuing to raise taxes, fees, and charges in order to offset or mitigate budget deficits (Scorsone & Plerhoples, 2010; Thompson, 2013). For example, in Florida, the state legislature increased the base dollar amounts of fines and fees for traffic citations in both 2008 and 2009 (§ 318.18, Fla. Stat., 2015). As Raudla and Kattel (2013) argued, these types of changes affect the revenue side of the balanced budget equation where there is equality between revenues and expenditures.

Although not necessarily included in the balanced budget equation is the financial concept of slack. Essentially, slack is the positive difference between revenues and expenditures retained by the organization for future expenses. Slack also refers to an organization's rainy day fund. Nelson (2012) aptly noted decisions which impact the financial outlook of a government stem from beyond the government's control. The Great Recession may be one such example.

During these economic crises, governments may rely on slack to offset budget deficits when other revenue sources are failing (Hendrick, 2006). Afonso (2013) argued the increased volatility of revenue streams and sources necessitates an increase in slack.

Hendrick (2006) premised organizations with large amounts of slack and flexibility have an increased ability to mitigate environmental threats and challenges since they face less uncertainty. Likewise, organizations with shared revenue require a greater amount of slack to offset negative environmental decisions (Hendrick, 2006). In sum, slack is an essential component to organizational survivability and the ability to maintain a balanced budget while providing the same level of public services.

There are times, however, when organizational slack cannot completely offset budget deficits. Baker (2011) and Raulda and Kattel (2013) noted changing the expenditure side of the equation to meet budget deficits is known as cutback budgeting. This budget strategy focuses on reducing varying areas of the organization to meet the balanced budget. For example, organizations may eliminate personnel and personnel benefits, reduce public services, and institute hiring freezes and furloughs in efforts to cope with revenue shortfalls (Scorsone & Plerhoples, 2010). Interestingly, Raulda and Kattel found organizations suffering from revenue downfalls are more likely to cut expenditures first before addressing strategies to increase revenues. This appears to be the fastest way to reduce expenditures to meet the balanced budget. This method, however, does not immediately address the issue of increasing revenues.

Additionally, there are other areas which can greatly impact revenue streams which government administrators must take into consideration. For example, Baker (2011) argued unexpected revenue shortages in a specific program or set of programs, unfunded mandates from another governmental level, and other general unanticipated fiscal issues can lead to cutback budgeting. Likewise, Yan (2011) contended large swings

in the local economy, such as the Great Recession, can influence revenue streams for local governments. Lastly, Trussel and Patrick (2009) warned overreliance on intergovernmental revenues can result in fiscal distress. This is especially true if those revenue streams become exhausted or become otherwise unavailable.

In essence, to meet public expectations, governmental organizations must maintain the same level of public services in the wake of reduced revenues. This has forced many governments to seek alternative sources of revenue and diversify their current portfolios to prevent deep cuts in the expenditure. Likewise, government organization are resorting to slack resources to meet budget deficits but those unable to do so are having to implement cutback budgeting. Scholars have not, however, fully addressed organizations constricted in their ability to diversify their revenue due to legal requirements like the FCCC. Conversely, organizations that have the ability to diversify their revenue sources are seeking alternative sources to property taxes such as revenues gained from traffic citations.

Traffic Citations as Revenue Source

The concept of using traffic citations as a source of revenue is beginning to receive scrutiny by academic scholars. The first major work in this area was conducted by Garrett and Wagner (2009) who empirically examined the relationship between the number of traffic citations issued and local government fiscal health. Unfortunately, the review of the literature does not reveal a clear definition of fiscal health or fiscal distress as it relates to local governments. This may in part be due to the general lack of scholarly research in this area. Nevertheless, Garrett and Wagner related fiscal distress to the years

where government revenues had declined from prior years. Although this definition is relatively overbroad, governments realizing declines in revenue are seeking alternative sources to mitigate the losses through the issuance of traffic citations (Garrett & Wagner, 2009).

As discussed in the previous section, declining property values and a general resistance to tax increases have forced governments to seek nontraditional forms of revenue. With this in mind, Makowsky and Stratmann (2009) argued anecdotal evidence exists in local governments linking traffic citations as a significant and alternative source of revenue to collecting the generally more stable tax revenues. Likewise, Hummel (2014) found a relationship exists between government fiscal health and the issuance of traffic citations. Moreover, Makowsky and Stratmann (2011) argued local governments may issue more traffic citations in periods of poor fiscal health. This is especially true in areas where the local governments may retain a portion of the revenue generated from traffic citations (Garrett & Wagner, 2009).

Concordantly, the practice of using traffic citations as a revenue generating tool has received considerable attention in the last several years. Garrett and Wagner (2009) and Hummel (2014) aptly noted there continues to be an eternal debate between revenue production and quality policing. Maisel (2013) supported this view through his review of the political issues surrounding traffic camera enforcement. Conlon (2015) noted traffic cameras increase local government revenues, but present legal challenges in regards to whether the traffic enforcement mechanism is a tool for generating revenue or public

safety. Conlon admitted legal challenges to the government's position of reducing automobile accidents and increasing public safety would be difficult to best.

In regards to the first point, Hummel (2014) argued when property tax revenues decrease the number of traffic citations increase. Garrett and Wagner (2009) supported this notion by finding the timing of the issuance of traffic citations directly relates to changes in the economic conditions of the county (p. 83). More specifically, Garrett and Wagner found that a 1.0% point decrease in the previous years' revenue led to .32% point increase in the number of traffic citations issued (Adjusted $R^2 = .200$, $p < .05$; p. 83). Similarly, Mercer (2012) noted one of the main arguments supporting traffic camera enforcement is the ability for municipalities to generate sorely needed revenues (p. 403).

Likewise, local government organizations that seek approval from the public to raise revenues through taxation tend to demonstrate an increased amount of traffic citations issuance. In Massachusetts, Makowsky and Stratmann (2009, 2011) found local governments placed a referendum before the voters of the municipality if the municipality faced fiscal distress. This referendum sought to increase the amount of traffic citations issued within the municipality. Local governments that did not seek a referendum did not demonstrate the same levels of financial hardships as those that did (Makowksy & Stratmann, 2011). Lastly, there was an increase in the number of traffic citations issued in areas where the referendums passed (Makowsky & Stratmann, 2011). In sum, local governments are seeking to raise revenues through the issuance of traffic citations during periods of fiscal distress or poor fiscal health.

Academicians support this notion of finding alternative sources of revenue. For example, Hummel (2014) used the ratings from the Standard & Poor's U.S. State credit for 2010 as an indicator of fiscal strain. Hummel found a state's credit score increased when the number of traffic tickets increased by 10,000 (Adjusted R^2 = .860, ß = .125, p < .05; p. 15). Furthermore, Garrett and Wagner (2009) argued governmental agencies are limited in their revenue-raising options but continue to be under pressure to find alternative sources of revenue. In support, Hummel argued fines and fees are gaining political acceptability in the wake of increased pressure to reduce taxes or to avoid tax-raising conversations altogether. Increasing the amount of traffic citations issued may be an easier way to increase revenues due to the increased sensitivity of tax increase initiatives (Garrett & Wagner, 2009). Lastly, the process of issuing a traffic citation is readily more acceptable to the public than tax increases.

For example, Hummel (2014) suggested governments are turning to fines and fees, such as traffic citations, to mitigate their budgets. The issuance of fines and fees occurs only when specific services are used or as a direct result of someone breaking the law (Hummel, 2014). Furthermore, there is a significantly lower threshold to "convict" someone of a traffic infraction than cases involving criminal behavior (Garrett & Wagner, 2009). As such, local governments may increase the number of traffic citations issued due to the ease in which they can issue the citations validating the rationale behind issuing traffic citations to nonresidents.

The voting power of the driver may indicate whether they receive a traffic citation from local law enforcement. Makowsky and Stratmann (2009) found local law

enforcement may have developed relations with residents (making them more lenient on locals) and thus issued more citations to nonconstituents as opposed to local residents. This may in part be due to the fact that nonconstituents do not have the authority to vote for override referendums related to traffic citations and cannot influence upcoming elections through their disapproval of traffic enforcement initiatives. Thus, Makowsky and Stratmann found drivers who reside outside of the jurisdiction had an 11% higher probability of receiving a traffic citation than those who resided within the jurisdiction with out of state drivers having an increase of 21% over local drivers ($p < .01$; p. 518). This however, may not be the only determinant for the issuance of traffic citations by local law enforcement. For example, Farrell (2015) cited Makowsky and Stratmann noting police agencies respond to municipal pressures to raise revenues (p. 516).

Makowsky and Stratmann (2009) contended local law enforcement take into consideration the local state of the economy when issuing traffic citations. For example, tourism and local unemployment may play a role in whether law enforcement officers issue traffic citations. Garrett and Wagner (2009) found a 1.0% increase in the county's unemployment rate was positively and statistically significantly correlated (Adjusted R^2 = .200, $p < .05$; p. 83) with a .08% increase in the number of tickets issued to each person. Garrett and Wagner supported this notion by finding a 1.0% increase in tourism spending was positively and statistically significantly correlated with a .12% increase in tickets (Adjusted $R^2 = .20$, $p < .01$; p. 83). Ultimately, Makowsky and Stratmann found local governments with lower fiscal health tended to issue more traffic citations with the bulk of those traffic citations being issued to nonvoters in the form of "tax exporting" (p. 9).

There is support, however, that increasing the issuance of traffic citations is an effective policing and public safety tool. In regards to traffic cameras, Eger, Fortner, and Slade (2015) indicated an increase in municipalities using traffic cameras as safety initiatives but noted empirical studies on this subject are still in its infancy when compared to other areas of research, such as racial profiling (p. 398).

While there is ample support that the issuance of traffic citations is in efforts to increase revenues, the association with safety initiatives is also under consideration by local governments. Makowsky and Stratmann (2011) conducted another quantitative study and demonstrated that an increase in traffic citations had two statistically significant correlations: (a) a positive correlation with revenue (there is an increase of 1.8 tickets issued per $100,000, $p < .001$) requested in the referendum (p. 876), and (b) a negative correlation with traffic injuries and accidents where for every 100 tickets written per mile there are 14.3 fewer accidents per mile ($p < .001$) and 6.7 fewer injuries per accident ($p < .05$; p. 879). Hummel (2014) supported this finding by showing an increase in the number of traffic citations resulted in a lower level of traffic-accident related fatalities. This issue continues to be of importance to local governments as McCallum (2011) contended there are more motorists killed every year than in international war zones, exceeding the suicide rates in many countries (p. 542). McCallum's finding supports the notion that increasing the amount of traffic citations may also decrease the number of traffic-accident related injuries and fatalities.

There continues to be, however, an argument between whether the issuance of traffic citation has become a revenue generating tool and whether effective policing is the

primary concern for local governments. Although not specific to traffic citations, "Policing and Profit" (2015) contended some local governments are using their police powers as a method of revenue generation. As such, Sun (2011) aptly noted the goal of revenue generation and public safety are not mutually exclusive and are often set against each other. There are governmental organizations, on the other hand, which are anticipating the revenues from fines and fees generated from traffic citations to be included in their budget forecasts (Hummel, 2014). Interestingly, Hummel (2014) found Florida issues more traffic citations than any other state but Hummel noted some law enforcement officers feel Florida's traffic fines are too high. This may give rise to Makowsky and Stratmann's (2009) argument that a citation could raise revenue if left uncontested but a contested traffic citation could be revenue lowering. In other words, the costs of someone challenging the legitimacy of the issuance of a traffic citation could outweigh, or substantially reduce, potential revenues from the citation. Unfortunately the authors did not provide any substantial evidence to support this notion.

Concordantly, there continue to be local governments that rely on the issuance of traffic citations while others are less dependent on such a revenue source (Sun, 2011). McCallum (2011) admitted the finances associated with traffic and parking fines may become a financial mainstay of local government. Likewise, Ward, Nobles, Lanza-Kaduce, Levett, and Tillyer (2011) argued traffic enforcement is "indelibly associated" with revenue generation as state and local governments continue to suffer budget cuts or the general costs of policing continue to rise (p. 271). Similar to the resource dependence

and revenue diversification literature, Hummel (2014) warned over-reliance on revenues gained from traffic citations may lead to future financial hardships.

Further researchers, however, do not explore Hummel's (2014) argument on over-reliance on the issuance of traffic citations a revenue source. Instead, local governments faced with fiscal health concerns tend to authorize the increased issuance of traffic citations. Likewise, tourism and local unemployment rates may influence citations typically issued to nonresidents. Local governments are including traffic citation revenues in their budget forecasts. To date, scholars examine the relationship between the issuance of traffic citations and fiscal health but do not convert the issuance of traffic citations into actual revenues. For example, an increase in the number of traffic citations does not necessarily mean an increase in actual revenues. There may be mitigating factors, such as the local unemployment rate, population of the county, and personal income per capita, which could impact the actual revenues of traffic citations. I attempted to address these concerns in this study.

Summary of Chapter 2 and Transition to Chapter 3

In this literature review, I provided an overview of RDTin relation to how governmental organizations obtain resources necessary for their continued survival. I provided evidence that RDT is contingent upon understanding the environment in which the organization operates and that all organizations are dependent upon their environments for resources. The criticality and scarcity of resources inevitably determine the dependence level of the organization on those resources. Furthermore, the types of relationships can also dictate how, and on what terms, the resources are acquired. Finally,

I showed that there is an element of internal stability that must be taken into consideration when analyzing the need for resources.

To date, academicians have indicated government organizations are facing increased budget cuts while being expected to maintain the same, or increased, levels of public services. In addition, many organizations are seeking to diversify their revenue sources to mitigate unexpected or unpredictable environmental changes. Unfortunately, many government organizations, such as the FCCC, do not have the authority to diversify their revenue streams outside of preprescribed legal mandates. Likewise, organizations are relying on slack, or rainy day funds, in order to offset budget deficits.

When slack is not enough to soften budget constraints local governments are resorting to cutback budgeting before attempting to increase revenues. Thus, government organizations are having to cut public services, terminate employees, eliminate employee benefits, or institute furloughs to ensure the expenditures side of the balanced budget equation matches, or is less than, the revenues side. In regards to raising revenues, some government organizations are seeking less traditional sources of revenue to decrease budget pitfalls.

