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THE EFFECT OF THE GREAT RECESSION ON LOCAL GOVERNMENT POLICY IN FLORIDA

by

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A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the Department of Public Affairs in the College of Health and Public Affairs at the University of Central Florida
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ABSTRACT

The length and depth of the Great Recession of 2008 provides an opportunity to examine the policy behavior of local governments unlike any window since the 1930’s post Depression era. Utilizing Peterson’s (1981) City Limits typology as a framework for local government policy allows for an evaluation of whether or not the economic downturn caused local governments to change their relative expenditures between policy categories. The City Limits typology has been widely used in the literature to explain how expenditures define a local government’s role in economic development. The typology has had limited use in a pre-post natural experimental research design to determine if a local government has ‘shifted’ policy priorities as measured by changes in expenditures among and between policy categories. This research design and the use Peterson’s framework combine for a study that has not yet been conducted under similar conditions.

Most of the existing literature, including the research from the 1980’s, failed to account for inter-state differences that directly affect local government expenditures and policy. Concentrating solely on Florida local governments, this study eliminates the confounding nature of a national study and ensures that the unit of analysis is comparable for research purposes. The study utilizes actual expenditure data for all cities and counties in Florida from FY2006 through FY2011. The research tests for the relationships between changes in policy priorities from pre- to post-recession, and the type of government, form of government, and various socio-economic factors.
The research contributes to a new body of knowledge that is just beginning to emerge in the literature about how local governments respond to periods of extreme fiscal stress. The findings suggest that cities and counties had an inverse response from pre- to post-recession with cities shifting toward developmental expenditures and counties prioritizing allocational spending. Differences were also found between forms of government. In addition, the density of population was found to contribute differently to shifts in expenditures for cities and counties. The study identifies emerging patterns that can help local governments understand past behavior and better anticipate future economic downturns.
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So many have influenced my passion for cities and local government throughout my career as a city planner and city manager. They are too numerous to mention, but all have shaped my ability to interpret what I have experienced into rational and effective public policy.

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CHAPTER 1
INTRODUCTION

Background

The depth of the recent U.S. economic crisis for local governments (cities and counties) is more severe than any experienced in the last half century (Miller & Svara, 2009; Muro & Hoene, 2009). Budget deficits for local governments in the United States are averaging nearly 12%, which is of such magnitude that when stability returns to the national economy, new approaches to revenues and cost cutting will be inevitable (Edwards, 2011). Local governments will continue to face enormous fiscal challenges in funding public services based on their traditional service delivery models.

In its most recent survey, the National League of Cities reports that 48% of U.S. cities cut their workforce during 2012 (Pagano & McFarland, 2013). The continued degradation of the local tax base, prolonged unemployment, depressed wages, the cost of employee and retiree health care, and underfunded pension obligations are cited as the continuing causes of fiscal stress for the nation’s cities. The year 2012 represented the sixth consecutive year that there has been a constant dollar decline (adjusted for inflation) in general revenue funds for America’s cities (Pagano, Hoene, & McFarland, 2012). Cities across the country have cut back on staffing levels, shuttered branch libraries, and closed recreation centers, and the prospect of resurgence in new revenues continues to be bleak (Ginsberg, 2010). The United States Government Accountability Office (GAO) has identified that the pre-existing long term fiscal pressures facing America’s counties and
cities is being further complicated by the current economic cycle as a result of the Great Recession of 2008 (Government Accountability Office, 2009).

**Problem Statement**

This economic downturn has been determined to be the deepest since the 1950s and the longest since the Depression of the 1920s (Ebel, Petersen, & Vu, 2013). While the impacts of the economic downturn are still being realized in Florida, a ‘new normal’ for local governments is quickly taking hold (Cawley, Levey, & Martin, 2012). The data showing the change in local government expenditures from pre to post recession is emerging but have not yet been analyzed and interpreted to determine whether the Great Recession caused a shift in local government policy. This represents a current gap in the literature.

**Significance of the Study**

This is a rare opportunity to examine the response of Florida’s local governments\(^1\) to an extreme level of fiscal stress. While there has been extensive research conducted following other recessions that research only dealt with modest reductions in local government revenue similar to what occurred in the 1980s. More drastic revenue reductions will require a new model to explain local government response to fiscal stress (Downs & Rocke, 1984). Many researchers have utilized local government expenditures

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\(^1\) In this study, the unit of analysis includes all of Florida’s 410 cities and 67 counties. As will be discussed later, Dade and Duval counties have become a hybrid form of local government and are excluded from this research, leaving 65 of the 67 counties as a population of county governments to be analyzed.
as an indicator of policy positions (Basolo, 2000; Choi, Bae, Kwon, & Feiock, 2010; Peterson, 1981; Schneider, 1989). This study is significant in that it will evaluate local government expenditures expressed as policy as opposed to just quantifying variation in spending or programmatic cutbacks, as has been the focus of academic research in the past. It is a form of a fiscal stress test of local governments to better understand the relationship between external economic conditions, attributes of the governmental organization, and policy change.

The historical service delivery model for local governments has been a component of a larger social contract between government and its citizens (Eggers & O'Leary, 2010). This study will document how expenditure patterns and policy priorities might have shifted post-recession, and will attempt to better understand some of the factors that explain differences between the local government responses to the Great Recession in Florida. The notion of a new ‘municipal contract’ between local governments and its constituents may emerge, which could have significant implications on a resetting of the role of local government in the lives of its residents and provide a new policy framework within which local governments will function. It is clear that in order for local governments to be able to become financially sustainable, they must seek a new revenue and expenditure policy framework (Chapman, 2008; Dadayan & Ward, 2009; Okubo, 2010).
Uniqueness of the Study

The length and depth of the Great Recession provides an opportunity to examine the policy behavior of local governments unlike any window since the 1930s post-Depression era. Utilizing Peterson’s (1981) *City Limits* typology as a framework for local government policy will allow for an evaluation of whether or not the economic downturn caused local governments to change their relative allocation of expenditures between policy categories. The *City Limits* typology has been widely used in the literature to explain how expenditures define a local government’s role in economic development (Basolo & Huang, 2001; Choi et al., 2010; Logan, 1976; Longoria, 1994; Molotch, 1976; Sanders & Stone, 1987; Wolman & Spitzley, 1996). The typology has had limited use in a pre-post natural experimental research design to determine if a local government has ‘shifted’ policy priorities as measured by changes in expenditures among and between policy categories. This research design and the use Peterson’s framework combine for a study that has not yet been conducted under similar conditions.

Research Questions

This research is organized into two distinct studies. Study 1 will examine whether or not the relative importance of per-capita expenditures among the three *City Limits* policy categories changed from pre-recession to post-recession for all local governments, as well as by type and form of local government. This analysis is a detailed descriptive examination of data based on the entire population of cities and counties in Florida. Research Questions 1-3 are associated with this first analysis. The measurement period
that is considered pre-recession includes the average per-capita expenditures for the three Fiscal Years 2006 through 2008. The measurement period that is considered post-recession includes the average per-capita expenditures for the three Fiscal Years 2009 through 2011. This is further discussed in Chapter 4.

Study 2 will focus on the determinants of change – what factors explain the proportional changes in the expenditure patterns from pre to post-recession. Research Questions 4 and 5 is associated with the second part of this study.

Study 1 - Descriptive Analysis

RQ 1. Did the expenditure pattern of local governments in Florida change from pre-recession to post-recession?

RQ 2. What differences or similarities, if any, exist between the type of local government (cities or counties) and changes in expenditure patterns from pre-recession to post-recession?

RQ 3. What differences or similarities, if any, exist between the form of local government and changes in expenditure patterns from pre-recession to post-recession?

2 An extensive explanation and discussion of form of local government occurs in Chapter 2 – Literature Review
Study 2 - Explanatory Analysis

RQ 4. What relationships exist, if any, between the types, form, and socioeconomic characteristics of a local government, and changes in expenditure patterns from pre-recession to post-recession?

Policy, Theoretical or Methodological Implications

A governmental policy can be conceived as the stated or inferred position on a purposeful course of action. Policies reflect the relationship between the government and its environment. As with all levels of government, local government policies change in response to changes in the social, political and economic environment within which local governments operate (Eyestone & Eulau, 1968; Hill & Hupe, 2009). Public policies are supposed to have purposeful role and relate to societal problems (Hill & Hupe, 2009, p. 5).

Local Government Budget as Policy

This research examines the fiscal behavior of Florida’s local governments – its cities and counties. When adopting a fiscal year budget, local governments are setting out their planned expenditures for the upcoming year. The budget is the tool that defines and implements public policy through the allocation of scarce resources to fund the delivery of projects, programs, and services (National Advisory Council on State and Local Budgeting, 1999; Smith & Lynch, 2004). Since all resources are allocated through the budget process, it is one of the most important and powerful tools in setting public policy
In Florida, as in most states, local governments are required to adopt balanced annual budgets (Government Accountability Office, 2013). They cannot utilize deficit spending to ‘ride out’ the impacts of a recession. Analyzing the actual expenditures of local governments before and after the Great Recession allows for a clear look at the effect of the economic downturn on the stability of local government policy.

The Great Recession of 2008 was a monumental economic shock to local governments in Florida and throughout the U.S. Local governments in Florida are dependent on property tax to finance a significant component of their operations. City and county revenues are more vulnerable to extended downturns in the economic cycle due to this dependence on the property tax as a primary source of revenue (Florida Legislative Committee on Intergovernmental Relations, 2010). The stability of Florida’s property tax base is dependent on a number of factors, including levels of employment and demand for new housing driven by population growth (Institute for Economic Competitiveness, 2013). The loss of employment and downturns in population growth has been referred to as the tax base erosion model of fiscal stress (Kloha, Weisert, & Kleine, 2005). Employment recovery to pre-recession levels in Florida is projected to take several years (Office of Economic and Demographic Research, 2013a). As of mid-2013, about 445,000 public and private sector jobs had been lost in Florida since the pre-recession peak. Nearly 850,000 jobs would need to be added in Florida to reach the same percentage of employment that existed prior to the Great Recession (Office of Economic and
Demographic Research, 2013a). Florida added an average of 120,000 jobs per year for the years 2011, 2012 and 2013 (Institute for Economic Competitiveness, 2013). The magnitude of this economic shock presents an important opportunity to measure the effect of the recession on local government policy in Florida.

Most of the existing literature, including the research from the 1980s, focuses on national trends using data from local governments from across the country (Basolo, 2000; Corni & Usher, 1981; Kelly & Rivenbark, 2008; Lewis, 1984; Morgan & Pammer, 1985; West & Davis, 1988). Many of these studies failed to account for inter-state differences that directly affect local government expenditures and policy. Significant variation in local government functions and authority exists between the states and creates challenges in finding comparable units of analysis. Concentrating solely on Florida local governments, this study will eliminate the confounding nature of a national study and ensure that the unit of analysis is comparable for research purposes. Failure to control for differences between states in how municipalities generate revenue, intergovernmental revenue sharing, and limits on taxing authority make a comparison difficult (Alm, Buschman, & Sjoquist, 2011; Chernick, Langley, & Reschovsky, 2011; Chicoine & Walzer, 1985; Liebert, 1974; Mounts, 1983; Nelson, 2012; Peterson, 1981; Wolman, 1982).

This proposed research would contribute to a new body of knowledge that is just beginning to emerge in the literature. Determining how local governments in Florida responded to this unprecedented period of fiscal stress is important in understanding them as organizations. Identifying patterns that may emerge could help local governments
anticipate and prepare for future downturns through revisiting long held policy positions and management practices in their service delivery models.

Theory and Conceptual Framework

This study relies upon Lindbloom’s (1959) theory of incrementalism to explain local governmental behavior when making budgetary decisions under normal conditions as well as under the pressures of fiscal stress. This theory helps explain public sector budgeting and the behavioral norm that exists when agencies adopt spending plans for the upcoming year. Since the analysis in this study relies upon actual local government expenditure data, it is important to note the relationship between budgeting and expenditures. Expenditures, or spending by local governments, are authorized through the adoption of an annual budget. Generally, all expenditures must be consistent with the approved budget of the local government (National Advisory Council on State and Local Budgeting, 1999). This study’s reliance on Lindbloom’s (1959) theory of incrementalism as a budgeting theory is used to establish a basis for analyzing the expenditure behavior of Florida’s cities and counties.

The conceptual framework that will be used in this study to operationalize the incrementalism theory as applied to local government budgeting is a model that explains local government policy regimes using a three-category classification developed by Peterson (1981) in his book City Limits. This has come to be known as the City Limits typology. This conceptual framework provides the foundation for this research and is the structure for testing of the hypotheses.
Budgetary Incrementalism

There have been several theories applied to how governments make budgetary decisions. In applying the incrementalism approach to the expenditure decisions of local governments, the funding for next year’s services would be largely based on last year’s expenditures, with only a modest increase in keeping within the existing policy context (Baker, 2011; Davis, Dempster, & Wildavsky, 1966; Dempster & Wildavsky, 1979; Levine, 1979; Lewis, 1984; Lindblom, 1959). The incrementalist model of government spending assumes that the budget process is complex, its participants act with limited information, there are multiple actors involved, it is a compartmentalized process between receiving agencies, and it results in imperfect agreements on its ends (Bailey & O'Connor, 1975; Bozeman & Straussman, 1982). Incremental budgeting is predictable, limits changes to annual spending, and reflects a stability, or equilibrium, that exists between competing interests for resources. (Anderson & Harbridge, 2010; Bozeman & Straussman, 1982; LeLoup, 1978; Wildavsky, 1964). This equilibrium represents a balance between the internal and external interests of a local government that are competing for limited funding. In the case of local government expenditures, this theory can be shown to exist by confirming that there is a relationship between the funding of a service for the coming year with that of prior year expenditures. In government budgeting vernacular, this is referred to as “across-the-board” changes to levels of funding where each competing agency receives a comparable percentage adjustment, up or down, to current funding levels.
Historically, this theory has been used by researchers to explain year-over-year expenditures during normal periods of growth in revenues and expenditures. During times of fiscal stress, the positive growth in revenues is replaced with funding reductions. In the vernacular of Lindbloom, incrementalism in times of funding reductions becomes *decrementalism*, or the cutting of spending in a systemic manner based on prior years base budget (Dempster & Wildavsky, 1979).

**City Limits Typology**

The second component of the theoretical and conceptual framework for this study utilizes work done in the early 1980s to describe the policy regimes, or policy arenas, of local governments. The central focus of this scheme is built upon a foundation of the theme in Peterson’s (1981) landmark book titled *City Limits*. In that work, Peterson theorizes that the primary driver of public policy at the local level is the economic survival of the community and the enhancement of the local government’s position in the national, state, and regional economy. Each of the policy categories is characterized by its relationship and impact on the local economy. This classification system has come to be known in the literature as the *City Limits* Typology (CLT), and has gained widespread utilization in urban policy research (Longoria, 1994). The classification system is composed of the three following policy regimes, or arenas:

1. Developmental Policies – policies that enhance the economic interests of the local economic base and support competition with other local governments for tax base
and regional economic significance; for example expenditures on economic development, roads and highways, and utility systems;

2. Redistributive Policies – policies that benefit lower socio-economic residents including low and moderate income housing, and human services; and

3. Allocational Policies – policies that are neutral in their effect on the local economy in that they are distributed evenly throughout the jurisdiction, including public safety, parks and recreational facilities (Peterson, 1981).

Methods

Sources of Data

There are a number of secondary data sources available for use in this study. These include the state of Florida Department of Financial Services, the Florida Association of Counties, the Florida League of Cities, and the University of Florida Bureau of Economic and Business Research (BEBR). The most relevant and effective data to use in examining the effects of the Recession of 2008 on local government policy priorities is actual annual expenditures. The source of expenditure data for cities and counties is updated annually as part of the state of Florida’s Local Government Financial Reporting System (State of Florida Department of Financial Services, 2012).

Study Population and Sample

The unit of analysis in this study is the local government. In Florida, the term local government is used to describe all the units of government that provide services
whose governing body is elected to govern countywide, or to govern a sub-area within an individual county such as a municipality or special district. Local governments in Florida are comprised of cities, counties, school boards, and special districts. There are 67 counties and 410 municipalities in existence today (Florida Association of Counties, 2009; Florida League of Cities, 2012). There are approximately 1000 additional special districts that, when combined with city and county governments, spend over $80 billion annually delivering public goods and services to their constituents (Florida Tax Watch, 2011). Given the wide variety of special district forms and functions, they will not be included in this study. This study excludes education expenditures and the 67 school boards in Florida.

This study will focus on just two types of Florida local governments – city (municipal) and county governments. While there are 67 named counties in Florida, two of those counties, Dade and Duval, have been eliminated from this research because they are neither a city nor a county. Miami-Dade County and Jacksonville-Duval County each have established a unique form of local government whose expenditures do not reflect the same or similar organizational approach to the other 65 counties in the state. Differentiating between conventional municipal and county expenditures, and those of these two unique counties for comparative purposes is not possible. Including these two counties in this research would only confound the results. Lubell et al. (2005) also eliminated these two counties in their study of political institutions and county conservation policy in Florida for similar reasons. Therefore, for the purposes of this research, there is a total county population of 65.
Part 1 of this study - the descriptive analysis - will include all 65 counties and all 410 cities. This represents the entire population of cities and counties in Florida, and requires no sampling.

Part 2 of this study - the explanatory analysis - will utilize 65 counties and a sample of the 410 cities in Florida. Cities with populations greater than 5,000 in 2010 \( n = 197 \) will serve as the sample for Part 2. The selection of these cities based on a minimum population is a type of non-probability sampling called purposive or judgmental sampling, and is used when the researcher has critical knowledge of the population and the negative effect that random sampling of that population would have on the usefulness of the study (Babbie, 2010). Examination of the expenditure data revealed that cities of a smaller size had a higher incidence of missing data, likely due to those cities not providing the full array of municipal services.

**Measures**

This study will examine the proportional change in per capita expenditures for the three policy regimes within the *City Limits Typology* from pre to post-recession. The use of per-capita expenditures is common in this type of research and represents one of the better measures to be able to compare one local government’s pattern of expenditure change to another (Anderson & Harbridge, 2010; Eskridge & French, 2011; Wolman, 1982). Whether there has been a shift in local government policy can be achieved by using per-capita expenditure data for selected governmental services for each local

Model Specification

This research will examine what changes occurred in the pattern of city and county expenditures as a result of the Great Recession, and will attempt to explain these changes. The explanatory model relies upon independent variables that are attributes of each city or county - the type of government, the form of government, and the socio-economic characteristics of the government’s jurisdiction. The three dependent variables are the change in per-capita local government expenditures for each of the three City Limits typology policy regimes – developmental, allocational, and redistributive expenditures. The explanatory component of the research will utilize multiple regression as the primary analytical tool to test the hypotheses associated with Research Question 4. The goals of the study are to determine if the Great Recession caused a shift in local government policy priorities and to what degree the independent variables explain the variation in the policy shift.

Hypotheses

This study is focused on city and county policy and whether there has been a ‘shift’ in policy priorities as expressed by measuring the change in per-capita expenditures from pre to post-recession, using the City Limits Typology as a framework. Utilizing research on quantifying what constitutes an incremental change in budgetary terms,
Wildavsky (1974) concluded that budgetary outcomes that are within ± 10% of last year’s budget are considered incremental (LeLoup, 1978). Anderson and Harbridge (2010) reached the same conclusion. The resulting hypotheses for this study test the extent of the proportional change among and between the three policy regimes – developmental, allocational and redistributive, from pre to post-recession, using Wildavsky’s measure of incremental change. Various aspects and characteristics of the local governments are tested based on the literature review in Chapter 2. A proportional change within ± 10% would be deemed to be incremental and not identified as a shift in local government policy.

Study 1 - Descriptive Analysis

RQ 1. Did the expenditure patterns of local governments in Florida change from pre-recession to post-recession?

- Hypothesis 1: The proportionate share of expenditures of all Florida local governments for all three policy groups from pre to post-recession is within ± 10%, indicating no significant difference in expenditure patterns as a result of the Great Recession.

RQ 2. What differences or similarities, if any, exist between the type of local government and changes in expenditure patterns from pre-recession to post-recession?

- Hypothesis 2: The proportionate share of expenditures for all cities for all three policy groups from pre to post-recession is within ± 10%, indicating no significant difference in expenditure patterns.
• Hypothesis 3: The proportionate share of expenditures for all counties for all three policy groups from pre to post-recession is within ± 10%, indicating no significant difference in expenditure patterns.

• Hypothesis 4: The proportionate share of developmental expenditures of charter counties from pre to post-recession is ± 10% of that for non-charter counties.

RQ 3. What differences or similarities, if any, exist between the form of local government and changes in expenditure patterns from pre-recession to post-recession?

• Hypothesis 5: The proportionate share of expenditures of Council-Manager cities and Commission-Manager form counties for all three policy groups from pre to post-recession is within ± 10%, indicating no significant difference in expenditure patterns.

• Hypothesis 6: The proportionate share of redistributive expenditures of Council-Manager cities for from pre to post-recession is ± 10% of that for non-Council Manager cities.

• Hypothesis 7: The proportionate share of developmental expenditures of Council-Strong Mayor form cities from pre to post-recession is ± 10% of that for other forms of city government.
RQ 4. What relationships exist, if any, between the types, form, and socioeconomic characteristics of a local government, and changes in expenditure patterns from pre-recession to post-recession?

- Hypothesis 8: Average household income is positively associated with a change in the proportionate share of local government allocational expenditures from pre-recession to post-recession.
- Hypothesis 9: Average household income is negatively associated with a change in the proportionate share of local government redistributive expenditures from pre-recession to post-recession.
- Hypothesis 10: Population size is positively associated with a change in the proportionate share of local government developmental expenditures from pre-recession to post-recession.
- Hypothesis 11: Population size is negatively associated with a change in the proportionate share of local government redistributive expenditures from pre-recession to post-recession.
- Hypothesis 12: Population density is positively associated with a change in the proportionate share of local government allocational expenditures from pre-recession to post-recession.
- Hypothesis 13: Population density is negatively associated with a change in the proportionate share of local government redistributive expenditures from pre-recession to post-recession.
• Hypothesis 14: The Council-Strong Mayor form is positively associated with a change in the proportionate share of local government developmental expenditures from pre-recession to post-recession.

• Hypothesis 15: The Commission-Manager form of county government is negatively associated with a change in the proportionate share of local government developmental and redistributive expenditures from pre-recession to post-recession.

• Hypothesis 16: Home rule charter counties are positively associated with a change in the proportionate share of local government developmental expenditures from pre-recession to post-recession.