One such example is the increase in the number of traffic citations issued by local governments. Researchers have identified a relationship between the issuance of traffic citations and local government fiscal health. In the wake of declining property tax revenues and a heightened sensitivity to increased tax initiatives, the issuance of traffic citations is being favored by local governments as an alternative source of revenue. Local law enforcement tends to issue increased numbers of traffic citations to non-residents,

potentially as a result of local unemployment rates and tourism. Lastly, researchers have found that there continues to be a debate between whether the primary objective of issuing traffic citations is revenue based, or as a result of public safety concerns.

Like any resource, the overreliance on revenues generated from traffic citations may create future financial hardships. While RDT scholars explore the overreliance on resources obtained through the formation of relationships with external organizations, they do not adequately address those relationships that are statutorily mandated. As I discussed in Chapter 1, the relationship between the FCCC and local law enforcement as it relates to the administration of traffic citations is statutorily created. Secondly, the FCCC does not have the authority to diversify their revenue streams outside of express or implied legal directives. To fully understand how to mitigate future reliance on external resources, including traffic citations, I first established the recognition of the reliance.

In other words, I aimed to determine what portion of the FCCC's budget is directly related to the issuance of traffic citations, considering the FCCC does not have the authority issue traffic citations. With this in mind, I also aimed to determine the dollar amount of revenues generated from the issuance of traffic citations for the FCCC. Concordantly, there are other factors to consider when determining the budgetary and revenue reliance by the FCCC. These included local unemployment rates, population size of the county, and personal income per capita as each could impact the percentage of the FCCC's budget dedicated to revenues from traffic citations and the actual revenue generated from the administration of traffic citations by the FCCC.

Therefore, in Chapter 3, I will establish the quantitative research plan dedicated to addressing the research questions that I summarized in Chapter 1 (they are expanded and fully explained in Chapter 3). In the methodology and research plan, I will outline the process to determine if a relationship existed between the independent variables (population size of the county, unemployment rate of the county, and the personal income per capita of the county) and the three dependent variables: the issuance of traffic citations, the revenues generated from traffic citations, and the percentage of the FCCC's budget derived from traffic citation revenues. In Chapter 3, I will also provide the quantitative methodology and research plan designed to extract a better understanding of the intricacies between the issuance of traffic citations and the FCCC.

Chapter 3: Research Method

Introduction

In Chapter 3, I will present the variables of the study including the independent (predictor) variables: local unemployment rate, population of the county, and personal income per capita (in dollars) of the county. Chapter 3 will also include a description of the three dependent variables: the number of traffic citations remitted to the FCCC during the decade 2005–2014, the actual revenues in dollars realized from the issuance of traffic citations by the FCCC during the decade 2005–2014, and the percentage of the budget of the FCCC attributable to traffic citations during the same time period. Concordantly, I will fully present the three research questions, discuss the rationale behind selecting the quantitative research method, and provide the benefits of using a correlational and multiple regression approach to resolve the issues presented in Chapters 1 and 2.

Next, I will discuss the population used in the study, the sampling and sampling strategies, instrumentation, procedures (including data storage, manipulation, coding, etc.), and statistical analyses. I will then discuss the internal and external threats to validity and the ethical strategies I used to reduce bias within the study. Afterwards, I will provide the statistical assumptions in detail, including the appropriate statistical tests necessary to determine whether any violations of assumptions might occur. Methods for overcoming violations will also be included. I addressed violations of the assumptions in further detail in Chapter 4.

I will then present the main analyses, including the methods for reporting the various statistical results. Ultimately, I used a summary table to report the findings of the

correlational analysis including Pearson's *r* for each of the independent variables. I will follow this with a presentation of the multiple regression analysis, which includes the unstandardized coefficients for each ß, including the corresponding confidence intervals, the unstandardized coefficients' standard error, standardized coefficients ß, and finally, the *p*-values. I will report these numbers for each of the independent predictor variables. Lastly, I will report the R^2 and ΔR^2 for each model used during the analysis.

Variables

Independent Variables

As I discussed in Chapter 1, the FCCC is a constitutionally-elected officer serving a 4-year term and who is the official record keeper of the judicial system (Art. V, § 16, Fla. Const.). Each FCCC must administer traffic citations upon remittal by law enforcement through final disposition of the citation per statutory law (§ 318.14, Fla. Stat. (2015).). The revenues gained from the administration of the citation are used to fund the FCCC's office and for budgetary purposes (316 Fla. Stat. § 001, et seq., 2015).

Independent Variable 1 was the estimated population of the sampled county during the decade of 2005–2014 (x_1). More specifically, each FCCC is responsible for the official record keeping and administration of traffic citations for their particular county (Art. V, § 16, Fla. Const.). There can only be one elected FCCC per county and FCCCs may not overlap in their jurisdictions (Art. V, § 16, Fla. Const.). In Florida, the populations of the counties range in size from 8,300 persons to well over 2.5 million persons . First, it is important to know whether the population of a county plays a role in the reliance on traffic citations for FCCC budgetary and revenues purpose. If so, it would

be important to know whether FCCCs servicing larger counties rely more on traffic citations than do their smaller counterparts and so on. To determine this, I divided the FCCCs into three groups: small populations (less than or equal to 40,000 persons), medium populations (40,001–249,999 persons), and large populations (greater than or equal to 250,000 persons).

Independent Variable 2 was the unemployment rate of the sampled county during the decade of 2005–2014 (x_2). The unemployment rate speaks directly to a county's fiscal health. In essence, I examined whether the unemployment rate relates to the budget and revenues of the FCCC. I anticipated those counties with higher unemployment rates would have an increased reliance on the revenues gained from traffic citations due to general economic stress associated with unemployment. I did not find a statistically significant correlation between unemployment rate (x_2) and revenues from traffic citations (Y_1;see Chapter 4).

Independent Variable 3 was the personal income per capita (in dollars) for the sampled county during the decade of 2005–2014 (x_3). I found that FCCC's that represented counties with the trifurcated higher household incomes were less reliant on revenues generated from traffic citations than those with lower household incomes. Counties with higher household incomes may have an increased ability to pay their traffic citations than their lower income counterparts.

Dependent Variables

There were also three dependent variables for this study. Dependent Variable 1 was the number of traffic citations remitted to the FCCC, based on the sampled FCCC,

during the calendar year for the decade of 2005–2014 (Y_1). The number of citations included citations for civil traffic violations (moving and nonmoving) and civil citations that are generally unclassified but subject to § 318.18, Fla. Stat. (2015). A decrease in the number of traffic citations may mean the FCCC is more reliant on the traffic citations, while an increase in the percentage may have the opposite effect. However, some FCCC offices were unable to delineate the revenues between civil and criminal citations due to internal accounting procedures. As a result, criminal violations are included in these sampling units. These offices represent less than 1% of the sample and the inclusion of criminal citations is negligible.

Dependent Variable 2 was the actual revenues (in dollars) realized from the issuance of traffic citations by the FCCC during the decade of 2005–2014 (Y_2). It is important to distinguish the difference between the first two dependent variables. For example, the number of traffic citations may be minimal, while the difference in revenues could be substantial. Secondly, there could be an increase in the number of traffic citations, while the revenues remain static. Therefore, a change in the number of traffic citations may not necessarily correlate with a change in the revenues and vice versa. Although closely related, the second dependent variable is also distinguishable from the third dependent variable.

Dependent Variable 3 was the percentage of the budget of the FCCC attributable to traffic citations (Y_3). It is important to note that the revenues associated with traffic citations may be different than the budgeted amount. I anticipated that the budgeted amount for traffic citations would be lower than the revenues associated with traffic

citations. The difference between the two amounts is subject to the Clerk of Court Trust Fund, and subsequently, the General Revenues for Florida (Florida CCOC, 2015). This knowledge may also help to understand the role of slack resources within the FCCC finances. Therefore, understanding the relationships between these variables is critical for public administrators to mitigate FCCCs' dependence on traffic citations as a source of revenue as well as for making responsible decisions related to strategic planning strategies.

Research Questions and Hypotheses Expanded

In this study, there were three linear regression research questions in total. I supported each of the three research questions with correlational questions. First, I conducted a correlational analysis between each independent variable and one of the dependent variables. I first analyzed the number of traffic citations issued as the first dependent variable. Once completed, I ran a multiple regression analysis to determine the predictiveness of each of the independent variables and the dependent variable. I conducted the second set of analyses in like manner with the exception that I replaced the first dependent variable with the second dependent variable: the actual revenues (in dollars) realized by the FCCC from traffic citations. I then analyzed the third set of questions in similar fashion and replaced the second dependent variable with the third dependent variable: the percentage of the budget (in dollars) of the FCCC attributable to traffic citations. The first research question focused on the dependent variable of the number of traffic citations remitted. The second research question focuses on the dependent variable revenue in dollars. The third research question focuses on the

dependent variable budget in dollars. Table 1 (in Chapter 1) provided a quick reference guide to the research questions.

The research questions and hypotheses that guided this study were as follows:

RQ1: Do the independent variables (estimated population, unemployment rate, and personal income per capita [in dollars]) predict, in a statistically significant manner, the dependent variable, the number of traffic citations remitted to the FCCCs during the decade of 2005–2014?

$H_0$1: The independent variables (estimated population, unemployment rate, and personal income per capita [in dollars]) predict, in a statistically significant manner, the dependent variable, the number of traffic citations remitted to the FCCCs, during the decade of 2005–2014, and all beta (β) coefficient values were not statistically significantly different from zero.

H_A1: The independent variables (estimated population, unemployment rate, and personal income per capita [in dollars]) predict, in a statistically significant manner, the dependent variable, the number of traffic citations remitted to the FCCCs during the decade of 2005–2014, and at least one beta (β) coefficient value was statistically significantly different from zero.

RQ2: Do the independent variables (estimated population, unemployment rate, and personal income per capita [in dollars]) predict, in a statistically significant manner, the dependent variable, the actual revenues (in dollars), realized by the FCCCs during the decade of 2005–2014?

$H_0$2: The independent variables (estimated population, unemployment rate, and personal income per capita [in dollars]) predict, in a statistically significant manner, the dependent variable, the actual revenues (in dollars), realized by the FCCCs during the decade 2005–2014, and all beta (β) coefficient values were not statistically significantly different from zero.

H_A2: The independent variables (estimated population, unemployment rate, and personal income per capita [in dollars]) predict, in a statistically significant manner, the dependent variable, the actual revenues (in dollars), realized by the FCCCs during the decade 2005–2014, and at least one beta (β) coefficient value was statistically significant different from zero.

RQ3: Do the independent variables (estimated population, unemployment, and personal income per capita [in dollars]) predict, in a statistically significant manner, the dependent variable, the percentage of the budget of the FCCCs attributable to traffic citations during the decade of 2005–2014?

$H_0$3: The independent variables (estimated population, unemployment, and personal income per capita [in dollars]) predict, in a statistically significant manner, the dependent variable, the percentage of the budget of the FCCCs attributable to traffic citations during the decade of 2005–2014, and all beta (β) coefficient values were not statistically significantly different from zero.

H_A3: The independent variables (estimated population, unemployment, and personal income per capita [in dollars]) predict, in a statistically significant manner, the dependent variable, the percentage of the budget of the FCCCs attributable to traffic

citations during the decade of 2005–2014, and at least one beta (β) coefficient value was statistically significantly different from zero.

Rationale for Selected Approach

Based on the research problem as well as the research questions and associated hypotheses, the most appropriate research method for this study was the quantitative approach. The quantitative approach focuses on analyzing empirical data (Frankfort-Nachmias & Nachmias, 2008; Frankfort-Nachmias, Nachmias, & DeWaard, 2015). The research questions do not necessitate the gathering of personal observations, conducting interviews, completing case studies, or a general desire to understand the meaning people have constructed in association with the factors influencing the FCCC's budget and revenues. The qualitative approach to research was not appropriate to this study as it typically includes these attributes.

Moreover, one of the main aspects of qualitative studies is the ability of the researcher to interact with live participants, which was absent in this study. In this study, I centered my focus on the collection of traffic citation data, population statistics, unemployment rate statistics, personal income per capita statistics, FCCC budgetary data, and FCCC revenue data. Each of these variables was easily measured and calculated using an empirical approach while maintaining objectivity. Conversely, the qualitative approach, due to the level of interaction by the researcher, is typically subjective in nature, whereas this study required an objective analysis (Creswell, 2013). Finally, Garrett and Wagner (2009) first mentioned the need for quantitative studies related to traffic citations and revenue generation.

There are many who select the methodology used in the experiment prior to the drafting of the research questions. In such cases, the researcher inappropriately manipulates the research questions to ensure a proper fit with the predetermined methodology. In like sense, the problem statement and purpose of the study compliment the research questions. However, in this study, I built upon the drafting of the research questions that revealed the appropriate methodology as the quantitative approach (Simon, 2011). In sum, the quantitative approach was the most appropriate method to adequately answer the research questions and hypotheses and address the previously identified gaps in the extant literature. This study was retrospective and longitudinal over the decade of 2005–2014, as I discussed in Chapter 1.

Research Design and Method

Traditional true experimental research designs require the manipulation of independent variable(s) by the researcher to the experimental/intervention group to observe the effect of the changes on the group while controlling for the same (Campbell & Stanley, 1963). I could not manipulate the variables in this study rendering Campbell and Stanley's (1963) true experimental designs moot. Instead, I employed a quasi-experimental correlational design followed by a multiple linear regression design. The correlational design is most appropriate when determining the relationship between a single independent variable against a single dependent variable (Field, 2013).

I used a multiple linear regression design after determining the relationship between each of the independent variables and the dependent variables. According to Frankfort-Nachmias and Nachmias (2008) and Frankfort-Nachmias et al. (2015), the

multiple regression analysis is an extension of simple linear regression or bivariate regression. In other words, instead of measuring the degree of predictability between one independent variable and one dependent variable, multiple regression measures two or more independent variables on the dependent variable. O'Sullivan, Rassel, and Berner (2008) stated the most common format for the multiple regression equation is:

$$Y = a + \beta_1 x_1 + \beta_2 x_2 + \ldots + \beta_n x_n + \varepsilon$$

where:

Y = dependent variable

a = constant

β_1 = regression coefficient for x_1 associated with Y

x_1 = independent variable x_1

β_2 = regression coefficient for x_2 associated with Y

x_2 = independent variable x_2

n = additional numbers as needed

ε = model deviations

Field (2013) contended multiple regression is appropriate where the independent and dependent variables can be measured on a continuous scale. The independent and dependent variables in this study were measured on a continuous scale making multiple regression the most appropriate design. Additionally, each of the correlational research questions and hypotheses seeks to establish the existence of a relationship between the independent and dependent variable before the regression equation is considered.