Organization of the Next Chapters

The remainder of this study is divided into chapters that set out the approach to this research. Chapter 2 focuses on the review of literature associated with the Great Recession of 2008 and local government’s response to fiscal stress. Chapter 3 describes the theoretical framework that will be used to analyze what happened to local government expenditures as a result of the recession and what factors might begin to explain whether the economic downturn caused a shift in local government policy. Chapter 4 establishes the methods and techniques that will be used to collect and analyze the data. Chapter 5 will identify the findings and results of the analysis in light of the study hypotheses. To complete the research, Chapter 6 will discuss the study results as they support or refute previous empirical studies in the literature.
CHAPTER 2  
LITERATURE REVIEW

There is a long line of research in the literature dating to 1960s known as determinant studies which analyzed the factors that influence public policy and government expenditures. These early studies focused on which social and economic variables influence public policy and expenditure decisions (Dye, 1969; Fry & Winters, 1970; Sharkansky & Hofferbert, 1969; Sunley, 1971). Several studies have concluded that the choice of strategies used by local governments during times of fiscal stress is a function of the severity of the government’s fiscal condition, form of government, and the socio-economic conditions faced by the community (Froman, 1967; Maher & Deller, 2007; Pammer, 1990). Froman (1967) identified similar variables in his summary of factors that influence local government policy adoption.

The Economic Downturn and Local Government Fiscal Stress

Local governments are at the bottom of the fiscal food chain (Pagano & Johnston, 2000). As organizations, they are constrained in their ability to perform their service delivery function by the availability of resources (Wolman, 1983). Since local governments are dependent upon their external environment (taxpayers, businesses, residents, etc.) for the resources necessary to function, they strive to establish stability and equilibrium with that environment (Bolman & Deal, 2008). When cities and counties are in a state of growth, they appear to have a rational, consistent, and more predictable approach to policy setting, including a consensus on organizational objectives. In a state
of retrenchment due to fiscal stress, cities and counties will exhibit fragmentation and inconsistent strategies as they attempt to understand the depth and breadth of their fiscal challenges (Levine, 1978).

Cyclicality and the Great Recession of 2008

The economic cycle, which has caused this fiscal stress for local governments, is illustrated by data from the U.S. Bureau of Economic Analysis (BEA) as shown in Figure 1. The official estimates of seasonally adjusted Gross Domestic Product (GDP) for the United States are reported by quarters. According to the BEA, GDP is defined as the market value of goods and services produced by labor and property in the United States, and is the most widely used indicator of the state of the U.S. economy (Bureau of Economic Analysis, 2012).

Figure 1. U.S. gross domestic product 2007 – 2011.
The first quarter of 2006 is often cited as the period in which the sub-prime mortgage crisis surfaced in the U.S. The collapse in the housing market caused all growth in the property tax base which had been growing steadily for over a decade to vanish, resulting in significant reductions in overall revenues for cities and counties (Acharya, Philippon, Richardson, & Roubini, 2009). Although the recession may have technically started at the end of 2007, the housing market and resulting financial crisis was well under way earlier in 2007 with a large number of households losing a major percentage of their net worth when housing prices started their steep downward trend (Acharya et al., 2009). Local governments began to see the erosion of their tax base and a drop in overall tax revenues in their next fiscal year (FY2008), which began on October 1, 2007. For the purposes of this study, the pre-recession time frame for local governments in Florida includes fiscal year 2008, and the post-recession time frame begins with fiscal year 2009. The measurement period that is considered pre-recession includes the average per-capita expenditures for the three Fiscal Years 2006 through 2008. The measurement period that is considered post-recession includes the average per-capita expenditures for the three Fiscal Years 2009 through 2011. This is further discussed in Chapter 4.

There has been a modest national recovery of some local government revenues from 2008 to the third quarter of 2012, returning some revenues to pre-recession levels (GAO, 2013). However, most of this recovery has been a result of growth in income and sales taxes. Property taxes have not recovered on a national basis and continue to lag. Property taxes remain as the single largest source of local government revenues nationally (Alm et al., 2011; Chernick et al., 2011; Ebel et al., 2013). Overall, the GAO projects that
local government property tax revenue will not recover to 2007 pre-recession levels until 2060 (GAO, 2013).

Local Government Revenue Crisis in Florida

Local government revenues are generated from a number of sources, and typically include property taxes, sales taxes, user fees, and intergovernmental revenues. Ad valorem property taxes in Florida, which are generated from the assessed value of real estate, were 45.2% of total revenues for counties and 23.1% of total revenues for cities for the fiscal year ending September 30, 2008. These represent the single largest source of revenues for counties and the second largest source of revenue for cities in Florida. Florida, unlike most other states, is overly dependent upon property tax to finance local government, and city and county revenues are more vulnerable to extended downturns in the economic cycle (Florida Legislative Committee on Intergovernmental Relations, 2010).

The assessed value of real estate in Florida is the driving economic force behind local government revenues. As a result of the national economic downturn, the resulting loss of assessed value of real estate in Florida between the years of 2007 and 2011 was a staggering 26.6%, amplifying the revenue crisis facing cities and counties in the state (Table 1).
Table 1

*Year-to-Year Change in Ad Valorem Values in Florida*

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Total Property Value in Trillion $</th>
<th>% Change from Prior Year</th>
<th>Cumulative % Change from 2007 to 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>2.52</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2008</td>
<td>2.43</td>
<td>-3.83</td>
<td>-26.6</td>
</tr>
<tr>
<td>2009</td>
<td>2.20</td>
<td>-9.26</td>
<td>-26.6</td>
</tr>
<tr>
<td>2010</td>
<td>1.94</td>
<td>-12.02</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>1.85</td>
<td>-4.52</td>
<td></td>
</tr>
</tbody>
</table>


**Local Government Response to Fiscal Stress**

Several authors have identified a pattern of organizational response to fiscal stress as the depth of the economic downturn intensifies. During the initial stages of revenue constraints, local governments will seek to ‘buy time’ by utilizing efforts to balance budgets through modest operating cost reductions, use of reserve funds, and deferral of facility maintenance, and delays in capital expenditures - items that are relatively invisible to the external environment (Baker, 2011; Hoene & Pagano, 2009; Levine, Rubin, & Wolohojian, 1981; Lewis, 1984; Wolman, 1980, 1982). As the fiscal crisis worsens, sources of revenue enhancement are explored, either through intergovernmental sources or from self-generation (Cooper, 1996; Levine, 1978; Wolman, 1980). Maintaining levels of service for as long as possible promotes policy stability, which is one of the hallmarks of the incrementalist view of public sector budgeting (Anderson & Harbridge, 2010; Boyne, Ashworth, & Powell, 2000; LeLoup, 1978; Lewis, 1984; Wildavsky, 1964). However,
continuing revenue shortfalls well into the economic cycle will ultimately require local governments to look at significant expenditure reductions. They will defer program and/or personnel cuts to the very last possible moment, but cuts eventually have to be made (Levine, 1978; Wolman, 1980). In an assessment of the nation’s parks and recreation programs in 2010, declining revenues and tax support is placing pressure on local government parks and recreation agencies resulting in staff furloughs, freezing of positions, and reduction of part-time positions in seasonal and maintenance areas (Mulvaney, 2010).

As the economic environment worsens, local governments gravitate to modest reductions in service levels and cutting of staff across multiple functions as opposed to elimination of programs (Levine et al., 1981). This generalized sequence of actions in response to fiscal stress is consistent with an incremental approach to local government policy adoption and has been confirmed in several empirical studies (Levine et al., 1981; Morgan & Pammer, 1985).

During times of economic retrenchment, decision makers have a limited number of budgetary tools available to address gaps between revenues and expenditures. Often times, it is the local government’s own internal management structure that constrains the available options. Examples of these include personnel classification systems and union contracts. The rigidity of some personnel systems and the existence of union contracts can prevent leadership from using all available strategies to mitigate the impact of a recession on the local government budget (Levine et al., 1981).
Cutback Strategies – Incrementalism and Political Equilibrium

One of the hallmarks of a budget that is developed consistent with Lindbloom’s (1959) theory of budgetary incrementalism is its stability from a policy standpoint. Year-over-year changes in an incremental budget are typically consistent and reflect consensus of policy within the organization (Anderson & Harbridge, 2010; Levine, 1979; Wildavsky & Caiden, 1997). The concept of a ‘base’ budget is held by actors in the budgeting process as a common expectation that an agency’s funding will continue into the next budget year at or near its current level. This belief contributes to the stability of the resource allocation environment. Past expenditures are accepted as legitimate and the focus is on balancing the budget (Boyne et al., 2000; Breunig & Koski, 2012; Davis et al., 1966; Lewis, 1984).

What Is Incrementalism?

The definition of what is an incremental change in budget and expenditures is the subject of considerable analysis in the literature. The term increment could imply that the annual change in appropriations is small in comparison to the preceding year. Anderson and Harbridge (2010) describe a range of 2% to 30% that has been documented in the literature. Their analysis of the federal budget reveals that more than 60% of the budgetary changes are more than 5% and almost 50% of changes are more than 10%. Wildavsky (1974) concluded that budgetary outcomes that are within ± 10% of last year’s budget are considered incremental (LeLoup, 1978). Anderson and Harbridge (2010) reached similar conclusions regarding a no more than ± 10% change constituting a year-
over year incremental change to expenditures. Boyne, Ashworth and Powell (2000) add a refinement to the percentage change view. They define incrementalism as adherence to the budgetary norms of the organization. In operationalizing these norms, two decision rules are invoked. First is the marginality, or size of the annual change. Second, there must be regularity, or consistency of deviations over time. These norms compose the simple rules that are used to reduce the complexity of spending decisions.

Bailey and O’Connor (1975) criticized Wildavsky when he determined that changes up to 30% could constitute incremental budgeting. Wildavsky responded by claiming that it is the regularity of change, and not the size of the increment that is most important (Dempster & Wildavsky, 1979).

Cutback Strategies – Seeking Political Equilibrium through Decrementalism

Wolman (1983) concluded that local governments under fiscal stress act to maintain their equilibrium relationship with both their external and internal environments. They achieve this by initially using tactics that do as little disruption to these relationships as possible. These tactics generally do not include new revenues from increasing fees or taxes, for that would likely upset external relationships and disrupt the political equilibrium that is being sought. Instead, the actions typically start out as reducing capital expenditures and other service reductions that are marginal in their impact and generally invisible to the external environment. Service level cuts are considered the least desired policy choice and come only when it is perceived that there are no other options. Maher and Deller (2007) confirmed this in their study of local governments in Wisconsin. The
equilibrium that exists among governmental services during times of normalcy is threatened during periods of extreme stress. As a result, the political consequences of changes to the equilibrium achieved during times of stability is challenged (Nelson, 2012; Wolman, 1983).

During times of fiscal stress, the positive growth in revenues is replaced with funding reductions. In the vernacular of Lindbloom, incrementalism in times of funding reductions becomes *decrementalism*, or the cutting of spending in a systemic manner based on the equity principles associated with Simon’s (1957) theory of bounded rationality and the desire to maintain political equilibrium (Dempster & Wildavsky, 1979; Schick, 1988).

The choices facing local governments when deciding how to cutback is a tradeoff between equity and efficiency. An efficiency cutback typically results in targeted reductions for specific services or functions based on a policy directive from the elected board and/or an appointed manager, based on the form of the local governmental. An equitable cutback would mean paring back funding relatively equally across the entire organization. In budgeting jargon, this is also known as “across-the-board” budget reductions so that the pain of the impact is felt equitably throughout the organization. The use of across-the-board budget reductions avoids the extensive analysis typically associated with efficiency or “targeted” cuts and supports the bounded rationality explanation for incremental budget decisions. The internal and external equilibrium and stability that local governments strive to maintain with its interest groups is maintained when decremental budgeting occurs (Levine, 1978; Nelson, 2012; Wolman, 1983). This
type of equity cutting could also indicate an inability of a local government to address the concerns of multiple interest groups and therefore resort to a policy of spreading out the pain equally among operating departments (Jick & Murray, 1982).

Relevant Empirical Studies

In reviewing data reported by 230 of 273 Michigan cities between 2005 and 2009, and Skidmore and Scorsone (2011) found that certain municipal services were more susceptible to fiscal stress. Utilizing secondary data from the Michigan Department of Treasury, they found that General Government, Public Works, and Parks and Recreation realized expenditure reductions while ‘essential’ services such as Public Safety were not adversely affected. In the search for a consistent pattern of expenditure reductions between local governments, there are similarities in the findings among many studies that also confirm work done in the 1980s, during the last period of significant economic downturn in the U.S. West and Davis (1988) established that a ‘preferred policy hierarchy’ existed in the budgeting and expenditure reduction approach taken by over 1000 cities across the country. They concluded that leisure services and social services were most often the target of funding reductions while public safety functions were least likely to be cutback.

The Michigan study has implications for this proposed research in Florida for several reasons. The most important is that the fundamental methodological approach is replicable. The source data for the study was collected by the state of Michigan under uniform guidelines of reporting, and the data used was actual expenditure data, not
budgeted expenditures. Actual expenditures are a more accurate measure of public policy than forecasted, or budgeted, expenditures. Florida has a very similar system for the reporting of local government expenditure data that will be used in this research, thus improving the potential generalizability of the findings. This increases the value of this proposed research in that it can contribute to body of knowledge about the effects of the Great Recession of 2008 on local government service delivery by incorporating salient aspects of the Michigan study.

Kelly and Rivenbark (2008) conducted a study of local government expenditures from all fifty states for five-year intervals between 1994 and 2004. They chose to use per capita expenditure data rather than appropriations due to its more accurate measure of actual impact (Anderson & Harbridge, 2010; Eskridge & French, 2011). They made a positive finding of the existence of budgetary incrementalism in all but one state – Hawaii, in which they described the 2% reduction of expenditures as a negative increment. While this study provides some guidance and confirmation of the use of certain measures, the time frame that was studied was during a period of relative consistent economic growth and did not have to factor in one of the longest and deepest recessions in American history. However, their research on how to measure and document the existence of budgetary incrementalism in local government expenditures is germane to the proposed research.
Summary of Response to Fiscal Stress Literature

The overall conclusion is that in the early stages of fiscal stress, local governments attempt to “buy time” to understand whether the conditions will improve or not. Local governments always seek to stabilize the political equilibrium with their internal and external environment, and this is true during times of fiscal stress. Using equitable strategies such as ‘across the board’ reductions in expenditures is supported by Lindbloom’s (1959) incremental theory of government policy action (Dezhbakhsh, Tohamy, & Aranson, 2003). However, prior empirical studies indicate that a preferred policy hierarchy may exist that favors certain services over others (Skidmore & Scorsone, 2011; West & Davis, 1988).

Type of Government: Florida’s Cities and Counties

Local governments in Florida are the unit of analysis for this study and are comprised of two types: cities and counties. Any examination of the fiscal and policy behavior of local governments in Florida must consider the similarities and differences that exist between cities and counties.

Florida’s Cities

Under the 1885 state Constitution, the authority of any city was specifically limited by an expressed grant of power by the Florida Legislature (Florida League of Cities, 2013). In 1969, a new Constitution of the state of Florida became effective and included a provision for ‘municipal home rule.’ Article VIII, Section 2(b) of the 1969 Constitution
granted home rule powers to municipalities in Florida, as long as it meets two tests: 1) the powers must be of a municipal purpose, and 2) the powers may be exercised “except as provided by law” (Florida League of Cities, 2013; Tucker, 2007a).

Florida’s cities enjoy home rule powers, meaning they can be self-governed and adopt their own laws, as long as those laws do not conflict with state or federal law. A significant exception to the home rule powers of cities is fiscal authority. That authority remains with the state of Florida. The state authorizes cities to levy and collect taxes and fees with the granting of those powers through state statute (Florida League of Cities, 2011).

Florida’s Counties

There is more variation in the structure of county government than there is in municipal government (Svara & Nelson, 2008). The structure of county government in Florida has three fundamental components: charter status, form of government, and districting plan (Jewett, 2010). The first two, charter status and form of government are most relevant to this study as they are indictors of differences in authority and decision-making. The districting plan refers to the number of seats and the method of electing the governing body either by individual districts or countywide. The districting plan is not considered as part of this research. The form of county government, along with the form of municipal government in Florida, is discussed below in a separate discussion.

The Florida Constitution requires that the state be divided into counties. Unlike municipalities, which must meet certain minimum population and provision of services
requirements, counties are defined simply by a description of territory. The entire
landmass of Florida lies within a county. County boundaries cannot be modified in the
same manner as cities. Only the Florida Legislature can revise and alter the boundaries of
counties. Florida’s counties are mandated by the state constitution to carry out specific
functions such as property assessment, tax collection, law enforcement and jail
administration, state court administration, public health, road maintenance, solid waste
disposal and supervision of elections, all on a countywide basis, including all of the
municipalities within the county (Florida League of Cities, 2011; Jewett, 2010; The
Florida Legislature, 2013).

County Home Rule Charter

There are two types of counties in Florida - charter and non-charter. A county that
properly adopts a home rule charter can operate in any manner not specifically prohibited
by state law. In a series of laws passed in the early 1970s, the Florida Legislature clarified
the powers of both charter and non-charter counties. The existence of a county home rule
charter takes the Florida Legislature out of the settlement of local issues and put it in local
control (Florida Association of Counties, 2009; Jewett, 2010). When counties adopt home
rule powers, they are better capable of providing services to meet the demands of a
growing metropolitan, unincorporated population (Benton, 2002; McCabe, 2000). Under
the Florida Constitution and state statute, a county charter can be adopted, amended or
repealed only by the registered electors of the county (Tucker, 2007a).
Another aspect of a county home rule charter is important to this research. Aside from a number of important distinctions such as the ability of a charter county to organize itself to address the specific needs of their electorate, charter counties in Florida are differentiated from non-charter counties in that they can levy utility services taxes in the unincorporated areas of the county. The taxes on consumption of electricity, water, sewer, natural gas, liquefied petroleum gas, and kerosene/heating oil are a significant source of revenue that is not available to non-charter counties (Jewett, 2010). Table 2 identifies the counties in Florida that operate under home rule.

Table 2

*Florida's Charter Counties and the Year of Adoption*

<table>
<thead>
<tr>
<th>County</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alachua</td>
<td>1987</td>
</tr>
<tr>
<td>Brevard</td>
<td>1994</td>
</tr>
<tr>
<td>Broward</td>
<td>1975</td>
</tr>
<tr>
<td>Charlotte</td>
<td>1986</td>
</tr>
<tr>
<td>Clay</td>
<td>1991</td>
</tr>
<tr>
<td>Columbia</td>
<td>2002</td>
</tr>
<tr>
<td>Duval</td>
<td>1967</td>
</tr>
<tr>
<td>Hillsborough</td>
<td>1983</td>
</tr>
<tr>
<td>Lee</td>
<td>1996</td>
</tr>
<tr>
<td>Leon</td>
<td>2002</td>
</tr>
<tr>
<td>Miami-Date</td>
<td>1957</td>
</tr>
<tr>
<td>Orange</td>
<td>1986</td>
</tr>
<tr>
<td>Osceola</td>
<td>1992</td>
</tr>
<tr>
<td>Palm Beach</td>
<td>1985</td>
</tr>
<tr>
<td>Pinellas</td>
<td>1980</td>
</tr>
<tr>
<td>Polk</td>
<td>1998</td>
</tr>
<tr>
<td>Sarasota</td>
<td>1971</td>
</tr>
<tr>
<td>Seminole</td>
<td>1989</td>
</tr>
<tr>
<td>Volusia</td>
<td>1971</td>
</tr>
<tr>
<td>Wakulla</td>
<td>2008</td>
</tr>
</tbody>
</table>

Non-charter counties have been granted the power of self-government, but only by way of legislation and not via the constitution. The delegation of this authority is subject to regulation through special law similar to the authority the legislature has over municipalities. Non-charter counties and municipalities are still subject to regulation by local law adopted by the Legislature, whereas charter counties are limited by general law of the legislature and by special law approved by the electors (Tucker, 2007a). In certain instances, the state may authorize non-charter county ordinance preemption over municipal ordinances, as is typically done in the area of emergency management (Tucker, 2007b). When there is a conflict between a county ordinance and a municipal ordinance, the Constitution requires that the county charter clarify which ordinance would prevail (Tucker, 2007a).

The Florida Constitution provides for a procedure in which local governments may transfer powers among and between cities, counties and special districts. The legislature has also recognized the need to encourage interlocal cooperation by adoption of the Florida Interlocal Cooperation Act (FICA) in Part I of F.S. Chapter 163. Agreements pursuant to this Act have been used to jointly finance capital projects and to consolidate various services to achieve greater efficiencies and economies of scale. Counties may not use countywide ad valorem revenues for the benefit of unincorporated residents without there being shown a direct benefit accruing to the municipal property or taxpayers (Tucker, 2007b).

The existence of a home rule charter is important in this research. Since the charter grants the power of self-rule to a county, it makes it easier for the county to
respond to citizen demand for increased and improved levels of services (Benton, 2002). Benton (2002) concluded that the expenditure patterns of charter county governments place greater emphasis on local services, including developmental expenditures, when compared with non-charter counties regardless of the form of government. This position is supported by the findings of Choi et al. (2010) in which they found that developmental and redistributive expenditures increased with the existence of a home rule charter.

Changing Role of Counties

About 51% of the population in Florida lives inside one of the 410 cities (Florida League of Cities, 2011). The balance resides in unincorporated areas governed by one of Florida’s 67 counties (Duval County consolidated with the city of Jacksonville into a city-county government and is considered a city when calculating municipal population in the state). The shift in the demographics of the last forty years toward suburbanization forced many counties to transform into urban service delivery agencies without many of the requisite revenue generating tools to be successful (Martin, 1993). As a result, twenty of Florida’s counties have adopted a charter to organize and design the form and function of county government to address their changing demographics and service delivery needs (Jewett, 2010).

In evaluating the expenditure patterns of Florida’s counties, consideration should be given to understanding which services are provided countywide as compared to those municipal type services provided primarily to the unincorporated population. Benton (2002) found that as counties urbanized and existing resident migrated to the suburbs,
much of the population remained unincorporated. This created a growing demand for ‘local’ services – those municipal type services traditionally provided by cities. These include utilities, police, fire, parks, recreation, and public works. These local services are contrasted with ‘regional’ services that are provided countywide, without regard for incorporation. Utilizing countywide population in determining per-capita expenditures for what Benton (2002) defines as local services could present measurement concerns. Therefore, separate measures of total county population and unincorporated population will be used in measuring per-capita expenditures for counties. This is discussed further in Chapter 4.

Summary of Cities versus Counties

The Florida Constitution and state statutes define the powers of cities and counties. There are slight differences between the home rule powers granted to municipalities and those approved by adoption of a county charter. The twenty counties that have adopted charter government in Florida are also those counties containing the highest concentration of population and urban development in Florida.