Therefore, the research questions and hypotheses dictate the need for correlational and multiple regression analysis.

One of the challenges associated with multiple regression is the time required to effectuate a reliable and valid study (Field, 2013). In essence, the addition of multiple independent variables requires more complex statistical equations leaving more room for mathematical and other errors and biases. On the other hand, multiple regression is the most appropriate design to advance knowledge in the discipline. As Field (2013), Frankfort-Nachmias and Nachmias (2008), and Frankfort-Nachmias et al. (2015) indicated, very rarely will a real world situation involve only one dependent variable and one independent variable. Therefore, the multiple regression design, is the most optimal design to advance our understanding of the determinants of traffic citation revenues on the FCCC's budget and revenues.

Population

The population of this study is known and is static. The state of Florida is divided into 67 counties (Florida CCOC, 2015). Art. V, § 16, Fla. Const. states there shall be a Clerk of Circuit Court for each county. Therefore, the population of this study included the 67 constitutionally-elected FCCCs.

Sampling and Sampling Strategy

Of the sampling designs discussed by Frankfort-Nachmias and Nachmias (2008) and Frankfort-Nachmias et al. (2015), the proportionate stratified random sampling technique appeared to be most useful for this study. Frankfort-Nachmias and Nachmias stated stratified sampling techniques are useful in studies where the scholar-practitioner

wants to ensure that every sampling unit is representative of the entire population. For example, the 67 FCCC offices represent populations that range anywhere from 8,300 persons per county to well over 2.5 million persons (which I broke into three groups [strata]: small, medium, and large).

Furthermore, this extreme range in population sizes also means there are large differences in the size of the FCCC offices. For example, there are FCCC offices with only 15 staff members while others have well over several thousand. Thus, to get an accurate representation of the population, I drew sampling units from FCCC offices that represent small, medium, and large populations. As a result, I divided the FCCC offices into three strata prior to selection of the sampling units: small populations (less than or equal to 40,000 persons), medium populations (40,001 249,999 persons), and large populations (greater than or equal to 250,000 persons). I averaged the populations by county for the decade 2005 2014 for placement in the strata. Since I cannot divide the 67 FCCC offices evenly into three groups, one of the groups had 23 potential sampling units while the other two groups had 22 potential sampling units. Based on population sizes, the small group had 23 potential sampling units. Because in this study I focused on the FCCC's offices only FCCC offices are eligible for selection.

Rudestam and Newton (2014), however, warned dissertation students from under powering their sample sizes resulting in a sample size too small to produce any meaningful results (p. 105). To account for this, Frankfort-Nachmias and Nachmias (2008), and Frankfort-Nachmias et al. (2015) indicated there are several types of sampling techniques to ensure the quantitative study meets to power requirements of

Rudestam and Newton. The most notable method for determining sample size is through the use of the software program G*Power. Using three predictors (independent variables), the desired power of .80, a large effect size of .35, and an α error probability of .05, G*Power calculates the required sample size at 36 samples which is shown in Figure 1. I uploaded the collected data into IBM's Statistical Package for the Social Science Statistics (SPSS) version 21.0.0.0 for ease of analysis and data organization.

The population difference between the FCCC offices requires further alignment of the calculated sample size of 36. As discussed above, the sample size must be broken down into three, evenly divided, groups: small, medium, and large. Thirty-six samples reveal each group had at least 12 sampling units.

Next, I coded the FCCC offices for sample selection and anonymity. Starting with the small group, and in alphabetical order, I gave each FCCC office a three digit number beginning with 101 and continuing until all the FCCC offices designated in the small group are assigned a three digit number. I recorded the final number. Then, I used the random digit table suggested by Frankfort-Nachmias et al. (2015) to select the 12 sampling units for the small group (p. 439). I began with column seven and using the last three digits in the column, selected the first 12 sampling units which fall within the range of 101 and the final sampling unit number (123). I repeated this process for the medium and large groups beginning with the three digit code 201 for medium size counties and 301 for large size counties to aid in quickly identifying the differing population sizes of the counties and their respective groups.

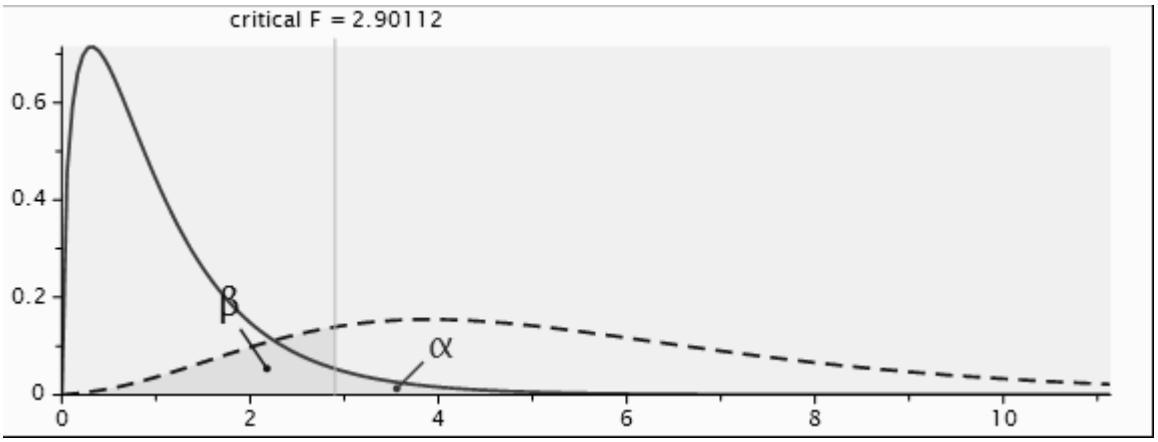

Figure 1. Required sample size. Adapted from "Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses," by Faul, Erdfelder, Buchner, and Lang, 2009, *Behavior Research Methods*, *41*, 1149-1160.

Instrumentation

The data used in this study was secondary, or archival, data and the need for an instrument is limited. The data related to the number of traffic citations issued, unemployment rates, personal income per capita rates, and population sizes can be easily downloaded from various government sponsored and maintained websites. The information related to FCCC traffic citation revenues, FCCC total revenues, FCCC annual budget, and FCCC annual budget dedicated to traffic citations were obtained directly from each FCCC.

Pursuant to Chapter 119 of the Florida Statutes, this information is considered to be public records. Unfortunately, not all of the FCCC offices publish this information in an electronic format which can be easily downloaded by the general public. Therefore, I

submitted a public records request in order to properly acquire this information. A copy of my letter sent to each FCCC office in order to obtain the necessary information is found in Appendix A.

Procedures

Critical to the success of this empirical study was the ability to collect the data in a timely fashion. After I selected the sampling units, I needed to recruit the individual FCCC offices for participation in the study. Since the FCCC office is a governmental organization, I acquired the information needed for this study through public records requests. This request does not interfere with any one person's rights. As discussed in the previous section, a cover letter addressed to the FCCC office is required to explain the study and how the results can potentially impact their organization.

This request included a notation ensuring the FCCC office of participant anonymity. Additional conversations and explanations were required with some of the FCCC offices to ensure the data they collected for submission met the needs of this study. I took into consideration and accounted for and any issues of concern noted by the FCCCs. I used the drafted public records request document found in the Appendix A to gain access to the required FCCC information.

Regarding the collection of traffic citation data, this data was readily available on the FDHSMV websites in .pdf (Adobe Acrobat) and .xls (Microsoft Excel) spreadsheet formats. I obtained traffic citation numbers for the years 2005 2010 on the website for FDHSMV (2010), which is in a .pdf format and required me to manually transfer the data into an .xls spreadsheet while I found citation numbers for the years 2011 2014 on

FDHSMV (2015), which is available in an .xls spreadsheet format. I electronically downloaded the unemployment from the U.S. Department of Labor, Bureau of Labor Statistics, Local Area Unemployment Statistics. This information includes county data by year beginning in 1990 2014 and is available in an .xls spreadsheet format. This data was within the specified range for this study.

I electronically downloaded the population estimates and personal income per capita data by county from the U.S. Department of Commerce, Bureau of Economic Analysis. This information includes county data by year beginning in 1969 2014 and is available in an .xls spreadsheet format. These data were within the specified range for this study. In the following section, I will discuss the procedures for imputing the data into SPSS.

Statistical Analysis

In this study, I used the computer programs SPSS and Microsoft Excel version 14.0.7153.5000 (Excel). These programs are designed to arrange, enter, calculate, and analyze data using a series of rows and columns. Upon collection, I entered or transferred the data into the Excel program for data editing and data cleaning. Frankfort-Nachmias and Nachmias (2008) and Frankfort-Nachmias et al. (2015) contended data editing is checking the data for errors and omissions. Missing data could skew the *p*-values and inadvertently lead me to rely on unreliable data. Field (2013) noted replacing data, depending on the sample size, could lead to significant results directly related to data replacement as opposed to the genuine effect (p. 333). Thus, data editing is important to ensure all of the data from each of the sampling units has been entered accurately into the

Excel program. I double entered each of the manual entries and compared the two datasets to check for data entry errors.

Data cleaning, a concept closely related to data editing, is the process by which the data is corrected to resolve any inconsistent codes (Creswell, 2013). For example, a study involving smokers and nonsmokers codes the *smokers* with "1" and the *non-smokers* with "2." The presence of a non-smoker entry coded as "1" will need to be corrected to a "2." Furthermore, samples that did not provide an answer to a specific question need to be coded to represent the sample did not provide an answer. A zero is statistically different than a nonanswer. For this study, all non-answers, missing data, or other data errors is coded as "99." I coded data which I cannot calculate because of an error in another column as "98."

As previously stated, I first entered all of the data into the Excel program. The first column included the name of the county the FCCC office represents. The second column was the case identification number assigned to each data point. I started with the number 1001 and concluded with 1390. The third column was the county identification number based on population. I coded the sample group in the following fashion: "101-123" for *small* counties, "201222" for *medium* counties, and "301322 for *large* counties. The fourth column was the sample group size (i.e., small, medium, or large). I coded the sample group size in the following fashion: "1" for small group, "2" for medium group, and "3" for large group.

I coded the fifth column as "2005 2014" for the year the data is related to. The sixth column was the population size of the county for the year stated in the second

column. The seventh column was the unemployment rate for the county for the year stated in the second column. The eighth column was the personal income per capita for the county. The ninth column was the number of traffic citations issued for the county. The 10th column was the total revenues realized by the FCCC office. In the 11th column, I inserted the total revenues realized by traffic citations. The 12th column was the percentage of revenues from traffic citations. For the 13th column, I imputed thetotal budget (in dollars) for the FCCC office. The 14th column was the budget (in dollars) associated with traffic citations. Likewise, the 15th column was the percentage of the budget associated with traffic citations.

The remaining columns I coded after I began working through the statistical assumptions that I will discuss further in Chapter 4. I coded the 16th column as the natural log of population. The 17th column was the natural log of unemployment rate. The 18th column was the natural log of per capita personal income. The 19th column was the natural log of the number of citations issued. The 20th column was the natural log of the revenues associated from traffic citations. The 21st column was the natural log of the budget associated with traffic citations. Finally, the 22nd column was Cook's distance. It is important to note each row corresponds to the county listed in the first column. I used the codebook in Appendix B to organize the data.

Threats to Validity

With any empirically based study, there are errors which may jeopardize the statistical outcomes and alter the results of the analyses. These errors are known as threats to validity and can either be internal, external, or both. According to Frankfort-

Nachmias and Nachmias (2008), and Frankfort-Nachmias et al. (2015), validity is rooted with the question "am I measuring what I intended to measure?" (p. 149). In other words, threats to validity call into doubt whether the research can reasonably conclude the predictor variables are influencing the outcome variables and not as a result of some other factor (Creswell, 2013). In the following subsections, I discuss the threats to external and internal validity as they relate to multiple linear regression analyses.

External

In a multiple linear regression analysis, the major threat to external validity is the inability to generalize the results to the remainder of the population (Field, 2013). Additionally, external validity includes the ability to generalize the results to populations that are akin to the current population. For example, external validity would mean the results of this study can be generalized to the remaining FCCC in Florida and similarly situated offices in other jurisdictions (O'Sullivan et al., 2008).

The most notable threat to external validity for this study is jurisdiction. I anticipated the results of this study to have the ability to be generalized to the remainder of the FCCC offices not included in the study but the same cannot be accurately said about similarly situated offices beyond Florida's borders with any degree of confidence. More specifically, it is beyond the scope of this study to analyze the funding processes of FCCCs in jurisdictions outside of Florida which may be funded in an entirely different manner. To overcome this threat to validity, the results should only be generalized to those jurisdictions similar in legal construct to the FCCC. As I will discuss further in

Chapter 5, the model I used in the study can be generalized to the remainder of the population.

Internal

The second threat to validity are the internal threats. An internal threat to validity is a plausible alternative explanation for the relationship between the independent and dependent variables (O'Sullivan et al., 2008). It is something beyond the independent variable(s) which has caused a change in the dependent variable which has not attributable to the independent variable(s). Secondly, Frankfort-Nachmias et al. (2015) note empirical and construct validity can influence the hypotheses if not properly accounted for by the researcher. Empirical validity mandates the measuring instrument is valid to demonstrate a strong relationship between the results it predicts and the results it obtains when measuring similarly related variables (Frankfort-Nachmias et al., 2015). Comparing instruments account for this type of validity. Likewise, construct validity is established when the measuring instrument can be related to the general theoretical framework (Frankfort-Nachmias et al., 2015). Therefore, I accounted for these types of validity during this study.

Ethical Procedures

In this study I used secondary data obtained from government resources. There were no human participants which eliminated any ethical concerns regarding human participation in this study. Secondly, the data used can be easily obtained through normal public records requests and does not contain any confidential or sensitive material. Lastly, Walden University's Institutional Review Board (IRB) reviewed this study to

ensure the study complied with ethical and social considerations prior to the collection of the data. Therefore, no additional protective measures needed to be considered for this study.