Form of Government as a Determinant of Local Government Expenditures

The study of the relationship between the form of local government and expenditures has been well examined with mixed results. Earlier works focused on cities and whether the two basic forms of city government – Council-Manager and Mayor-Council – had significant differences in spending patterns. Some found higher spending
under the Mayor – Council form and/or lower expenditures with an appointed city manager (Booms, 1966; Coate & Knight, 2011; Lineberry & Fowler, 1967; Lyons, 1977; Stumm & Corrigan, 1998). These early studies of the 1960s and 1970s were rudimentary and limited in the use of multivariate analysis. Nevertheless, they did conclude that the form of government was a factor in municipal spending (Carr & Karuppusamy, 2010).

There is no uniform consensus in the literature on this topic. Others concluded that the Council-Manager form produced higher per-capita expenditures as compared to the Mayor-Council form of government (Sherbenou, 1961). Later studies starting in the 1980’s concluded that there was no significant difference in expenditure patterns between the two basic forms of municipal government (Deno & Mehay, 1987; Deno & Mehay, 1987; Farnham, 1986; Hayes & Chang, 1990; Jung, 2006; Macdonald, 2008).

This research uses local government expenditures as a surrogate for policy action as measured pre and post-recession. Studies dating to the late 1960’s have explored the relationship between governmental structure and policy outcomes. The form of government has been found to be a contributing factor in certain policy decisions (Clingermayer & Feiock, 2001; Dye, 1967, 1969; Dye & Macmanus, 1976).

Clingermayer and Feiock (2001) identified one of the most important determinants of municipal policy decisions is the form of government. During the past decade, the form of county government has been the subject of equal emphasis as cities. More research has been conducted in this area for municipalities than for counties (Benton, 2002). As with the earlier research on cities, the form of county government has been determined to be
one of the factors in shaping county government policy (Choi et al., 2010; DeSantis & Renner, 1996; Feiock, 2004; Lubell, Feiock, & Ramirez, 2005).

Carr and Karuppusamy (2010) suggest that the relationship between form of municipal government and policy is a mainstay of empirical research on municipal policy decisions. They identified three areas where there have been obstacles to a more complete understanding of this relationship. First, the notion that the city manager in the Council-Manager form is the only example of a form of government with professional management has been disrupted with the advent of the appointed position of Chief Administrative Officer (CAO) in some Mayor-Council forms of government. Secondly, the use of expenditure data does not necessarily reflect improvement in the effectiveness of service delivery, often overlooking examples of administrative efficiency. Finally, Carr and Karuppusamy (2010) identify the complexity of the relationship between form of government and fiscal policy as a reason why prior research may not have properly specified the causal models used in the analysis of data.

Form of County Government

There are three basic forms of county government in the United States, and are the existing forms in the state of Florida (Florida Association of Counties, 2009; National Association of Counties, 2013). These include the Commission, Commission-Administrator (or Manager), and the Commission-Executive forms of government. Each form grants the authority for policy implementation to a different entity. In the Commission form, the executive powers to administer policy lies jointly with the elected
County Commission. In the Commission-Administrator form, a county administrator, sometimes called a county manager, is appointed by the county Commission to run the day-to-day operations of government, including the power to hire and fire department heads. The county administrator is also responsible for preparing a budget for adoption by the County Commission. The Commission-Executive form provides for an elected county executive that typically has veto powers over ordinances and other prescribed actions of the County Commission. The county executive has the authority to hire and fire department heads (Jewett, 2010; National Association of Counties, 2013; Turnbull, 2007).

The Commission form is considered the traditional, “unreformed,” form of county government. As a result of their not being an appointed administrator or manager to oversee day-to-day operations, operating departments and agencies report directly to the elected body (Feiock, 2004; Jewett, 2010). This form of county government has been characterized as being more easily swayed by local politics, especially those representing growth and development interests (Turner, 1990).

The Commission-Administrator form and Commission-Executive form of county government are also referred to as “reformed” county governments throughout the literature (Feiock, 2004; Jewett, 2010; Svara & Nelson, 2008). The reform movement in county government began as an attempt to increase professionalism to provide better leadership in an increasingly complex service delivery agenda (DeSantis & Renner, 1994; Schneider & Ok Park, 1989). The reform movement for counties started much later than that for cities. The shift away from the Commission form to the Commission-Administrator and Commission-Executive forms is the result of the county reform
movement (Benton, 2002; Lubell et al., 2005; Schneider & Ok Park, 1989). The county reform movement had a different motivation than municipal reform. City reformers pursued greater efficiency and a reduction in spending, whereas county reformers sought to make the form of government more responsive to the needs of its citizens, which is likely to result in greater spending (Benton, 2002; Choi et al., 2010).

Significance of the Form of County Government

The form of county government has bearing in the evaluation of the response to the Great Recession of 2008. The traditional Commission form has been the subject of some criticism due to the lack of a single executive, either elected or appointed, to effectively execute policy. The traditional Commission form has been viewed as having a limited ability to respond to the service needs of a growing metropolitan region. The Commission form of county government exists without the benefit of a home rule charter, and may only provide those services authorized by the state with revenue sources restricted by state statute (Benton, 2002).

The level of urbanization and complexities of urban issues tend to drive counties to the reform movement, either through adoption of a home rule charter or other structural reform. Service demands are higher resulting in higher expenditure requirements (Benton, 2002; Choi et al., 2010; DeSantis & Renner, 1994; Morgan & Kickham, 1999; Schneider & Ok Park, 1989). Studies examining the relationship between expenditures and form of county government reveal that reformed county governments have higher levels of expenditures than the non-reformed Commission form (Benton, 2002; Choi et al., 2010;
This is contrasted by Campbell and Turnbull (2003) who found no significant differences between the spending patterns of different forms of county government. Their national study of cities and counties did indicate some slight differences in expenditure patterns when regional location was taken into account (Campbell & Turnbull, 2003).

Schneider & Park (1989) found the relationship between the form of county government and the role in service provision significant. Their national study identified the Commission-Executive form as providing the most services, with Commission-Manager forms providing the second most services, and Commission form counties lagging far behind. In comparing county form by type of expenditure, Schneider and Park (1989) found that the Commission form and Commission-Manager form spent similar amounts on developmental expenditures, but far less than the Commission-Executive form. Choi et al., (2010) found that Commission-Manager and Commission-Executive forms had a negative relationship with expenditures in the developmental and redistributive policy arenas. Some have explained this relationship as being the result of efficiency and commitment to formal process as the top priority of the appointed executive, whereas the Commission form of county government is more responsive to the political demands for developmental and redistributive expenditures (Choi et al., 2010; Feiock, 2002, 2004; Lubell et al., 2005).

Jewett (2010) classified the form for all of Florida’s counties. Those findings are shown in Table 3.
Table 3

*Three Forms of County Government in Florida with Date of Adoption of New Form*

<table>
<thead>
<tr>
<th>County</th>
<th>Date</th>
<th>County</th>
<th>Date</th>
<th>County</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calhoun</td>
<td>N/A</td>
<td>Baker</td>
<td>1990</td>
<td>Alachua</td>
<td>1987</td>
</tr>
<tr>
<td>Franklin</td>
<td>N/A</td>
<td>Broward</td>
<td>1975</td>
<td>Bay</td>
<td>1987</td>
</tr>
<tr>
<td>Hamilton</td>
<td>N/A</td>
<td>Charlotte</td>
<td>1986</td>
<td>Bradford</td>
<td>1993</td>
</tr>
<tr>
<td>Jefferson</td>
<td>N/A</td>
<td>Citrus</td>
<td>1999</td>
<td>Brevard</td>
<td>1994</td>
</tr>
<tr>
<td>Lafayette</td>
<td>N/A</td>
<td>DeSoto</td>
<td>1987</td>
<td>Clay</td>
<td>1991</td>
</tr>
<tr>
<td>Levy</td>
<td>N/A</td>
<td>Escambia</td>
<td>1985</td>
<td>Collier</td>
<td>1993</td>
</tr>
<tr>
<td>Liberty</td>
<td>N/A</td>
<td>Flagler</td>
<td>1995</td>
<td>Columbia</td>
<td>2002</td>
</tr>
<tr>
<td>Madison</td>
<td>N/A</td>
<td>Gadsen</td>
<td>1989</td>
<td>Dixie</td>
<td>?</td>
</tr>
<tr>
<td>Suwannee</td>
<td>N/A</td>
<td>Gilchrist</td>
<td>2004</td>
<td>Glades</td>
<td>1995</td>
</tr>
<tr>
<td>Union</td>
<td>N/A</td>
<td>Gulf</td>
<td>1993</td>
<td>Hardee</td>
<td>2001</td>
</tr>
<tr>
<td>Hendry</td>
<td>1987</td>
<td>Lake</td>
<td>1990</td>
<td></td>
<td></td>
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<tr>
<td>Hernando</td>
<td>1983</td>
<td>Lee</td>
<td>1996</td>
<td></td>
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<tr>
<td>Highlands</td>
<td>1991</td>
<td>Nassau</td>
<td>1986</td>
<td></td>
<td></td>
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<tr>
<td>Hillsborough</td>
<td>1983</td>
<td>Osceola</td>
<td>1992</td>
<td></td>
<td></td>
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<tr>
<td>Holmes</td>
<td>2006</td>
<td>Polk</td>
<td>1998</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indian River</td>
<td>1990</td>
<td>Seminole</td>
<td>1989</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jackson</td>
<td>1984</td>
<td>Volusia</td>
<td>1971</td>
<td></td>
<td></td>
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<tr>
<td>Leon</td>
<td>2002</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Manatee</td>
<td>1991</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Marion</td>
<td>1983</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Martin</td>
<td>1981</td>
<td></td>
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<tr>
<td>Monroe</td>
<td>1977</td>
<td></td>
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</tr>
<tr>
<td>Okaloosa</td>
<td>1993</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Okeechobee</td>
<td>1992</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Palm Beach</td>
<td>1985</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Pasco</td>
<td>1974</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pinellas</td>
<td>1980</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Putnam</td>
<td>1990</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Santa Rosa</td>
<td>1989</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Sarasota</td>
<td>1971</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>St. Johns</td>
<td>1990</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>St. Lucie</td>
<td>1959</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sumter</td>
<td>1983</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taylor</td>
<td>2003</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wakulla</td>
<td>2008</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walton</td>
<td>1984</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Washington</td>
<td>1991</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Jewett (2010) has identified a relationship between size of county population and form of government in Florida. This evolution of form of government is borne out in Table 4.

Table 4

<table>
<thead>
<tr>
<th>Form of Government</th>
<th>Average County Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commission</td>
<td>18,969</td>
</tr>
<tr>
<td>Manager/Administrator</td>
<td>260,723</td>
</tr>
<tr>
<td>Executive</td>
<td>1,493,914</td>
</tr>
</tbody>
</table>

Note. Adapted from “County Government Structure in Florida,” by A. Jewett, 2010, In Florida county government guide (pp. 7 – 26), Tallahassee, FL: Florida Association of Counties.