Statistical Assumptions

One of the issues of concern for a scholar-practitioner is controlling for bias. Essentially, bias inhibits the objectivity of the analysis. Put another way, the evaluation of data is conducted in a manner which lacks objectivity giving rise to the possibility there are other things which are influencing the conclusions (Field, 2013). One of the ways to control for bias is through identification of outliers and the testing of assumptions.

An outlier is a score which is extremely different from the remainder of the data while assumptions are conditions which ensure what are measuring is being measured akin to that of threats to internal validity (Field, 2013). If the assumptions are tested and it is determined they are untrue, they are considered to be violations, or violations of assumptions. Violations of assumptions can lead to inaccurate test statistics and *p*-values causing academicians to rely on results which in all likelihood, are inaccurate (Field, 2013). I tested these assumptions before I addressed the research questions.. Including the test for outlier, multiple linear regression has eight assumptions which must be tested: dependent variable, independent variable, independence of observations, linear relationship, homoscedasticity, multicollinearity, no significant outliers, and residuals. I discussed each assumption test below but I did not conduct the test until after the data collection phase.

Dependent Variable

To be measured correctly in a multilinear regression analysis, the dependent variable must be measured on a continuous scale at either the interval or ratio level. Examples of this are the measurement of time, exam scores, body weight, and annual salary. I anticipated I could measure the dependent variables in this study on a continuous scale.

Independent Variable

Like the dependent variable, the independent variable in a multilinear regression analysis must be measured on a continuous scale at the interval or ratio levels. If either of the variables, dependent or independent, are measured at the ordinal or nominal levels, the analysis must be conducted using a different statistical test, such as ordinal regression or as a moderated analysis. I anticipated I could measure the independent variables in this study on a continuous scale.

Independence of Observations

Field (2013) contended for any two observations the residuals should be uncorrelated meaning the errors in the model are independent of one another (p. 311). For example, if the observations somehow interact with each other there is not an independence of observations. Field used the photograph and the interaction between two participants to illustrate this point. Violations of this assumption cause the confidence intervals and significance tests to be invalid (Field, 2013). Concordantly, Field contended the Durbin-Watson test can test for independence of observations. Field argued a Durbin-

Watson score less than 1 or greater than 3 is cause for concern. Furthermore, Field argued the closer the score is to 2, the better the assumption has been met.

Linear Relationship

The assumption of additivity and linearity means the dependent variable(s) is linearly related to the independent variables. In other words, the relationship between the dependent variable and the independent variable can be viewed as a straight line (Field, 2013). Each of the independent variables must be compared against the dependent variable and then the same analysis is conducted using the collective of independent variables. According to Field (2013), scatterplots and partial regression plots can be visually inspected to determine the existence of a linear relationship. Lastly, Field argued this assumption is the most important because if the assumption is violated, the model is invalid rendering the remainder of the assumptions as moot.

Homoscedasticity

Homoscedasticity, or homogeneity of variance, means the samples come from a population with the same variance (Field, 2013). At each point along the regression line the spread of scores around the mean are roughly the same. Should the spread of the scores be significantly different from one point to another, it is known as heteroscedasticity or heterogeneity of variance (Field, 2013). As a result, unequal variance creates bias and inconsistency within the statistical results.

Multicollinearity

Multicollinearity exists when there is a strong correlation between two or more independent, or predictor, variables (Field, 2013). A high degree of correlation between

independent variables makes it nearly impossible to determine which independent variable is influencing the dependent variable. Field (2013) suggested using a correlation matrix of the predictor variables where a score of .80 or .90 is considered strongly correlated. Furthermore, Field argued the variance inflation factor (VIF) and tolerance statistic can be used to indicate the relationship between predictor variables. VIF values greater than 10 are cause for concern and if the average VIF value is substantially greater than 1 then the regression may be biased (Field, 2013). Likewise, tolerance levels below .01 indicate a serious problem while levels below a .02 indicate a potential problem (Field, 2013).

No Significant Outliers

An outlier is a data score which is very different from the remainder of the scores implying the score deviates significantly from the mean of the scores. The inclusion of outliers in the analysis can ultimately bias the estimates of parameters skewing the remainder of the statistical analysis (Field, 2013). A simple boxplot using the data revealed the existence of outliers via the symbol (*). This symbol allowed me to easily identify the outlier and take correct the data as needed, such as Winsorizing, trimming the data, bootstrapping, or transforming the data, to allow the distribution of the scores to return to normal (Field, 2013).

Residuals

This assumption is also known as the assumption of normality. Field (2013) introduced three key concepts to ensuring data meets this assumption. The first is the confidence intervals around a parameter estimate must come from a normal distribution.

Secondly, Field argued the sampling distribution being tested must come from a normal distribution and third, the residuals in the population must come from a normal distribution to ensure the parameters of the model are optimal (p. 169). I used a normal probability-probability plot of regression to determine whether this is a violation of this assumption (p. 179). Lastly, I used Cook's distance to measure the overall influence of a single case on the model (p. 306). Field contended values greater than 1 may be cause for concern.

Summary of Chapter 3 and Transition to Chapter 4

In Chapter 3, I presented a brief restatement of the purpose and problem I attempted to address in this study. The independent (predictor) variables were introduced and include: the number of traffic citations issued (x_1), local unemployment rate, population of the county (x_2), and personal income per capita of the county (x_3), and their relationships to each of the three dependent variables: the number of traffic citations issued (Y_1), the percentage of the FCCC's budget associated with traffic citations on a yearly basis (Y_2) and the actual revenues realized from the issuance of traffic citations by the FCCC (Y_3), during the decade of 2005 2014. Following the introduction of the variables, I fully stated the research questions I summarized in Chapter 1 to add clarity and readability to this chapter.

Following the research questions, I discussed the rational for the quantitative approach including the overall design of the study. Next, I discussed the population of the study, the sampling and sampling techniques followed by a brief overview of the instrumentation, procedures, and statistical analysis. Afterwards, I discussed how I used

the software programs of Excel and SPSS to categorize and analyze the data which I collected electronically. I also discussed the threats to validity, both internal and external, including measures I took to overcome these threats. I then discussed the ethical procedures noting the lack of human participants in this study prevents any potential ethical violations involving human participants.

I followed the discussion on ethical procedures with a detailed description of the statistical assumptions of a multiple linear regression and the different statistical tests I used to meet all of the statistical assumptions. In Chapter 4, I will follow a similar format as Chapter 3 but report the results of the tests I discussed in Chapter 3, including any additional tests made necessary by violations of the assumptions or any other violation which could alter the outcome of the results or challenge this study's credibility, reliability, or validity. Lastly, in Chapter 5 I will discuss the interpretations of the findings and proffer recommendations.

Chapter 4: Results

Introduction

In Chapter 4, I will present the results of this study, including the statistical assumptions, descriptive analysis, correlational analysis, and multiple linear regression analysis for each of the three RQs. The crux of this quantitative study was threefold: (a) to determine the demographic factors (unemployment rate, personal income per capita, and estimated population size of the county) that influence the issuance of traffic citations; (b) to determine the demographic factors that influence the dollar amount of actual revenues generated by the issuance of traffic citations for the FCCC; and (c) to determine the demographic factors that influence the percentage of the FCCC budget attributable to traffic citations. To accomplish these purposes, I asked three regression RQs supported by correlational questions in this study. The RQs were as follows:

RQ1: Do the independent variables (estimated population, unemployment rate, and personal income per capita [in dollars]) predict, in a statistically significant manner, the dependent variable, the number of traffic citations remitted to the FCCCs during the decade of 2005–2014?

RQ2: Do the independent variables (estimated population, unemployment rate, and personal income per capita [in dollars]) predict, in a statistically significant manner, the dependent variable, the actual revenues (in dollars) realized by the FCCCs during the decade of 2005–2014?

RQ3: Do the independent variables (estimated population, unemployment, and personal income per capita [in dollars]) predict, in a statistically significant

manner, the dependent variable, the percentage of the budget of the FCCCs attributable to traffic citations during the decade of 2005–2014?

To comprehensively organize and analyze these three questions, I divided Chapter 4 into four main sections: Introduction, Data Collection, Results, and Summary of Chapter 4 and Transition to Chapter 5. In the introduction, I will provide a brief overview of the organization of Chapter 4, while in the Data Collection section, I will illustrate the procedures used in the collection of the data in this study. More specifically, the Data Collection section includes minor changes to the sampling strategy, issues encountered during data collection, and any other noteworthy event(s) during the data collection process.

Unlike the other three sections, I divided the Results section into three subsections. I dedicated each subsection to one of the RQs and organized the subsections in the order they appear as in a RQ (i.e., traffic citation results, revenue results, and budget results). Each subsection will begin with an analysis of the statistical assumptions followed by the correlational analysis. After I present the results of the correlational analysis, I will present the results of the multiple linear regression analysis. I organize and present the results in the same fashion for all three subsections. In the last section of the chapter, I will recap the results of Chapter 4 and briefly preview Chapter 5.

Data Collection

I electronically downloaded the required data once the Walden University IRB issued approval to continue with the study. Walden University IRB issued approval number 0620160374269 for this study. I electronically downloaded the traffic citation

data from the FDHSMV websites in .pdf (Adobe Acrobat) and .xls (Microsoft Excel) spreadsheet formats. I obtained traffic citation numbers for the years 2005–2010 on the website FDHSMV (2010) which was in a .pdf format. I manually transferred the data into an .xls spreadsheet twice to ensure for data entry accuracy. I found citation data for the years 2011–2014 on FDHSMV (2015), which was available in an .xls spreadsheet format. I electronically downloaded the unemployment data from the U.S. Department of Labor, Bureau of Labor Statistics's Local Area Unemployment Statistics.

Moreover, I electronically downloaded the population estimates and personal income per capita data by county from the U.S. Department of Commerce, Bureau of Economic Analysis. The process of downloading the traffic citation, unemployment rate, population estimates, and personal income per capita encompassed the better part of a day. I then uploaded the downloaded data into an .xls spreadsheet titled, "Data Entry," which I used to clean and scrub the data for errors, missing content, and any other issues which would threaten validity. I entered the data following the codebook found in Appendix B. The process of uploading the electronic data into the "Data Entry" spreadsheet took approximately 12 hours to complete.

Next, I sent out the public records requests to obtain the revenues and budgetary information from the FCCC offices selected in the sampling process. Each office received a letter from me informing them of the study and a template in which they used to fill in the required information. I initially sent 40 requests to the FCCC offices and most acknowledged receipt of the request within the first week of mailing. This number

is higher than the required 36 sampling units for the power requirements that I discussed in Chapter 3. I took into consideration some FCCC offices may be nonresponsive.

Ultimately, I listed six of the FCCC offices as nonresponsive in the first mailing. It is unclear whether these offices received the public records request or not. Furthermore, the postal service returned one of the requests as undeliverable because of a incorrect address. Five offices responded to my request but were either unable to gather the data or were unable to provide the data prior to the analysis.

Most of the FCCC offices were able to provide the requested data within 5 weeks of the original mailing date. Due to the offices listed as nonresponsive, the returned mail, and the offices which were unable to comply with my request, I selected an additional five sampling units per strata to ensure this study met the appropriate sample size and power. The sampling strategy matched the original sampling strategy with the exception that instead of using the last three digits in the column of the random digit table I used the first three digits. I selected a total of 15 sampling units and mailed public records requests to each of the sampling units.

Of the 15 sampling units, I listed three sampling units as nonresponsive and the postal service returned one indicating the postal service was unable to deliver the request because of a shortage of postage on the envelope. Most of the FCCC offices acknowledged receipt of the records request within 7 days of the mailing date and provided the requested information within 4 weeks of the mailing date. I completed the collection of data approximately 6 weeks after the mailing date of the original public records request. In total, 39 of the 67 FCCC offices (58%) are included in this study. The

inclusion of three additional sampling units increased the power of this study to .85 instead of the original power of .80, which I illustrate in Figure 2. Using 10 years' worth of data from each of the 39 FCCC offices provided me with 390 individual cases. To quickly identify cases, I assigned each case a unique Case ID number beginning with the first case entered as 1001and ending with the last case entered as 1390.

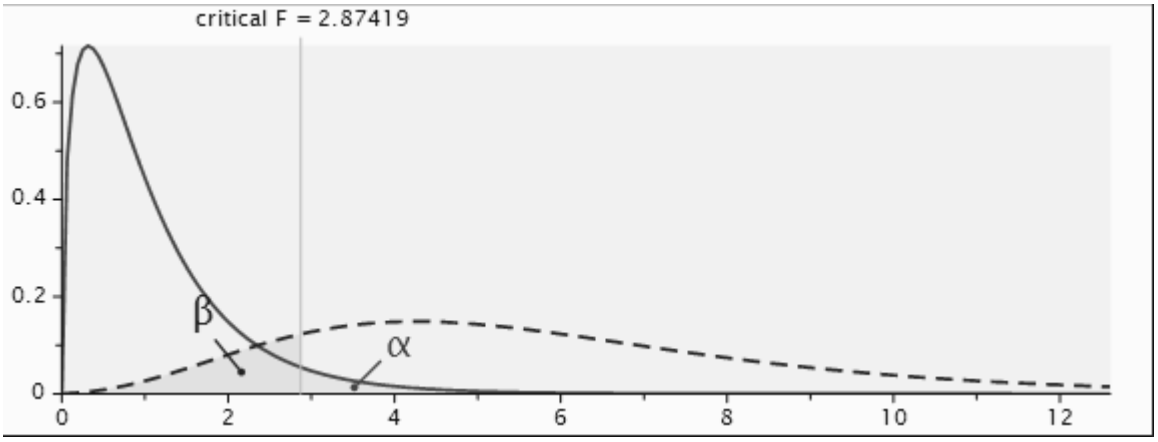

Figure 2. Adjusted sample size. Adapted from "Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses," by Faul, Erdfelder, Buchner, and Lang, 2009, *Behavior Research Methods*, *41*, 1149-1160.

I entered the data from the public records requests into the "Data Entry" spreadsheet when the data arrived either through the self-addressed return envelope or through my University e-mail account. Most of the FCCC offices preferred communication and submission of data through e-mail. Thirty-two of the FCCC offices electronically returned the requested data to me in either an .xls or .pdf format. The FCCC offices that submitted the data in an .xls format matched, or very nearly matched,

the format provided to them in the public records request. The data electronically returned to me in a .pdf format also matched, or very nearly matched, the format provided to them in the public records request. There were, however, two submissions in .pdf format that were financial reports which contained the information I needed. This required me to read through the reports and glean the appropriate data for the study and transpose that data into an .xls format ease of use.

Four of the FCCC offices submitted the requested data through the postal service in a hard copy format or on the body of an e-mail. Additionally, three FCCC offices directed me to their government maintained website which contained all or parts of the requested data. Two of these three offices provided me with the data that were not available on their website, while the third did not. Eight of the FCCC offices required me to pay an administrative fee before releasing the requested data due to the voluminous request and time spent researching the request. These fees ranged from $37.50 to $200.00 and I paid using personal funds. Lastly, some of the FCCC offices reported their data using decimals. I used standard rounding procedures to make the numbers whole.

Through the course of the public records requests, I received responses from some of the FCCC offices requesting clarification of my request, informing me of the difficulty in obtaining the requested data, or in general connection to the way the FCCC offices are funded. For example, I clarified that my public records request concerned only the court side budget of the FCCC and not the comptroller side. Moreover, some of the FCCC offices were not able to gather the requested information due to changes in their internal programming or accounting methodology.

Most notably, the changes to Art. V, Fla. Const. in 2004 shifted the burden of funding the FCCC offices from the counties to the state. This transition required a different accounting methodology and the FCCC offices could no longer obtain some of the data I requested for the year of 2005. I coded the lack of information in 2005 as missing data. Furthermore, at the beginning of the Great Recession of 2008 through 2010, many of the sampling units indicated they relied on the Trust Fund for the funds they required to operate their office. As such, these FCCC offices reported no revenues for this time period. The FCCC's remitted all "revenues" back to the Trust Fund. I coded the lack of information during these years as missing data. Concordantly, some of the FCCC offices could not provide portions of the requested data due to its location in off-site storage and the general costs and time associated with retrieving the data would be great. I coded the information during these year(s) as missing data.

Four of the FCCC offices indicated that they did not divide their traffic division into a criminal and civil division for accounting purposes. As such, these offices included criminal citations into their reported numbers. The inclusion of the criminal citations for these four offices is minimal. Additionally, during the records request, I learned the FCCC offices switched from county fiscal year to state fiscal year. A few years later, the FCCCs converted back to the county fiscal year. Thus, the information reported to me by the FCCCs for the 2013 year is broken down into 3-month and 9-month periods, as this year covered the conversion back to a county fiscal year. While this division could impact a study focusing solely on 2009 and 2013 it had no effect on this study as this study focuses on a decade's worth of data. In sum, the total amount of time that lapsed

between the original request for data and the last FCCC office to submit data was approximately 6 weeks.

Main Analysis

I first tested the statistical assumptions before I moved on to the remainder of the multiple regression analysis. This must be done prior to the main analysis in order to identify any potential biases in the data, the model, or the design (Field, 2013). After I tested the assumptions and resolved any issues, I conducted a correlational analysis to determine the correlation coefficient. The correlation coefficient is the measure of association for interval-level data (O'Sullivan et al., 2008). This can be measured using Pearson's *r*. The *r* score must fall somewhere between 1.00 and -1.00. An $0.00 < r$ score ≤ 1.00 indicates a direct positive relationship and $0.00 > r$ score ≤ -1.00 indicates a direct inverse relationship (Field, 2013; O'Sullivan et al., 2008).

I used summary tables to report the findings of the correlational analysis including Pearson's *r* for each of the independent variables (See Tables 2, 4, and 6). After Pearson's *r* was calculated, I determined the method of regression. I used hierarchical regression, or blockwise entry, to determine whether the addition of independent variables improved the model. I did not consider stepwise regressions for this study due to the negative consensus among statisticians (Field, 2013). Since this study had not been previously conducted, I used the *r* values to determine which independent variables were placed into the model first. The highest *r* value was placed first and continue in descending order until all the variables were entered. I anticipated the estimated

population size had the highest *r* value and would be placed in the model first. I confirmed this anticipation in Chapter 4.

Table 2

Correlation Coefficient for Traffic Citations

Variable	Pearson's *r* [CI]	Sig. (two-tailed)	*N*
Estimated Population (x_1)	.965 [.959, .972]	.000	361
Personal Income Per Capita (x_2)	.636 [.577, .694]	.000	361
Unemployment Rate (x_3)	-.062 [-.165, .042]	.238	361

Table 4

Correlation Coefficient for Traffic Citation Revenues

Variable	Pearson's *r*	Sig. (2-tailed)	*N*
Estimated Population (x_1)	.958 [.949, .966]	.000	306
Personal Income Per Capita (x_2)	.682 [.630, .738]	.000	306
Unemployment Rate (x_3)	.061 [-.053, .161]	.291	306

Table 6

Correlation Coefficient for Traffic Citation Budget

Variable	Pearson's *r*	Sig. (2-tailed)	*N*
Estimated Population (x_1)	.938 [.924, .950]	.000	321
Personal Income Per Capita (x_2)	.690 [.636, .740]	.000	321
Unemployment Rate (x_3)	.040 [-.067, .143]	.480	321

I reran the model after each independent variable was added. In essence, I looked for increases in R^2 which indicates a better fit or improvement in the model from the previous one. I used the newer models so long as each independent variable increased R^2. Furthermore, the adjusted R^2 informed me how well the model generalizes. In other words, the closer the adjusted R^2 is to R^2, the better the model generalizes.

I began the regression analysis by selecting various statistics options in SPSS. The dialog box for SPSS allowed me to select various options related to the selected model. For the purposes of this study, I followed Field's (2013) recommendations and selected estimates, confidence intervals (95%), model fit, R squared change (ΔR^2), descriptives, part and partial correlations, collinearity diagnostics, Durbin-Watson, and casewise diagnostics (with outliers set outside of three standard deviations). I set the analysis to run allowing SPSS to run a series of complex mathematical equations to determine the ß coefficient value for each of our predictor variables.

In order to determine whether the ß coefficient value differs significantly from zero and contributes to the model I examined the significance value associated with the *t*-test. If the significance value (*p*) is less than or equal to .05 than the ß coefficient value is statistically significant (Field, 2013). Field also argued the lower the significance value and the higher the *t*-value the greater the contribution of that predictor in the model. I used this information to answer the regression questions. At this point, I used a concise summary table to report the data including the ß coefficient values and their respective confidence intervals, standardized coefficient, *t*-value, and significance. Once completed, I ran the same analysis for the second and third sets of correlation and regression questions.

I began the multiple regression analysis after I selected the appropriate model which was Model 2 for each of the research questions. I completed most of this analysis during the model selection stages through the use of SPSS's descriptive statistics functions. The Model Summary output is the most useful in determining which predictor variable(s) contributed the most to the budget and revenues of the FCCC. I anticipated using three models, adding a predictor variable to each model so the Model Summary would have three different models. Finding the ΔR^2 of each model revealed the percentage the additional predictor variable accounts for the variation in the model. Ultimately, I used summary tables to report the findings of the multiple regression analysis. See Tables 3, 5, and 7. This summary table includes the unstandardized coefficients for ß including the corresponding confidence intervals, the unstandardized coefficients standard error, standardized coefficients ß, and finally the *p*-value. I reported

these numbers for each of the predictor variables in both regressions (using both dependent variables as described earlier). Lastly, I reported the R^2 and ΔR^2 for each model used during the analysis including correlational data.

Table 3

Regression for Log Transformed Traffic Citations

	b	*SE b*	ß	*p*
Model 1				
Constant	-2.16 (-2.50, -1.82)	.17		$p < .000$
Population (x_1)	1.04 (1.00, 1.07)	.02	.97	$p < .000$
Model 2				
Constant	2.67 (.57, 4.78)	1.07		$p = .013$
Population (x_1)	1.10 (1.06, 1.14)	.20	1.03	$p < .000$
Personal Income Per Capita (x_2)	-.54 (-.43, .00)	.12	-.09	$p < .000$
Model 3				
Constant	2.00 (.17, 3.84)	.94		$p = .034$
Population (x_1)	1.12 (1.08, 1.15)	.02	1.04	$p < .000$
Personal Income Per Capita (x_2)	-.60 (-.50, -.09)	.10	-.10	$p < .000$
Unemployment Rate (x_3)	-.43 (-.50, -.35)	.04	-.13	$p < .000$

Note. $R^2 = .93$ for Model 1; $\Delta R^2 = .004$ for Model 2 ($ps < .000$); $\Delta R^2 = .02$ for Model 3 ($ps < .000$).

Table 5

Regression for Log Transformed Traffic Citation Revenues

	b	*SE b*	ß	*p*
Model 1				
Constant	.75 (.31, 1.18)	.22		$p = .001$
Population (x_1)	1.10 (1.07, 1.14)	.02	.96	$p < .000$
Model 2				
Constant	4.80 (.75, 3.42)	1.56		$p = .002$
Population (x_1)	1.16 (1.10, 1.21)	.03	1.00	$p < .000$
Personal Income Per Capita (x_2)	-.45 (-.79, -.11)	.17	-.06	$p = .009$
Model 3				
Constant	4.02 (.43, 3.06)	1.54		$p = .010$
Population (x_1)	1.17 (1.06, 1.14)	.03	1.01	$p < .000$
Personal Income Per Capita (x_2)	-.45 (-.50, -.09)	.17	-.06	$p = .008$
Unemployment Rate (x_3)	-.25 (-.37, -.12)	.06	-.06	$p < .000$

Note. $R^2 = .92$ for Model 1 (*p*s < .000); $\Delta R^2 = .002$ for Model 2 (*p*s = .009); $\Delta R^2 = .004$ for Model 3 (*p*s < .000).

Table 7

Regression for Log Transformed Budget Related to Traffic Citations

	b	*SE b*	ß	*p*
Model 1				
Constant	1.00 (.45, 1.54)	.28		$p < .000$
Population (x_1)	1.03 (.99, 1.08)	.02	.92	$p < .000$
Model 2				
Constant	-1.28 (-4.31, 1.75)	1.54		$p = .405$
Population (x_1)	1.00 (.94, 1.07)	.03	.90	$p < .000$
Personal Income Per Capita (x_2)	.25 (-.08, .58)	.17	.04	$p = .134$
Model 3				
Constant	-1.52 (.43, 3.06)	1.54		$p = .324$
Population (x_1)	1.01 (.95, 1.07)	.03	.90	$p < .000$
Personal Income Per Capita (x_2)	.22 (-.11, .55)	.17	.04	$p = .195$
Unemployment Rate (x_3)	-.18 (-.33, -.02)	.08	-.05	$p = .006$

Note. $R^2 = .85$ for Model 1 (*p*s < .000); $\Delta R^2 = .001$ for Model 2 (*p*s = .134); $\Delta R^2 = .002$ for Model 3 (*p*s = .028).

Results for Research Question 1

Traffic Citation Results

Statistical assumptions. This subsection covers the testing of the statistical assumptions related to the first research question involving the issuance of traffic citations. Violations in the statistical assumptions could skew or alter the final results of the study. As such, it is imperative to identify violations in the assumptions and take corrective actions as necessary or warranted.

Dependent variable. As discussed in Chapter 3, the dependent variable must be measured on a continuous scale at either the interval or ratio level. I measured the number of traffic citations on a continuous scale. In this study, the number of traffic citations issued ranges from a minimum of 469 citations to a maximum of 1,233,276 citations. This assumption was met.

Independent variable. Like the dependent variable, the independent variables must also be measured on a continuous scale at either the interval or ratio level. I measured the first independent variable, estimated population, on a continuous scale. The scale ranges from 7,820 persons to 2,662,874 persons. This assumption was met for the first independent variable. I measured the second independent variable, unemployment rate, on a continuous scale. The scale ranges from 2.2% to 14.7%. This assumption was met for the second independent variable. In like manner, I measured the third independent variable, personal income per capita (in dollars), on a continuous scale. The scale ranges from $15,681 to $70,204. This assumption was met for the third dependent variable. In sum, the statistical assumption for independent variables in a multiple

regression analysis was met.

Linear relationship and homoscedasticity. I conducted a series of scatter plots to test for linearity and homoscedasticity. I first analyzed linearity by examining the histogram, the normal P-P plot of regression standardized residual, and the regression standardized residual versus the regression standardized predicted value. The "S" shaped pattern around the vertical line of linearity and the skewed clustering of data points indicate a violation of the assumption of linearity. To correct for linearity, Field (2013) suggests using the log transformation (log base 10) or square root transformation ($\sqrt{X_i}$; p. 203). In this study, I used natural log transformation (Weisstein, 2016).

I transformed each of the variables using the variable's natural log (log) in SPSS. I began with estimated population and exchanged the natural data points of estimated population for the log of estimated population in the regression model. I reran the regression model to examine only the scatterplots to determine if the log of population would correct the linearity. This test failed linearity. I then exchanged the log of estimated population with its natural form and conducted the same analysis using the log10 of personal income per capita. This test failed linearity. Following the same format, I ran subsequent tests, exchanging each variable with its log transformation into the model including using multiple log transformed variables in the model.

Each time I ran the analysis, I examined the histogram, the normal P-P plot of regression standardized residual, and the regression standardized residual versus the regression standardized predicted value to determine linearity. I used the log transformation of the independent variables and the dependent variable and achieved

linearity. Therefore, the assumption of linearity was met. I next examined the regression standardized residual versus the regression standardized predicted value and all partial plots to determine whether the assumption of homoscedasticity was met. The scatterplots did not indicate funneling of the data meaning there is not a violation of homoscedasticity. The assumption of homoscedasticity was met.

Multicollinearity. I conducted a correlation matrix to analyze the correlation between the log transformed independent (predictor) variables using a two-tailed test of significance. I used the two-tailed test to test for the possibility a relationship exists in the top 2.5% and bottom 2.5% at either end of the now normal bell curve of data. There was a statistically significant relationship between estimated population and personal income per capita, $r = .65$, $p < .000$. There was not a statistically significant relationship between estimated population and unemployment rate, $r = .10$, $p = .05$ (though it was close). There was not a statistically significant relationship between personal income per capita and unemployment rate, $r = .006$, $p = .90$. Furthermore, the data met the assumption of multicollinearity and indicated multicollinearity was not a concern: Estimated population, Tolerance = .57, VIF = 1.74; unemployment rate, Tolerance = .99, VIF = 1.02; and personal income per capita, Tolerance = .58, VIF = 1.73.