As counties grow in population, so does the complexity of issues that need to be addressed. There are currently ten counties remaining with the original Commission form of government. They are all rural counties. These counties would be expected to have the lowest per-capita expenditures for governmental services among forms of county government (Benton, 2002). When matters grow beyond the ability of the Commission form and professional management is required, there typically is a move to adopt a charter affirming the Commission-Manager form (Svara & Nelson, 2008). Given the inability of that form to address the even more complex political, economic, and social issues of counties greater than one million in population, the pattern has been to move to the Commission-Executive form. A countywide elected county executive, with veto power over certain Commission decisions is often viewed as a more effective governing
mechanism, especially in areas of large population and complex problems. As county
governments move from the Commission form to Commission-Administrator to
Commission-Executive, there is an increase in the number and scale of services provided
as demands from increasing population grows (Benton, 2002, 2003; Morgan & Kickham,
1999; Schneider & Ok Park, 1989). In Florida, three counties have adopted the
Commission-Executive form – Miami-Dade, Orange, and Duval counties. The elected
county executive in these three counties has a leadership role in policy making as well as
the responsibility for administering most of the services delivered by the county. In all
three instances, the county executive employs a profession administrator to assist with the
administrative function (Jewett, 2010).

Form of City Government

The Florida Constitution permits cities to adopt any form of government they
desire, as long as the legislative body is elected. The Florida Statutes go further in
requiring that any proposed municipal charter must clearly define the legislative and
executive functions (Florida League of Cities, 2013). There are four generalized forms of
city government in Florida that establish the structure of governance for municipalities.
These include:

- Council-Manager – a city council, or commission, sets policy and adopts the
  annual budget. The council appoints a city manager that oversees the day-to-day
  administrative operations. The mayor is typically selected from among the council
  and the position is held on a rotating basis.
- Council-Strong Mayor – the Mayor is elected citywide and is the chief executive, and has significant control over policy, administration, and the annual budget. The mayor typically has veto power over certain actions of the council. The mayor can also be a voting member of the council depending upon the charter.

- Council-Weak Mayor – the role of mayor is limited to ceremonial, and is often rotated on an annual basis. The council is responsible for legislative functions and administrative oversight. Department heads report to the entire council.

- Commission – the commission has both legislative and executive responsibilities. Each city commission is responsible for a department of function of government, such as police, fire, finance, public works, etc. One commissioner is designated the mayor to have a presiding officer (Florida League of Cities, 2013; National League of Cities, 2013).

The most common form of municipal government in the United States is the Council-Manager form. In 2007, 49% of the cities and towns over 2,500 in population in the U.S. were operating under this form. The percentage is even higher (58%) for U.S. cities with populations over 100,000 (International City-County Management Association, 2013). More than half of the municipal governments in Florida operate under the Council-Manager form of government (Florida League of Cities, 2013). The Council-Mayor form, both strong and weak, is the second most utilized form of government nationally. The Commission form, the oldest form of government in the U.S., is relatively rare, operating in just 1% of cities nationally and has limited presence in Florida (National League of Cities, 2013). In the past 30 years, there has been a hybridization of some of these forms.
as individual cities tailor their structure to fit the unique needs and character of their community. Most of these alterations have occurred between the Council-Manager and Council-Strong Mayor forms (DeSantis & Renner, 2002).

Significance of the Form of City Government

In the analysis of how local governments respond to fiscal stress, several studies have attempted to measure the effects of the form of government. There is a considerable volume of literature examining the relationship between government expenditures and form of city government, with mixed results. Various studies looked at the Council-Weak Mayor form versus the Council-Manager (reformed) form of city government and found that reformed cities are likely to tax and spend less than their unreformed counterparts (Booms, 1966; J. Chapman & Gorina, 2012; Deno & Mehay, 1987; Lineberry & Fowler, 1967; Lyons, 1978; Sass, 1991). However, more recent results are mixed. These studies indicate that cities with administrative leadership rather than political leadership result in higher per-capita expenditures (Coate & Knight, 2011; Eskridge & French, 2011), while others concluded that the presence of a professional manager had no impact on the pattern of expenditure reductions as a result of fiscal stress (Nelson, 2012).

Other studies have concluded that the city manager is more detached from the political process than elected strong mayors when comparing the expenditure levels of each form, and therefore result in more efficient measures of service delivery and more detachment from the politics of spending (Booms, 1966; Chapman & Gorina, 2012; Coate & Knight, 2011; DeSantis & Renner, 1994; Lineberry & Fowler, 1967; Stumm &
Corrigan, 1998). Hawkins (2010) notes that the Council-Manager form of city government may be more oriented toward redistributive policies based on the guidelines for the professional city manager that emphasizes citizen access and equity in the distribution of resources.

The role of the mayor in the municipal governance structure is important in understanding the relationship between developmental and redistributive expenditures as defined in the City Limits typology. Basolo and Huang (2001) found that the strong mayor form had a positive relationship with developmental policy expenditures as compared with redistributive initiatives. The mayor in a Council-Strong Mayor form of city government is expected to be more responsive to political pressure from pro-growth business and citizen interest groups, resulting in the adoption of policies that favor developmental expenditures (Basolo & Huang, 2001; Fleischmann, Green, & Kwong, 1992). Less reformed city governments may lack the ability to implement certain development policies (Clingermayer & Feiock, 2001). Contradicting results have found the Council-Manager form to be more aligned with the growth and development interests of the city by favoring expenditures for roadways, and sewer and water infrastructure (Nunn, 1996).

The early literature that relied upon the dichotomous description of city government as either council-manager or mayor-council has been criticized as being far too simple to fully explain fiscal policy actions (Carr & Karuppusamy, 2008; Frederickson & Johnson, 2001; Karuppusamy & Carr, 2012). During the 1990s, researchers began to identify changes that were occurring in each of the two basic forms, incorporating aspects
of each other. What emerged in the literature was a classification system known as the Adapted Cities Framework (Frederickson & Johnson, 2001). This framework categorized mayor-council form cities as political or Type I cities. Council-manager form cities are described as administrative in nature and classified as Type II cities. The Adapted Cities Framework recognized the amalgamation of aspects of each of these two forms into what is known as a Type III form of government. (Frederickson & Johnson, 2001; Frederickson, Johnson, & Wood, 2004; Frederickson, Logan, & Wood, 2003). The classification of Florida’s cities based on the Adapted Cities Framework has not yet been undertaken, and would be a welcome addition to the literature. This represents a ripe area to expand upon the research proposed in this study. The classification system deployed by the Florida League of Cities (2013) will serve as the analytical typology for this research.

Summary of Government Structure

The elected strong mayor in the Council-Strong Mayor form is analogous to an elected County Executive in the Commission-Executive form of county government (Feiock, 2004). In a Council-Strong Mayor form for cities or the Commission-Executive form for counties, it is theorized that the coalition building required to govern a more complex community results in compromise with interests groups that are well organized and have access to decision making at the highest level of local government. Those service areas that have internal as well as external political support during the budgeting process are likely to be the winners when measuring expenditures during times of fiscal stress (Rubin, 1982). Developmental policies are generally favored over redistributive
policies in a Council-Strong Mayor form of government (Basolo & Huang, 2001; Longoria, 1994). On the other hand, the ideology that serves as the basis for the Council-Manager structure is that this form of government will deliver services more efficiently, and will be less vulnerable to special interest groups. The role of the appointed manager is instrumental in how a local government responds to fiscal stress. The budget preparation responsibilities of the city or county manager are expected to insulate the process from interest group politics and result in a more even treatment of competing service areas (Booms, 1966; J. Chapman & Gorina, 2012; DeSantis & Renner, 2002; Morgan & Pammer, 1988; Nelson, 2012; Stumm & Corrigan, 1998).

The examination of the relationship between form of government, local government expenditures, and local government policy has advanced to include a number of additional factors. More recent studies have built models that rely upon the inter-jurisdictional competition argument (Tiebout, 1956; Craw, 2006; Karuppusamy & Carr, 2012). Craw (2006) suggests that government form of is just one aspect of the political structure, along with inter-jurisdictional competition, that drive expenditure patterns. This research uses form of government as one of several potential determinants of local government per-capita expenditures.

**Socio-Economic Conditions as Determinants of Local Government Expenditures**

The socio-economic conditions that exist within the community are key factors in driving the government’s fiscal condition and ultimately what strategies they use to respond to fiscal stress (Choi et al., 2010; Maher & Deller, 2007; Pammer, 1990). The
demand for local government services is determined by a complex set of factors that includes population size, density, growth, level of urbanization and the demographic characteristics of the community (Choi et al., 2010). There is a positive relationship between household income, higher tax base, higher unemployment, higher percentage of minority population, and higher intergovernmental aid, with higher levels of per capita expenditures (Chicoine & Walzer, 1985; Choi et al., 2010).

One of the critical focal points for analyzing the fiscal health of a local government is the social and economic condition of the community it serves (Gauthier, 2007). Central to Gauthier’s (2007) view is that local governments do not exist in a vacuum. They exist in a macro political, social, and economic environment, which has a direct relationship to its financial position. This economic condition includes its intergovernmental relationships with the state and other local governments and the strength of its economic base. Elements of the macro environment that contribute to the local government’s economic condition also include the prevalence of social and economic stress occurring in its neighborhoods and communities. The relationship between the macro economy and fiscal stress is consistent with Chapman’s (2008) definition of cyclical and structural pressures, and Skidmore and Scorsone’s (2011) consideration of factors external to the local government.

The identification of appropriate measures of community economic stress can include factors that drive local government revenues including the level of employment, the change in value of its property tax base, and household income. Measures that can have significant impacts on local government expenditures include the age of community
residents, crime rate, education level, and the increase or decrease in the size of the community population over the measurement period (Chapman & Gorina, 2012). Population density and degree of urbanization are also variables that can shape local government policy (Holcombe & Williams, 2009; Peterson & Rom, 1989). Population density can affect the type and efficiency of service delivery. People living in higher concentrations may require more public safety services than those in less dense communities (Holcombe & Williams, 2009). In his review of empirical studies from the 1950s through the mid-1970s, Raimondo’s (1992) generalized findings concluded that:

1. A positive association exists between personal income and general government, police, fire and highway expenditures;
2. A negative association exists between population density and general government, sanitation, and highway expenditures;
3. A positive association exists between population density and police and fire expenditures;
4. A positive association exists between urbanization and general government, police, fire, and sanitation expenditures; and
5. A negative association exists between urbanization and highway expenditures (pp. 82 – 83).

In summarizing these findings, Raimondo (1992) acknowledged that differences exist between local government expenditures between states, confirming that any national study of the behavior of local governments has imbedded validity issues. Only some of these findings are relevant to this research, including the relationship that density and
personal income have with police and fire expenditures.

The social and economic characteristics of the community are factors to consider in studying expenditure patterns of cities. Understanding these external elements and how they affect and ‘limit’ local government choice is to better understand local government structure, and the specific interests of local government (Peterson, 1981). To this end, additional demographic factors are worthy of inclusion in the study to determine their potential relationship with the change in expenditures by City Limits policy category. These include poverty rate, age of the resident population, education level, and ethnicity of the population (Campbell & Turnbull, 2003; Carr & Karuppusamy, 2010; Chapman & Gorina, 2012; Chicoine & Walzer, 1985; Choi et al., 2010; Gauthier, 2007; Hayes & Chang, 1990; Holcombe & Williams, 2009; Maher & Deller, 2007; Pammer, 1990; Peterson & Rom, 1989; Raimondo, 1992).

**Gaps in the Literature**

Given that the effects of the Great Recession of 2008 are still being realized today, it is not surprising that the body of literature examining the impacts on local government is still evolving. Very little, if any, research has been discovered to date focused specifically on Florida, and none has included a comparison between cities and counties.