Independence of observations. As discussed in Chapter 3, Field (2013) contends the most appropriate test for independence of observations is the Durbin-Watson test. The Durbin-Watson score ranges between 0 and 4. Field states the closer the Durbin-Watson test is to 2, the better the assumption was met. I conducted the Durbin-Watson test and received a score of .405 which violates this assumption. As such, I examined the

residuals using Cook's Distance to determine if any cases are having an undue influence on the regression line. The conventional acceptable distance is $4/N = 4/390 = .010$.

Twenty-nine cases displayed a Cook's Distance greater than .010. I removed these cases from the analysis. At this point, the highest Cook's Distance value is .010. I reran the regression analysis to check the Durbin-Watson score again and received a score of 2.07. The Cook's Distance correction eliminated the cases which were previously violating the assumption of independence of observations. Therefore, this assumption was met.

No significant outliers. I analyzed the presence of significant outliers through the use of simple boxplots. I first analyzed estimated population and based on the boxplot, determined there are no significant outliers. I conducted the same analysis for personal income per capita and determined there were no significant outliers. Lastly, I conducted the analysis on the independent variable unemployment rate and determined there are no significant outliers. The assumption of no significant outliers was met.

Residuals. I analyzed the existence of normal distribution through the use of a normal probability-probability plot (P-P plot) of regression. The data on the P-P plot hovers closely to the diagonal line of identity confirming the presence of normal distribution. Likewise, I double-checked the normal distribution through the use of a histogram chart which confirmed the findings of the P-P plot. Lastly, I examined casewise diagnostics to determine if any cases lie outside of three standard deviations. Casewise diagnostics did not reveal any cases which were cause for concern for this analysis. In sum, the statistical assumptions required of multiple regression was met or

adjusted for to meet the requirements of the statistical assumptions.

Correlational analysis. I conducted a correlational analysis to find the relationship between each independent variable and the dependent variable to help determine the entry into the regression model. Table 2 displays the results of the correlational analysis. I reported the results of the correlational analysis in the following format: Pearson's r, the confidence intervals, and the *p*-value. I truncated the results in the body of the text and listed the full numerical values in the tables. There was a statistically significant relationship between estimated population and the number of traffic citations issued, $r = .97$ [.96, .97], $p < .000$. There was a statistically significant relationship between personal income per capita and the issuance of traffic citations, $r = .64$ [.58, .69], $p < .000$. There was not a statistically significant relationship between unemployment rate and the issuance of traffic citations, $r = -.06$ [-.17, .04], $p = .24$. I reran the analysis using bootstrapping to obtain the confidence intervals (CI). The bootstrapped analysis did not change Pearson's *r* for any of the relationships. Based on the results of the correlational analysis I rejected the null hypothesis for RQ1.

Table 2

Correlation Coefficient for Traffic Citations

Variable	Pearson's *r* [CI]	Sig. (two-tailed)	*N*
Estimated Population (x_1)	.965 [.959, .972]	.000	361
Personal Income Per Capita (x_2)	.636 [.577, .694]	.000	361
Unemployment Rate (x_3)	-.062 [-.165, .042]	.238	361

Main Analysis. I entered the estimated population, personal income per capita and unemployment rate, respectively, into the model based on the results of Pearson's *r*. I then conducted the regression analysis. See Table 3 for the results of the log transformed regression analysis. I accepted the alternative research question based on the positive relationship between the independent variables, estimated population and personal income per capita, and the dependent variable, the number of traffic citations issued. Furthermore, the ß coefficients were statistically significantly different from zero. Using untransformed data, I conducted a secondary analysis on the mean number of traffic citations against the year of issuance. Between 2008 and 2011, the number of citations issued declined by approximately 3,507 citations per year. Florida experienced a second decline beginning in 2012 with a decline of 9,063 citations per year until 2014.

Table 3

Regression for Log Transformed Traffic Citations

	b	*SE b*	ß	*p*
Model 1				
Constant	-2.16 (-2.50, -1.82)	.17		$p < .000$
Population (x_1)	1.04 (1.00, 1.07)	.02	.97	$p < .000$
Model 2				
Constant	2.67 (.57, 4.78)	1.07		$p = .013$
Population (x_1)	1.10 (1.06, 1.14)	.20	1.03	$p < .000$
Personal Income Per Capita (x_2)	-.54 (-.43, .00)	.12	-.09	$p < .000$
Model 3				
Constant	2.00 (.17, 3.84)	.94		$p = .034$
Population (x_1)	1.12 (1.08, 1.15)	.02	1.04	$p < .000$
Personal Income Per Capita (x_2)	-.60 (-.50, -.09)	.10	-.10	$p < .000$
Unemployment Rate (x_3)	-.43 (-.50, -.35)	.04	-.13	$p < .000$

Note. $R^2 = .93$ for Model 1; $\Delta R^2 = .004$ for Model 2 ($ps < .000$); $\Delta R^2 = .02$ for Model 3 ($ps < .000$).

Results for Research Question 2

Revenues Results

Statistical assumptions. This subsection covers the testing of the statistical assumptions related to the first research question involving the issuance of traffic citations. Violations in the statistical assumptions could skew or alter the final results of the study. As such, it is imperative to identify violations in the assumptions and take corrective actions as necessary or warranted.

Dependent variable. The dependent variable must be measured on a continuous scale at either the interval or ratio level. I measured the revenues associated with traffic citations on a continuous scale. In this study, the revenues associated with traffic citations ranges from a minimum of $10,955 to a maximum of $32,400,316. This assumption was met.

Independent variable. Like the dependent variable, the independent variables must also be measured on a continuous scale at either the interval or ratio level. I measured the first independent variable, estimated population, on a continuous scale. The scale ranges from 7,820 persons to 2,662,874 persons. This assumption was met for the first independent variable. I measured the second independent variable, unemployment rate, on a continuous scale. The scale ranges from 2.2% to 14.7%. This assumption was met for the second independent variable. In like manner, I measured the third independent variable, personal income per capita (in dollars), on a continuous scale. The scale ranges from $15,681 to $70,204. This assumption was met for the third dependent variable. In sum, the statistical assumptions for independent variables in a multiple

regression analysis were met.

Linear relationship and homoscedasticity. I conducted a series of scatter plots to test for linearity and homoscedasticity. I first analyzed linearity by examining the histogram, the normal P-P plot of regression standardized residual, and the regression standardized residual versus the regression standardized predicted value. The "S" shaped pattern around the vertical line of linearity in and the skewed clustering of data points in indicate a violation of the assumption of linearity. I used the natural log (log) transformation to correct for this issue.

I transformed each of the variables using log in SPSS. I began with estimated population and exchanged the natural data points of estimated population for the log of estimated population in the regression model. I reran the regression model to examine only the scatterplots to determine if the log of population would correct the linearity. This test failed linearity. I then exchanged the log of estimated population with its natural form and conducted the same analysis using the log of personal income per capita. This test failed linearity. Following the same format, I ran subsequent tests, exchanging each variable with its log transformation into the model including using multiple log transformed variables in the model.

Each time I ran the analysis, I examined the histogram, the normal P-P plot of regression standardized residual, and the regression standardized residual versus the regression standardized predicted value to determine linearity. I used the log transformation of the three independent variables and the dependent variable and achieved linearity. Therefore, the assumption of linearity was met. I next examined the

regression standardized residual versus the regression standardized predicted value and all partial plots to determine whether the assumption of homoscedasticity was met. The standardized residual versus the regression standardized predicted value scatterplot may be in violation of homoscedasticity while the remaining plots are not indicative to a violation of homoscedasticity. The assumption of homoscedasticity was met.

Multicollinearity. I conducted a correlation matrix to analyze the correlation between the log transformed independent (predictor) variables using a two-tailed test of significance. There was a statistically significant relationship between estimated population and personal income per capita, $r = .646$, $p < .000$. There was not a statistically significant relationship between estimated population and unemployment rate, $r = .098$, $p = .05$. There was not a statistically significant relationship between personal income per capita and unemployment rate, $r = .006$, $p = .90$. Furthermore, the data met the assumption of multicollinearity and indicated multicollinearity was not a concern: Estimated population, Tolerance = .45, VIF = 2.24; unemployment rate, Tolerance = .98, VIF = 1.02; and personal income per capita, Tolerance = .45, VIF = 2.22.

Independence of observations. I conducted a Durbin-Watson test and received a score of .812. I then conducted a Cook's Distance analysis to correct for any cases which may be having an undue influence on the regression line. I examined the data to identify any cases which exceed 1.0 or 4/N which in this case is 315 due to missing data. Thus 4/N = 4/315 = .013. A total of nine cases exceeded the recommended Cook's Distance of .013. I eliminated these cases from further use in this regression question. I reran the

Durbin-Watson analysis and received a score of 2.16. This score met the assumption of independence of observations.

No significant outliers. I analyzed the presence of significant outliers through the use of simple boxplots. I first analyzed estimated population and based on the boxplot, determined there are no significant outliers. I conducted the same analysis for personal income per capita and determined there were no significant outliers. Lastly, I conducted the analysis on the independent variable unemployment rate and determined there are no significant outliers. The assumption of no significant outliers was met.

Residuals. I analyzed the existence of normal distribution through the use of a normal probability-probability plot (P-P plot) of regression. The data on the P-P plot hovers closely to the diagonal line of identity confirming the presence of normal distribution. Likewise, I double-checked the normal distribution through the use of a histogram chart which confirmed the findings of the P-P plot. Lastly, I determined the presence of any cases which would have an undue influence on the regression line using Cook's Distance and casewise diagnostics.

There were no cases revealed by casewise diagnostics as a potential problem. In other words, none of the cases extended beyond three standard deviations. Furthermore, I calculated Cook's distance and determined none of the cases place an undue influence on the regression. The highest Cook's distance value was .012. In sum, the statistical assumptions required of multiple regression was met or adjusted for to meet the requirements of the statistical assumptions.

Correlational Analysis. I conducted a correlational analysis to find the

relationship between each independent variable and the dependent variable to help determine the entry into the regression model. Table 4 displays the results of the correlational analysis. I reported the results of the correlational analysis in the following format: Pearson's r, the confidence intervals, and the *p*-value. I truncated the results in the body of the text and listed the full numerical values in the tables. There was a statistically significant relationship between estimated population and the revenues from traffic citations, $r = .96$ [.95, .97], $p < .000$. There was a statistically significant relationship between personal income per capita and the revenues from traffic citations, $r = .68$ [.63, .74], $p < .000$. There was not a statistically significant relationship between unemployment rate and the revenues from traffic citations, $r = .061$ [-.05, .16], $p = .29$. I reran the analysis using bootstrapping to obtain the confidence intervals. The bootstrapped analysis did not change Pearson's *r* for any of the relationships. Based on the results of the correlational analysis I rejected the null hypothesis for RQ2.

Table 4

Correlation Coefficient for Traffic Citation Revenues

Variable	Pearson's *r*	Sig. (2-tailed)	*N*
Estimated Population (x_1)	.958 [.949, .966]	.000	306
Personal Income Per Capita (x_2)	.682 [.630, .738]	.000	306
Unemployment Rate (x_3)	.061 [-.053, .161]	.291	306

Main Analysis. I entered the estimated population, personal income per capita and unemployment rate, respectively, into the model based on the results of Pearson's *r*. I then conducted the regression analysis. See Table 5 for the results of the log transformed regression analysis and the back-transformed regression analysis. I accepted the alternative research question based on the positive relationship between the independent variables, estimated population and personal income per capita, and the dependent variable, the revenues from traffic citations and their respective ß coefficient values which were statistically significantly different from zero.

Table 5

Regression for Log Transformed Traffic Citation Revenues

	b	*SE b*	ß	*p*
Model 1				
Constant	.75 (.31, 1.18)	.22		$p = .001$
Population (x_1)	1.10 (1.07, 1.14)	.02	.96	$p < .000$
Model 2				
Constant	4.80 (.75, 3.42)	1.56		$p = .002$
Population (x_1)	1.16 (1.10, 1.21)	.03	1.00	$p < .000$
Personal Income Per Capita (x_2)	-.45 (-.79, -.11)	.17	-.06	$p = .009$
Model 3				
Constant	4.02 (.43, 3.06)	1.54		$p = .010$
Population (x_1)	1.17 (1.06, 1.14)	.03	1.01	$p < .000$
Personal Income Per Capita (x_2)	-.45 (-.50, -.09)	.17	-.06	$p = .008$
Unemployment Rate (x_3)	-.25 (-.37, -.12)	.06	-.06	$p < .000$

Note. $R^2 = .92$ for Model 1 (ps < .000); $\Delta R^2 = .002$ for Model 2 (ps = .009); $\Delta R^2 = .004$ for Model 3 (ps < .000).

Secondary analysis. I conducted a secondary analysis of the data to determine the percentage of the FCCCs total revenues associated with traffic citations. To calculate this number I took the mean of the total revenues of the FCCC office and divided it by the mean of the revenues associated with traffic citations. The mean for the total revenues of the FCCC office was $8,148,682. The mean for the revenues associated with traffic citations was $3,057,930. Thus, the revenues from traffic citations made up approximately 37% of the FCCCs total revenues. Using untransformed data, I also charted the mean of the total revenues of the FCCCs against the year and found the revenues of the FCCC offices have declined by approximately $1,019,146 between 2008 and 2010 before rising by $17,500 per year from 2010 to 2014.

Results for Research Question 3

Budget Results

Statistical assumptions. This subsection covers the testing of the statistical assumptions related to the first research question involving the issuance of traffic citations. Violations in the statistical assumptions could skew or alter the final results of the study. As such, it is imperative to identify violations in the assumptions and take corrective actions as necessary or warranted.

Dependent variable. The dependent variable must be measured on a continuous scale at either the interval or ratio level. I measured the budget associated with traffic citations on a continuous scale in dollar amounts. In this study, the budget associated with traffic citations ranges from a minimum of $14,388 to a maximum of $23,294,501. This assumption was met.

Independent variable. Like the dependent variable, the independent variables must also be measured on a continuous scale at either the interval or ratio level. I measured the first independent variable, estimated population, on a continuous scale. The scale ranges from 7,820 persons to 2,662,874 persons. This assumption was met for the first independent variable. I measured the second independent variable, unemployment rate, on a continuous scale. The scale ranges from 2.2% to 14.7%. This assumption was met for the second independent variable. In like manner, I measured the third independent variable, personal income per capita (in dollars), on a continuous scale. The scale ranges from $15,681 to $70,204. This assumption was met for the third dependent variable. In sum, the statistical assumption for independent variables in a multiple regression analysis was met.

Linear relationship and homoscedasticity. I conducted a series of scatter plots to test for linearity and homoscedasticity. I first analyzed linearity by examining the histogram, the normal P-P plot of regression standardized residual, and the regression standardized residual versus the regression standardized predicted value. The "S" shaped pattern around the vertical line of linearity and the skewed clustering of data points indicate a violation of the assumption of linearity. I used natural log (log) transformation to correct for this issue.

I transformed each of the variables using log in SPSS. I began with estimated population and exchanged the natural data points of estimated population for the log of estimated population in the regression model. I reran the regression model to examine only the scatterplots to determine if the log of population would correct the linearity. This

test failed linearity. I then exchanged the log of estimated population with its natural form and conducted the same analysis using the log of personal income per capita. This test failed linearity. Following the same format, I ran subsequent tests, exchanging each variable with its log transformation into the model including using multiple log transformed variables in the model.

Each time I ran the analysis, I examined the histogram, the normal P-P plot of regression standardized residual, and the regression standardized residual versus the regression standardized predicted value to determine linearity. I used the log transformation of the three independent variables and the dependent variable and achieved linearity. Therefore, the assumption of linearity was met. I next examined the regression standardized residual versus the regression standardized predicted value and all partial plots to determine whether the assumption of homoscedasticity is met. The scatterplots do not indicate funneling of the data meaning there is not a violation of homoscedasticity. The assumption of homoscedasticity was met.

Multicollinearity. I conducted a correlation matrix to analyze the correlation between the log transformed independent (predictor) variables using a two-tailed test of significance. There was a statistically significant relationship between estimated population and personal income per capita, $r = .65$, $p < .000$. There was not a statistically significant relationship between estimated population and unemployment rate, $r = .10$, $p = .05$.There was not a statistically significant relationship between personal income per capita and unemployment rate, $r = .006$, $p = .90$. Furthermore, the data met the assumption of multicollinearity and indicated multicollinearity was not a concern:

Estimated population, Tolerance = .57, VIF = 1.75; unemployment rate, Tolerance = .98, VIF = 1.02; and personal income per capita, Tolerance = .58, VIF = 1.73.

Independence of observations. I conducted a Durbin-Watson test and received a score of .60. I then conducted a Cook's Distance analysis to correct for any cases which may be having an undue influence on the regression line. I examined the data to identify any cases which exceed 1.0 or 4/N which in this case is 338 due to missing data. Thus 4/N = 4/338 = .012. A total of seventeen cases exceeded the recommended Cook's Distance of .012. I eliminated these cases from further use in this regression question. I reran the Durbin-Watson analysis and received a score of 2.14. This score met the assumption of independence of observations.

***No significant outliers*.** I analyzed the presence of significant outliers through the use of simple boxplots. I first analyzed estimated population and based on the boxplot, determined there are no significant outliers. I conducted the same analysis for personal income per capita and determined there were no significant outliers. Lastly, I conducted the analysis on the independent variable unemployment rate and determined there are no significant outliers. The assumption of no significant outliers was met.

Residuals. I analyzed the existence of normal distribution through the use of a normal probability-probability plot (P-P plot) of regression. The data on the P-P plot hovers closely to the diagonal line of identity confirming the presence of normal distribution. Likewise, I double-checked the normal distribution through the use of a histogram chart which confirmed the findings of the P-P plot. Lastly, I determined the presence of any cases which would have an undue influence on the regression line using

Cook's Distance and casewise diagnostics.

There were no cases revealed by casewise diagnostics as a potential problem. In other words, none of the cases extended beyond three standard deviations. Furthermore, I calculated Cook's distance and determined none of the cases place an undue influence on the regression. The highest Cook's distance value was .012.In sum, the statistical assumptions required of multiple regression were met or adjusted for to meet the requirements of the statistical assumptions.

Correlational Analysis. I conducted a correlational analysis to find the relationship between each independent variable and the dependent variable to help determine the entry into the regression model. Table 6 displays the results of the correlational analysis. I reported the results of the correlational analysis in the following format: Pearson's *r*, the confidence intervals, and the *p*-value. I truncated the results in the body of the text and listed the full numerical values in the tables. There was a statistically significant relationship between estimated population and the budget associated with traffic citations, $r = .94$ [.92, .95], $p < .00$. There was a statistically significant relationship between personal income per capita and the budget associated with traffic citations, $r = .69$ [.64, .74], $p < .00$. There was not a statistically significant relationship between unemployment rate and the budget associated with traffic citations, $r = .04$ [-.07, .14], $p = .48$. I reran the analysis using bootstrapping to obtain the confidence intervals. The bootstrapped analysis did not change Pearson's *r* for any of the relationships. Based on the results of the correlational analysis I rejected the null hypothesis for RQ3.

Table 6

Correlation Coefficient for Traffic Citation Budget

Variable	Pearson's *r*	Sig. (2-tailed)	*N*
Estimated Population (x_1)	.938 [.924, .950]	.000	321
Personal Income Per Capita (x_2)	.690 [.636, .740]	.000	321
Unemployment Rate (x_3)	.040 [-.067, .143]	.480	321

Main Analysis. I entered the estimated population, personal income per capita and unemployment rate, respectively, into the model based on the results of Pearson's *r*. I then conducted the regression analysis. See Table 7 for the results of the log transformed regression analysis and the back-transformed regression analysis. I accepted the alternative research question based on the positive relationship between the independent variables, estimated population and personal income per capita, and the dependent variable, the budget associated with traffic citations. Lastly, the ß coefficients were statistically significantly different from zero which supports the alternative research question.

Table 7

Regression for Log Transformed Budget Related to Traffic Citations

	b	*SE b*	ß	*p*
Model 1				
Constant	1.00 (.45, 1.54)	.28		$p < .000$
Population (x_1)	1.03 (.99, 1.08)	.02	.92	$p < .000$
Model 2				
Constant	-1.28 (-4.31, 1.75)	1.54		$p = .405$
Population (x_1)	1.00 (.94, 1.07)	.03	.90	$p < .000$
Personal Income Per Capita (x_2)	.25 (-.08, .58)	.17	.04	$p = .134$
Model 3				
Constant	-1.52 (.43, 3.06)	1.54		$p = .324$
Population (x_1)	1.01 (.95, 1.07)	.03	.90	$p < .000$
Personal Income Per Capita (x_2)	.22 (-.11, .55)	.17	.04	$p = .195$
Unemployment Rate (x_3)	-.18 (-.33, -.02)	.08	-.05	$p = .006$

Note. $R^2 = .85$ for Model 1 (*p*s < .000); $\Delta R^2 = .001$ for Model 2 (*p*s = .134); $\Delta R^2 = .002$ for Model 3 (*p*s = .028).

Secondary analysis. I conducted a secondary analysis of the data to determine the percentage of the FCCCs budget is associated with traffic citations. To calculate this number I took the mean of the total budget of the FCCC office and divided it by the mean of budget associated with traffic citations. The mean for the total revenues of the FCCC office was $7,848,966. The mean for the revenues associated with traffic citations was$1,723,339. Thus, the budget associated with traffic citations makes up approximately 22% of the FCCCs total budget. Using untransformed data, I also charted the mean of the total budget of the FCCCs against the year and found the budget of the FCCC offices have declined by approximately $260,161 per year since 2008.

Summary of Chapter 4 and Transition to Chapter 5

I divided Chapter 4 into four sections and three subsections: the Introduction, Data Collection, Main Analysis, Results for RQ1, Results for RQ2, Results for RQ3, and Summary of Chapter 4 and Transition to Chapter 5. The Results for RQ1 analyzed the relationship between estimated population, personal income per capita, and unemployment rate against the dependent variable, the number of traffic citations issued. Where appropriate, I adjusted the data to meet the statistical assumptions. I then ran a correlational analysis and determined estimated population and personal income per capita demonstrated a statistically significant correlation with the number of traffic citations. Thus, I rejected the null hypothesis for RQ1. Unemployment rate did not demonstrate a statistically significant relationship with the number of traffic citations issued although I included the independent variable in the main analysis for academic purposes. I next conducted the main analysis and determined a positive and statistically

significant relationship exists between the estimated population and personal income per capita and the number of citations issued and accepted the alternate hypothesis. Table 8 provides a summary of the three research questions.

I conducted the same analysis on RQ2 where the independent variables remained the same but the dependent variable was the revenues associated with traffic citations. Similar to the first research question, I adjusted the data to meet the statistical assumptions which included data transformation. I then ran a correlational analysis and determined estimated population and personal income per capita demonstrated a statistically significant correlation with the number of traffic citations. Thus, I rejected the null hypothesis for RQ2. Like the first research question, there was not a statistically significant relationship between unemployment rate and the revenues associated with traffic citations.

I next conducted the main analysis and determined a positive and statistically significant relationship exists between the estimated population and personal income per capita and the revenues associated with traffic citations. As such, I accepted the alternate hypothesis. Although not statistically significant, I included unemployment rate in the main analysis for academic purposes. I also determined traffic citation revenues made up approximately 37.5% of the FCCCs total revenues.

The results for RQ3 followed the same procedures as the results for RQ2. To begin, the independent variables remained the same but the dependent variable was the budget associated with traffic citations. I adjusted the data to meet the statistical assumptions which included data transformation. I then ran a correlational analysis and

determined estimated population and personal income per capita demonstrated a statistically significant correlation with the budget associated with traffic citations. Thus, I rejected the null hypothesis for RQ3.

Like the second research question, there was not a statistically significant relationship between unemployment rate and the revenues associated with traffic citations. I next conducted the main analysis and determined a positive and statistically significant relationship exists between the estimated population and personal income per capita and the budget associated with traffic citations. These findings allowed me to accept the alternate hypothesis. Although not statistically significant, I included unemployment rate in the main analysis for academic purposes.

I also determined the budget associated with traffic citations makes up approximately 22% of the FCCCs total budget. In Chapter 5, I will interpret the results of the regression analysis, reevaluate the limitations of the study, and provide any recommendations for future analysis. I will also discussed the potential social implications of the results of this study and link the results to the extant literature. Lastly, I will discuss the results of this study in relation to RDT.

Table 8

Summary Table of Research Questions

	b	*SE b*	*ß*	*p*
RQ1				
Constant	2.67 (.57, 4.78)	1.07		$p = .013$
Population (x_1)	1.10 (1.06, 1.14)	.20	1.03	$p < .000$
Personal Income Per Capita (x_2)	-.54 (-.43, .00)	.12	-.09	$p < .000$
RQ2				
Constant	4.80 (.75, 3.42)	1.56		$p = .002$
Population (x_1)	1.16 (1.10, 1.21)	.03	1.00	$p < .000$
Personal Income Per Capita (x_2)	-.45 (-.79, -.11)	.17	-.06	$p = .009$

(*table continues*)

	b	*SE b*	ß	*p*
RQ3				
Constant	-1.28 (-4.31, 1.75)	1.54		$p = .405$
Population (x_1)	1.00 (.94, 1.07)	.03	.90	$p < .000$
Personal Income Per Capita (x_2)	.25 (-.08, .58)	.17	.04	$p = .134$

Note. RQ1: $R^2 = .93$ for Model 1; $\Delta R^2 = .004$ for Model 2 (*p*s < .000; RQ2: $R^2 = .92$ for Model 1 (*p*s < .000); $\Delta R^2 = .002$ for Model 2 (*p*s = .009); RQ3: $R^2 = .85$ for Model 1 (*p*s < .000); $\Delta R^2 = .001$ for Model 2 (*p*s = .134).

Chapter 5: Discussion

Introduction

As I discussed in Chapter 1, the purpose of this quantitative study was to analyze the nature of the relationship of demographic factors and the issuance of traffic citations and traffic citation revenues of the FCCC through the theoretical lens of Pfeffer and Salancik's (1978) RDT. Likewise, prior to this study, there was no scientifically-based research examining the relationship between RDT and the issuance of traffic citations. A basic understanding of how demographic factors, including estimated population, personal income per capita, and unemployment rate, influence the number of traffic citations issues, revenues from traffic citations, and amounts budgeted for traffic citations is critical to the success of the FCCC offices. More specifically, understanding the factors which impact the revenues on externally reliant governmental organizations, like the FCCCs, progresses responsible public administration. I organized this quantitative study to address these issues.

Fortunately, the data collection process in this study demonstrated only minor setbacks. I was able to obtain most of the required data within 6 weeks of my initial request. After cleaning and uploading the data into SPSS, I found that the raw data lacked in linearity for all three of the RQs. Surprisingly, the independent variable, unemployment rate, did not have a statistically significant correlation with any of the three dependent variables in this study. As discussed in the following chapter, I did not consider the hierarchical statistics models which included the unemployment rate for interpretation purposes.

Interpretation of the Findings

Garrett and Wagner (2009) were the first to conduct research on the use of traffic citations as a source of revenue. Makowsky and Stratmann (2009, 2011) and Hummel (2014) followed Garrett and Wagner's study and tied, directly or anecdotally, the issuance of traffic citations with local government revenues. While Garrett and Wagner found a 1.0% increase in the county's unemployment rate was positively and in a statistically significant manner correlated (Adjusted R^2 = .20, p < .05; p. 83) with a .08% increase in the number of tickets issued to each person, the same was not necessarily true for Florida. Using Pearson's *r*, confidence intervals, and *p*-value, I found there was not a statistically significant relationship between unemployment rate and the issuance of traffic citations r = -.06 [-.17, .04], p = .24 in Florida. There are, however, other variables to consider when comparing the results of Garrett and Wagner's study against this study. For example, I did not consider the role of tourism, "tax exporting," or local ad valorem taxes when devising the models for this study. Likewise, these interpretations pertain only to the decade 2005 through 2014.