In Florida, the unique political culture of the state has resulted in a local government form that has a very large proportion of the state’s residents living in urbanized unincorporated areas with municipal services being provided primarily by counties. Many metropolitan counties in Florida provide more urban and municipal
services than some suburban municipalities (Benton, 2003; Schneider & Ok Park, 1989). This study will examine the expenditure patterns of cities as well as counties, and will allow for measuring the differences between the two different governmental entities. Most literature regarding counties does not differentiate between the countywide function of the county, and those municipal functions of the county that only apply to the unincorporated population, which is prevalent in Florida.

Much of the prior research focused on what tools and management strategies were used by local governments during an economic downturn. Little has been done in analyzing changes in expenditures and correlating those changes to local government policy. Analyzing the implications of the different forms of local governmental structure while controlling certain socio-economic variables will help explain the relationship between these factors and any shift in local governmental policy as a result of this period of extreme fiscal stress. While there are studies examining the relationship between the determinants of local government expenditures and fiscal stress, they have largely been conducted during periods of normal economic growth.

Finally, the quality and availability of comparative financial data that exists today for local governments did not exist in the 1980s and 1990s, when much of the determinants literature was produced. Given the recent amplification of the local government financial condition, states have become more interested in detecting the early stages of fiscal stress by its cities and counties (Kloha et al., 2005). In Florida, the state legislature has established indicators of financial stress focusing on the unit of local government’s failure to pay employees, employee benefits, pension obligations, and
having a fund balance or retained earnings deficit (Coe, 2008). The Florida Legislature has mandated strict financial reporting requirements by all local governments to the State. Section 218.33, Florida Statutes (F.S.), directs the Department of Financial Services to establish rules and regulations regarding uniform procedures and classification of accounts to assure proper fiscal management by local governments. This data is collected annually by the state and has been operating under a uniform chart of accounts (See Appendix B) (State of Florida Department of Financial Services, 2012). Utilization of this data will allow for an evaluation of policy adjustment through actual expenditure data rather than reliance on information gained by opinion survey or other means. The data will show what changes in funding occurred to specific service areas on an annualized basis. The year-over-year change before, during, and after the Great Recession will show the evolution of local government policy through this period of extreme fiscal stress. By using expenditure data, a very accurate assessment of the impact of the event can be measured.
Charles Lindbloom’s (1959) theory of budgetary incrementalism helps explain why there is stability in local government budgetary priorities year-over-year. The local government budgetary process is largely predictable as political equilibrium is sought between internal and external interests of the governmental organization (Davis et al., 1966; Dempster & Wildavsky, 1979; Levine, 1979; Lewis, 1984; Lindblom, 1959). Dempster and Wildavsky (1979) explained that these theories work in both positive and negative economic cycles. They used the term *decrementalism* to describe the process of budgeting during downturns in the economic cycle.

In order to answer the research questions and test the study hypotheses, a conceptual framework that operationalizes local government budgetary behavior explained by decrementalism is required. This is best achieved by the operationalization of local government policy into local government expenditures.

The categorization and classification of public policies is often used to better understand the substance, process and implications on society. The literature of the 1960’s introduced the use of typologies to simplify the understanding of public policy. Typologies help bring order to the realm of explanation and have their place in social science research (Ostrom, 1980; Steinberger, 1980). The very nature of categorizing public policies by type favors the use of qualitative description in lieu of quantitative measurement (Williams & Adrian, 1968).
History of the *City Limits* Typology

The origin of Peterson’s *City Limits* typology can be traced back to Theodore J. Lowi in 1964. In writing about the prevalence of single-issue political decisions and case studies in the political science literature, Lowi (1964) observed that there was no comprehensive system for understanding the implications of the varied findings from previous research. He concluded that there was a lack of understanding of the role of theory in policy research. Lowi’s argument was grounded in three principles: (1) relationships among people are based on expectations, (2) in the political realm, the relationship between groups and government are defined by policies, and (3) political relationships are defined by the governmental policy in question. He concluded that governmental policies are what government produces and those policies define the balance of power between groups. He called for a framework in which policies would be organized by their expected impact on society (Lowi, 1964).

Lowi’s Three Policy Arenas

Lowi (1964) focused on creating a scheme that centered on types of public policies based on their impact on society. His view was that when basing a classification of policies in this manner, there are only a limited number of possible categories. In using the federal government as the model, his framework consisted of three classifications of policies - distribution, regulation, and redistribution. He argued that his typology would replace policy description with policy function, and that all of the functions of the federal government could be described with just these three classifications (Lowi, 1964). The use
of a classification system would allow policy analysts to address the shortcomings of the case-study method which had, up until now, dominated the literature (Steinberger, 1980).

According to Lowi (1964), federal policies of distribution were commonplace in 19th century land programs, and included such areas as agricultural subsidies, federal lands and natural resource management systems, and other federal ‘pork’ programs. Regulatory policies are those that result in the increase of costs to the regulated and/or the limitation of private choices in the market place. Redistributive policies are those that focus on social classes within the economic system. Redistributive policies are not based on how property can be used like regulatory policies. Instead they are geared toward the property itself and the equal redistribution of that property throughout society (Lowi, 1964). A fourth category of constituent policies was later added to his initial typology, but is not relevant to this study (Lowi, 1972)

Lowi (1964) believed that the nature of a policy influences the political environment that attempts to form and shape it (Sharkansky, 1980; Smith, 2002; Steinberger, 1980; Waste, 1989). Each of the three policy types had their own ‘arena’ of power. Each arena would be composed of its own political structure, process, and policy elites (Lowi, 1964). To Lowi, the assumption that “policies determine politics” only has value when the policy typology reflects the most important aspect of real government. Real government coerces behavior. A meaningful classification system for public policy will capture the context of this coercion (Lowi, 1972).

Steinberger (1980) highlights an element of Lowi’s (1964) original work as an important perspective on using a typology to understand public policy. He noted that
Lowi observed that it is not the actual outcome but what the political expectations are of the outcome that shape the politics of a policy (Steinberger, 1980).

The Typology Literature

The literature utilizing typologies to classify public policies essentially begins with Lowi (1964, 1972) and emerged into a number of alternative approaches and empirical analyses (Smith, 2002). The appropriateness of typologies to simplify and explain the complexities of public policy spawned great debate among scholars. Greenberg et al. (1977) noted that policies evolve over time and have a number of decision points. The complexity of policy outputs can make it difficult to put in just one classification. The determinants of policy type are often subjective and subject to interpretation that will vary by individual (Greenberg, Miller, Mohr, & Vladeck, 1977; Waste, 1989).

Peterson’s ‘Best Interests of the City’

Paul Peterson (1981) explained the relationship between local government expenditures and the role and purpose of cities that differed from others during the same period in the literature. While others offered explanations of how expenditures were affected by the internal struggle for power, he viewed the expenditures as a holistic expression of the interests of the city. Much of the literature of his time explained levels of expenditures as a function of the sum total effect of the political forces at work at the local level. He did not disagree that some effects of the struggle for power between political elites and pluralists, and agencies and factions, helped shape urban policy.
Remarking about his colleagues who had attempted to explain the causal factors for local government expenditures, he concluded that there was enough evidence from so many different perspectives that the “findings of expenditure patterns among states and localities within the United States remain largely a muddle” (Peterson, 1981, p. 9).

Underlying Peterson’s argument is the notion that cities and counties compete with each other to improve their economic and fiscal position. Elected officials are keenly aware that supporting policies that promote job creation and economic growth, especially during times of fiscal stress, are important to the fiscal health of the local government. The loss of property tax revenue to Florida’s local governments as a result of the Great Recession has been significant. It can be expected that local governments will actively pursue policies that promote and advance the expansion of revenues (Peterson, 1981, p. 29). Recent research has shown that county economic development expenditures used to incentivize economic expansion may be caused by political as well as economic conditions. Competition between counties in a metropolitan region drives local governmental expenditures, especially in urban counties with high capacity to carry out such incentives (Betz, Partridge, Kraybill, & Lobao, 2012).

Peterson’s Adaptation of Lowi

Peterson (1981) adapted Lowi’s (1964) classification of public policies to apply to local governments, and cities in particular. The modified classification scheme included the three following policy arenas:
1. Developmental Policies – policies that enhance the economic interests of the local economic base and support competition with other local governments;

2. Redistributive Policies – policies that benefit lower socio-economic and working class groups by addressing substandard conditions in the community; and

3. Allocational Policies – policies that are neutral in their effect on the local economy in that they are uniformly applied throughout the community.

The underlying principle of this typology is that local government policies are organized around what impact the policies have on the economic base of the community (Peterson, 1981). The central focus of City Limits is that the driving force behind local government policy is the economic survival of the community, and improving the local jurisdiction’s position in the national, state, and regional economy. Each of the policy categories is characterized by its accretive, dilutive, or neutral relationship with the local economy. This classification system is known as the City Limits typology and has been used extensively in the urban policy literature. Some have described the approach as the predominant explanatory model for local government policy choice (Basolo & Huang, 2001; Longoria, 1994; Wolman & Spitzley, 1996). Mount (1983) referred to City Limits as undeniably important for the field of urban policy research.
The *City Limits* Typology

Each of the policy categories is characterized by its accretive, dilutive, or neutral relationship with the local economy. Peterson (1981) uses a measure of marginal benefits to marginal costs to the average taxpayer as one of the principal determinants of the policy type in the classification of expenditures. Table 5 provides a summary of the net effect of each of the policy types on the local economy.

Table 5

*Summary of City Limits Typology*

<table>
<thead>
<tr>
<th>Policy Type</th>
<th>Benefit/Tax Ratio</th>
<th>Type of Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developmental</td>
<td>&gt;1.0</td>
<td>Economic Development, Utilities, Streets &amp; Highways</td>
</tr>
<tr>
<td>Redistributive</td>
<td>&lt;1.0</td>
<td>Health &amp; Human Services, Housing</td>
</tr>
<tr>
<td>Allocational</td>
<td>=1.0</td>
<td>Police and Fire, Sanitation, Parks &amp; Recreation</td>
</tr>
</tbody>
</table>

Note. Adapted from *City Limits*, by P. E. Peterson, 1981, Chicago, IL: University of Chicago Press.

Developmental Policies

Local government developmental policies encompass those expenditures, programs and activities that support the expansion of the local economic base. The net effect of these policies results in positive growth and expansion of the tax base and promote further economic expansion (Basolo & Huang, 2001; Henig, 1992; Wolman & Spitzley, 1996). There may be costs associated with these policies in terms of higher taxes
or fees, trade-offs between land uses, and increases in traffic congestion and environmental impacts. However, the community will typically realize growth in employment, increased land values and higher local governmental revenues (Peterson, p. 42). Given that the _City Limits_ typology is framed by an economic and fiscal impact structure, developmental policies promote economic expansion and are assumed to be in the best interests of all residents (Henig, 1992).

Examples of local government activities that reflect developmental policies include expenditures for streets and highways, transportation facilities, and utilities. These expenditures have the effect of reducing the cost to conduct business by improving mobility, making the city more competitive in the marketplace for private investment and economic expansion. This in turn improves the benefit/tax ratio for those who can take advantage of the improvements and increase wealth in the community. Developmental expenditures build urban infrastructure, positively impact the fiscal state of the jurisdiction and are popular with elected officials (Schneider, 1989).

The contention that local governments are singularly focused on developmental policies means that governments will likely favor large employers and wealthy residents because of their contribution to the tax base and their ability to generate additional economic activity (Mounts, 1983).