Traffic Citations

The first analysis I conducted was the relationship between estimated population, personal income per capita, and unemployment rate with the number of traffic citations issued. Using Model 2, I found a 1.0% increase in population increased the number of traffic citations issued by 1.10% (R^2= .93, p < .000). Thus, the larger the population within the county, the more tickets issued. The second independent variable, personal income per capita, had a negative effect on the issuance of traffic citations. A 1.0%

increase in personal income per capita resulted in a .54% decrease in the number of citations issued (ΔR^2 = .004, *p*s < .000). I could use Model 2 to explain 93% of the variance in traffic citations issued, while 6.7% of the variance was unexplained by this model.

On its face, it appears Florida counties with higher personal income per capita derive their revenue from alternative sources aside from traffic citations. Concordantly, counties with lower personal income per capita demonstrate an increase in the issuance of traffic citations, a .54% increase in citations when personal income per capita decreases by 1.0%. As mentioned above, I did not consider unemployment rate in this model. Using Pearson's *r*, confidence intervals, and *p*-value, the correlational analysis revealed no statistical significant relationship between unemployment rate and the issuance of traffic citations(*r* = -.06 [-.17, .04], *p* = .24).

Revenues

With respect to the revenues generated from traffic citations, a 1.0% increase in population increased the revenues of the FCCCs by 1.16% (R^2= .92, *p* < .000). Like the issuance of traffic citations, FCCCs that represent larger populated areas demonstrate increased revenues from traffic citations. Following the same format, a 1.0% increase in personal income per capita resulted in a .45% decrease in the revenues associated with traffic citations (ΔR^2 = .002, *p* = .009). This confirms the possibility that Florida counties with a higher personal income per capita may receive revenues from other sources. Once again, Pearson's *r*, confidence intervals, and the *p*-value of the correlational analysis revealed no statistical significant relationship between unemployment rate and the

revenues associated with traffic citations (r = .06 [-.05, .16], p = .29). Like the issuance of traffic citations, I explained 92.2% of the variance in the revenues associated with traffic citations for FCCC offices using Model 2. The model does not explain the remaining 7.8% of the variance.

Additionally, I conducted a secondary analysis using the mean of the total revenues of the FCCC office and the mean for the revenues associated with traffic citations. I compared the two means to determine if traffic citation revenues form a significant portion of the FCCC revenues. The mean for the total revenues of the FCCC office was $8,148,682. The mean for the revenues associated with traffic citations was $3,057,930. Thus, the revenues from traffic citations made up approximately 37% of the FCCCs total revenues. Therefore, the revenues from traffic citations made up a significant portion of the FCCCs total revenues. This confirms Pfeffer and Salancik's (1978) theory regarding resource dependence. The FCCCs are dependent upon traffic citation revenues for revenue purposes.

Budget

As the previous two subsections indicated, estimated population demonstrated a statistically significant and positive relationship with the FCCC budget associated with traffic citations. Model 2 indicated a 1.0% increase in population increased the budget associated with traffic citations by 1.0% (R^2 = .85, p < .000). It appears the population of the county and the FCCC budget associated with traffic citations is directly proportional. Increases and decreases in the population have the same effect on the FCCC budget.

Unlike the previous two subsections, personal income per capita demonstrated a positive influence on the FCCC budget associated with traffic citations. A 1.0% increase in personal income per capita resulted in a .22% increase in the FCCC budget associated with traffic citations ($\Delta R^2 = .001$, $p = .13$). The statistically significant relationship between personal income per capita and estimated population makes it difficult to distinguish which predictor influences the dependent variable ($r = .65$, $p < .000$). This may account for the high *p*-value. Lastly, Model 2 accounted for 85% of the variance of the FCCC budget associated with traffic citations leaving 15% unexplained.

I also conducted a secondary analysis to challenge the existence of resource dependency of traffic citations on the FCCC budget. I examined the mean of the total budget of the FCCC office and divided it by the mean of budget associated with traffic citations. The mean for the total revenues of the FCCC office was $7,848,966. The mean for the revenues associated with traffic citations was $1,723,339. Thus, the budget associated with traffic citations makes up approximately 22% of the FCCCs total budget. Therefore, the FCCC offices were dependent upon traffic citations for budget and revenue purposes.

Limitations of the Study

The adjusted R^2 informed me how well the model generalized for each of the RQs. In other words, the closer the adjusted R^2 was to R^2, the better the model generalized for that particular question. With regards to traffic citations, the R^2 for Model 2 was .94. The adjusted R^2 for the model was .94. These values are nearly identical, meaning that I can generalize the results of this model to the remainder of the population.

For traffic citation revenues, the R^2 for Model 2 was .92. The adjusted R^2 for the model was .92. These values are identical, so I can generalize this model to the remainder of the population. Lastly, the R^2 for Model 2 regarding the FCCC budget was .85. The adjusted R^2 for the model was .85. I can generalize this model to the remainder of the population as well due to the proximity of the two values. Therefore, the results of the three models have a high degree of external validity.

Regarding internal validity, I reran the statistical analysis for each RQ multiple times to ensure that my results were the same each time I ran the analysis. Secondly, two of the three models used in this study exceeded 90% accountability for variance, while the third model accounted for 85%. Based upon the foregoing, I can reasonably conclude there were no issues with internal validity.

Recommendations

As I mentioned earlier in this chapter, there are certain variables that I did not take into consideration for this study. For example, I did not analyze the role local tourism has on traffic citations like Garrett and Wagner (2009) did. Knowing Florida contains several major theme parks, universities, major athletic sports, and is popular as a spring break destination, a follow-up study should be conducted to determine if tourism plays a role in the issuance of traffic citations in Florida and the revenues and budget of the FCCCs. Secondly, I did not consider local government fiscal health as found in the studies of Makowsky and Stratmann (2009, 2011). Future research should explore this area.

Concordantly, the decade 2005–2014 includes the time period of the Great Recession of 2008. Using dummy variables, scholars should compare the means between

the Great Recession of 2008 and remaining years to determine if the Great Recession impacted the dependent variables in this study. Likewise, the Florida Legislature increased the base amount of traffic citations in 2008 and eliminated the driver's improvement school discount for traffic citations in 2009 (318 Fla. Stat. § 11, et seq., 2015). Scholars should conduct a time-series analysis to determine if these events together, or independently, influenced the issuance of traffic citations, traffic citation revenues of the FCCC and the FCCC budget associated with traffic citations. Concurrently, a qualitative analysis could be helpful in understanding the mindset of the law enforcement officers who issued citations during this time period.

With this in mind, traffic-related studies should examine Makowsky and Stratmann (2011) and Hummel's (2014) findings to determine the relationship between traffic citations, accidents, and the Great Recession of 2008. Similarly related, the FCCC offices disburses revenues generated from traffic citations to the state which is then used to fund state project, programs, and the like. Thus, scholars should conduct a tertiary analysis to determine if these state beneficiaries are also reliant on the issuance of traffic citations. Lastly, several of the FCCC offices received funding from the Trust Fund during the time period covered in this study. An analysis of the Trust Fund should determine if this supplementation financially impacted the fund.

Implications

Traffic citation revenues consistently formed a significant portion of the FCCCs revenues during the decade 2005 through 2014 as discussed above. As discussed in Chapter 1, the FCCCs used these revenues to fund FCCC personnel (Bock, 2015). With

the FCCC as the gatekeeper to the Florida judicial system, declines in the number of traffic citations issued, and in turn, their revenues, directly impact the ability for Florida citizens to timely access the judicial system. The secondary analysis I discussed in Chapter 4 of the total revenues and total budget for the FCCC demonstrate declines in both of these categories beginning in 2008.

Naturally, these declines forced FCCC offices to likely cut personnel, services, and other expenditures to meet their legal obligations of maintaining a balanced budget. At the practitioner level, a thorough understanding of how demographic and economic factors relate to the budget percentage and revenues in dollars linked to traffic citations could aid the FCCCs in promulgating sound strategic, operational, and tactical budget and revenue planning. This planning provides the FCCCs, and Florida's legislators, with the tools necessary to anticipate and mitigate revenue fluctuations and advance the administration of Florida's judicial system. Ultimately, this planning would then provide Florida's citizenry with timely access to the judicial system embodying the idea of positive social change.

Summary of Chapter 5 and Conclusion

In this chapter, I interpreted the results that I presented in Chapter 4. The independent variable, estimated population, demonstrated a positive and statistically significant relationship with the number of traffic citations issued, revenues from traffic citations, and the budget associated with traffic citations. Personal income per capita, on the other hand, demonstrated a negative and statistically significant relationship with the number of traffic citations issued and the revenues from traffic citations. Personal income

per capita had a positive and statistically significant relationship with the FCCC budget associated with traffic citations. Interestingly, unemployment rate did not have a statistically significant relationship with the number of traffic citations issued, revenues from traffic citations, or the budget associated with traffic citations.

Furthermore, the results of this study confirmed that the FCCCs are reliant upon the issuance of traffic citations for revenues and budgetary purposes. The secondary analysis on the untransformed data confirmed that when the number of traffic citations issued declines so do the revenues from those citations. During the decade 2005–2014, the FCCCs experienced declines in their total revenues and total budgets. Future studies will be needed to determine if these declines relate to the Great Recession of 2008, changes in Florida's statutory laws, or a combination of both. In sum, without legislative intervention, the FCCCs continue to be dependent on the bulk of their revenues, and significant portion of their budget, from the unreliable traffic citation.

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Appendix A: Public Records Request

DD Month YYYY

XXXXXXXXX
XXXXXXXXXX
XXXXXXXXXXX
XXXXXXXXXX
Hon. John E. Doe
Clerk of the Circuit Court
County Name
123 Main Street
Anytown, FL 12345

Hon. John E. Doe:

Good Day. My name is Corey Hamilton and I am a doctoral candidate at Walden University seeking information from your office in order to complete my dissertation. The working title of my dissertation is *The Determinants of Traffic Citation Revenues on Florida's Clerks of Court & Comptrollers*. Essentially, I am doing a study to examine the reliance on traffic citation revenues by the Clerk and Comptroller's office for budgetary purposes with the hopes of sparking public awareness and the quest for establishing a potential need for sustainable sources of revenues for the Clerk and Comptroller's office in addition to Article V funding methods.

Therefore, I humbly request, Pursuant to Article I, § 24 of the Florida Constitution, and Chapter 119 of the Florida Statutes, an opportunity to inspect or obtain copies of public records related to civil traffic citations, annual budget numbers, and revenue numbers for the years 2005 through 2014. More specifically, I would like to know the total revenues (in dollar amounts) of your office, the total revenues (in dollar amounts) generated from traffic citations for your office, the total dollar amount of the approved budget for your office, and the total dollar amount of your budget associated with traffic citation revenues. I have attached a spreadsheet to aid in the collection of this information.

I have also enclosed a self-addressed stamped envelope for you to include this information at no cost to your office. In the alternative, you may electronically submit this information via the e-mail XXXXXXXX. I am willing to pay reasonable copying and searching fees for these records. If there are fees for this information, please notify me by email of the costs associated with obtaining this information and include the preferred method of payment.

If you are unable to complete my request, or any portion thereof, please inform me in writing as to the basis of the denial including the statutory citation which serves as the grounds for the denial. This writing may be submitted via email.

If possible, I would like to receive this information within 15 business days from the date of this letter. If this timeframe is not feasible, please let me know when you think I can expect to receive this information.

Please do not hesitate to reach out to me by phone or email if you have any questions regarding this request or need further clarification of the information requested. Lastly, before publication this study will be subject to Walden University's Institutional Review Board which will ensure this study meets or exceeds minimum ethical standards.

Sincerely,

Corey A. Hamilton, Esq.

FCCC Office

Year	Total Revenues For Office	Total Revenues from Traffic Citations	Total Approved Budget	Total Budget Associated with Traffic Citations **
2004				
2005				
2006				
2007				
2008				
2009				
2010				
2011				
2012				
2013				
2014				

*** All numbers should be in dollar amounts**

**** How much of the budget stems from Traffic Citation revenues?**

Appendix B: Codebook

Codebook for the Determinants of Traffic Citation Revenues on Florida's Clerks of Court & Comptrollers (FCCC)

SPSS Value Label	Variable Position	Variable Name	Values or Explanation
GeoName	1	County Name	
Case_ID	2	Individual number assigned to each data point	1001 - 1390
County	3	County that FCCC represents	101 - 123 = Small 201 – 222 = Medium 301 – 322 = Large
Group	4	Group FCCC placed based on stratified sampling.	1 = Small 2 = Medium 3= Large
Year	5	The year the data is related to	2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 99 = Missing
Pop	6	Estimated population size of county	99 = Missing
Unem_Rate	7	Unemployment rate of the county	99 = Missing
PInc_PCap	8	Personal income per capita in $ of the county	99 = Missing
Traf_Cit	9	The number of traffic citations remitted	99 = Missing
Tot_Rev	10	Total revenues for the FCCC	99 = Missing

(*table continues*)

SPSS Value Label	Variable Position	Variable Name	Values or Explanation
TotRev_TC	11	Total revenues from traffic citations	99 = Missing
Per_Rev	12	Percentage of revenue from traffic citations	98 = Inaccurate due to missing data in another column 99 = Missing
Tot_Bud	13	Total approved budget	99 = Missing
TotBud_TC	14	Total budget associated with traffic citations	99 = Missing
Per_Bud	15	Percentage of budget associated with traffic citations	98 = Inaccurate due to missing data in another column 99 = Missing
LNPopulation	16	Population transformed using natural log	
LNRate	17	Unemployment rate transformed using natural log	
LNIncome	18	Personal income per capital transformed using natural log	
LNCitations	19	Number of citations issued transformed using natural log	
LNRevenues	20	Revenues from traffic citations transformed using natural log	
LNBudget	21	Budget associated with traffic citations transformed using natural log	
Cook's Distance	22	Cook's Distance calculated	

Appendix C: NIH Certificate

Certificate of Completion

The National Institutes of Health (NIH) Office of Extramural Research certifies that Corey Hamilton successfully completed the NIH Web-based training course "Protecting Human Research Participants".

Date of completion: 06/20/2013

Certification Number: 1201589