Redistributive Policies

Local government policy advisers and elected officials do not set out to adopt policies that have a detrimental affect on the local economic base. In Peterson’s (1981)
City Limits typology, local governmental redistributive policies act as a drag on the local economy. Given that redistributive policies are geared toward assisting lower income groups with equal access to public services, they are an integral part of the financial model of local government service delivery. Waste (1989) said that redistributive policies must cost the local government more than benefit it. He also notes that the benefit/tax analysis is measured as a short-term drag on the economy in the form of lost expenditures that could otherwise have been spent on developmental policies. Redistributive policies often have long-term benefit value that is not realized in the short term due to improved housing and social conditions for the community’s working class (Waste, 1989).

Not every local government policy can or should have a benefit/tax ratio greater than 1.0 nor can every policy decision be made on the basis of its accretive value. Local government jurisdictions have economically challenged communities and neighborhoods that require programs and expenditures to help equalize access to services. Peterson (1981) clarifies that redistribution policies are a transfer of resources from the well off to the less well off, and are not intended to include income transfer programs of the federal or state governments (Peterson, p. 43). Examples include expenditures for social welfare programs, housing, community health and hospitals (Schneider, 1989).

Allocational Policies

A third category of local government policies created by Peterson (1981) has neither a positive nor negative impact to the local economy. Allocational policies do not fit into the developmental/redistributive dichotomy. Peterson (1981) describes these as
“housekeeping services” that all members of the community benefit from equally. Examples include police, fire and garbage collection services and are proportionately allocated throughout the jurisdiction. Allocational policies provide average benefit/tax ratio to the average taxpayer. According to Peterson, increasing expenditures on allocational policies have no positive or negative effect on the attractiveness of the community to an average taxpayer.

Summary of the City Limits Typology

The developmental and redistributive policies of a local government are significant to the economic importance of the community. Developmental policies are designed to enhance employment, land values, and economic expansion. Redistributive policies act to provide much needed human services to support lower-income segments of the community. Some note that redistributive policies counter the growth nature of developmental policies by syphoning resources away from a local government’s developmental potential. This can result in competition between local jurisdictions to expand developmental policies and limit redistributive programs (Basolo, 2000; Sanders & Stone, 1987).

Henig (1992) identifies the central premise of City Limits as local governments being limited from spending on redistributive policies to only when there are excess resources available. Taking away resources that could otherwise be spent on developmental policy items risks alienating those individuals and businesses that add to
the stature of the political, social and economic realm in favor of those who cost more than they benefit the community.

**Historical Use of the *City Limits* Typology**

The *City Limits* typology has been influential in the field of local government policy research, especially as it relates to examining the role of local governments in economic development. As capital has become more and more mobile, local governments have a single and overriding interest in attracting it to their jurisdiction (Wolman & Spitzley, 1996). Local governments promote economic development as an outgrowth of competing in the marketplace for new capital investment. That is why the predominant policies at the local level are developmental due to their contribution to improve the fiscal and economic position of the government and set the conditions for ongoing and continual economic expansion. This has been a central theme of the *City Limits* typology research (Logan, 1976; Molotch, 1976; Sanders & Stone, 1987; Wolman & Spitzley, 1996).

The theory has been used to understand the underlying politics behind economic development strategy at the local government level. Each policy regime has its own ‘elites’ (Lowi, 1964; Peterson, 1981). Molotch (1976) identified the groups that are dependent upon local government developmental policies as the ‘land elite.’ These groups help promote the idea that there is a collective economic ‘interest’ of the local government and thus reinforce the importance of developmental policies over redistributive and allocational policies. Reinforcing the importance of developmental policies to local governments, the land elite’s goal is to increase land values for their personal gain. This
The City Limits Typology and Form of Government

Wolman and Spitzley (1998) used the City Limits explanation of the competition among local governments to explain why local governments engage in providing financial incentives to businesses to invest in their jurisdictions. Economic development policy is formed in the political arena by policy actors that influence decision making (Hawkins, 2010). The desire of politicians to remain in office can become a ‘high-powered’ incentive to expend funds on visible projects that support economic development for their jurisdiction (Frant, 1996). This is especially true for the Strong Mayor-Council form of government. The Mayor would be viewed as a ‘deal-maker and the facilitator of developmental policies (Hawkins, 2010). This is consistent with Longoria’s (1994) observation that mayors in the U.S. prefer developmental expenditures to allocational and redistributive spending. Hawkins (2010) describes the differences between the Strong Mayor form and the Council-Manager form when it comes to developmental expenditures. The elected mayor and the appointed manager have different time frames for execution of policy. Mayors operate on an election cycle whereas managers have a longer time horizon (Hawkins, 2010). In a post-recession environment where short term improvement in the economic environment is highly desired and also aligns with the political interests of the elected leadership, the Council-Strong Mayor form will favor developmental expenditures (Feiock, Jeong, & Kim, 2003).
Empirical Studies

The City Limits typology has been used in a number of ways in the literature to examine local government policy. In City Limits, Peterson (1981) chose to test this policy framework with an empirical study used to develop the theory. He set out to prove that policy decisions are driven by economic and environmental factors as opposed to political forces. He examined the combined expenditures of state and local governments in all fifty states during the late 1970’s. State and local expenditures were combined to resolve the unit of analysis concern regarding cities located in different states operating under differing municipal authorizing statutes. The assignment of expenditures to the three policy regimes was done based on Census Bureau information – the best data available at the time. Eight independent variables were selected to serve as proxies for three groupings of determinants of expenditures: 1) fiscal capacity, 2) demand-supply factors, and 3) non-economic need (Peterson, 1981, p.52). The statistical test was a simple correlation analysis. The conclusions affirmed the expected relationships between certain determinants of expenditures and the applicable policy regime. Strong relationships were found between several independent variables and expenditures in the policy regimes. To Peterson, these findings affirmed that the City Limits typology was a sound explanatory framework for policy decisions, and that economic forces trumped political activity in local government policy setting.

Basolo (2000) studied 709 U.S. cities with a 1990 population greater than 25,000 to identify whether economic or political factors influenced policy decisions that favored economic development (developmental) over affordable housing (redistributive). Political
factors were determined to be slightly more important than economic factors in explaining certain policy choices (Basolo, 2000).

Schneider (1989) used the three-category City Limits typology to predict the effects of competition on levels of expenditures for the three policy domains for suburban cities in the U.S. Competition was operationalized by the number of nearby municipalities and by the variation of the tax rate in each. Schneider’s (1989) hypothesis was that developmental expenditures should increase and redistributive spending would decrease as competition between local governments increased. The findings included a refuting of Peterson’s (1981) contention that developmental policy expenditures increase as competition increases. The study confirmed that redistributive policies are a distinct policy regime and that in a suburban setting, allocational policy expenditures are more responsive to competition than developmental spending (Schneider, 1989).

The relationship between the Commission-Manager form of County government and the favoring of developmental policies was found to be positive when examining growth management policies in Florida (Feiock, Tavares, & Lubell, 2008). Feiock et al (2008) found that the existence of professional management diminished the probability of strict growth policies being in place that would inhibit economic expansion.

Choi et al (2008) used the City Limits typology to analyze the expenditure patterns of county governments in Florida. A pooled cross-section time series design was deployed to understand the hypothesized explanatory variables on the dependent variable - county expenditures across the three City Limits policy regimes. The independent variables used were categorized as county economy, citizen political ideology, form of
government and home rule charter, and population characteristics. The conclusions are varied, but indicated that charter counties have higher developmental and allocational expenditures, and that political ideology has a positive influence on all three spending categories. In addition, Choi (2008) found that population density and economic conditions have a positive relationship with spending. In contrast to the Peterson’s (1981) insistence that economics drives local government policy, politics does matter at the county level (Choi et al., 2010).

Application of the City Limits Typology to this Research

The City Limits Typology has been described as a successful analytical model that simplifies complex and abstract aspects of organizational behavior relating to the pursuit of economic interests. It is a framework that explains the consequences of the pursuit of those economic interests (Henig, 1992).

It is the interests of local government that is central to this research. What is in the best interest of a city or county can be explained to exist whenever aspects of the entire jurisdiction such as economic base, political influence, or elevated social interaction are achieved by way of policy or program (Peterson, 1981, p. 20). Even though a single individual may be harmed by any one policy, the collective interest of the local government is enhanced by that same policy, and therefore justified.

Peterson’s central premise is that local governments are driven to improve their status through enhancements to three stratified systems – economic, social and political. Of the three, it is the economic system - the city’s market position in the national, state
and regional economy – that drives local government policy decisions. The collective economic interest of the local government is the driving force behind local public policy and how a city or county expends its resources. Peterson assumes that local governments are rational actors pursuing their organizational self-interest. Local governments will act to protect and enhance their economic system within their borders and, like private firms, will compete with one another to improve their regional position (Mounts, 1983). Local governments will adopt policies that help its economic base prosper and promote the exporting of its products and services, often at the expense of policies that aid lower income groups. These economic base policies often take the form of expenditures for infrastructure – roads, utilities, airports, seaports, etc. - necessary for the local economy to thrive and expand (Peterson, 1981).

Public policies can be inherently ambiguous (Sharkansky, 1980; Smith, 2002; Steinberger, 1980). Public policy typologies often lack the ability to provide clear distinctions between categories needed to be fully explanatory for researchers (Smith, 2002). However, Henig (1992) saw Peterson’s (1981) typology having face validity as an interpretive tool to evaluate policy choices. It reflects the real-world political struggles regarding growth and economic development that local governments face on a regular basis. Basolo (2000) identifies actual expenditure data from the local government as one of the best indicators of public policy choice.

Using real expenditure data collected from the state of Florida, Department of Financial Services, the analytical model proposed for this research is shown in Figure 2.
Policy Typology, Research Questions, and Study Hypotheses

The culmination of the literature review and the theoretical framework results in specific and testable hypotheses which is the focus of this research:

RQ 1: Did the expenditure patterns of local governments in Florida change from pre-recession to post-recession?

Local governments operating in an environment of fiscal stress will seek to maintain their political equilibrium through various mechanisms, including cutting back
on expenditures that are less visible to the external environment while maintaining service levels for as long as possible (Baker, 2011; Hoene & Pagano, 2009; Levine et al., 1981; Lewis, 1984; Wolman, 1980, 1982). This tends to present a more stable policy environment and suggests that avoidance of a significant shift in policy is an objective of incremental budgeting.

A policy hierarchy has been found to exist for the funding of certain services during times of fiscal stress. Skidmore and Scorsone (2011) and West and Davis (1988) concluded that public safety services – police, fire and emergency medical response – fared better than parks and recreation and general government. All of these services fall within the allocational category of the *City Limits* typology. The higher funding of public safety will likely offset, at least to some extent, the reduction in funding of other allocational services. From an overall policy regime standpoint, this suggests that the pre-recession to post-recession policy distribution of local governments will be stable, with only significant shifts in funding occurring within the allocational policy category.

**Hypothesis 1:** The proportionate share of expenditures of all Florida local governments for all three policy groups from pre to post-recession is within ± 10%, indicating no significant difference in expenditure patterns as a result of the Great Recession.

**RQ 2:** What differences or similarities, if any, exist between the type of local government and changes in expenditure patterns from pre-recession to post-recession?
About one-half of the population in Florida lives either inside one of the 410 cities (Florida League of Cities, 2011) or in unincorporated areas governed by one of Florida’s 67 counties. Martin (1993) described the changing demographics of suburbanization that have resulted in the creation of twenty charter counties largely in Florida’s urban areas. The adoption of the home rule county charters is in response to the lack of governance and taxation tools to deliver urban services in unincorporated communities lying outside Florida’s central cities (Jewett, 2010).

There are only modest differences between the home rule powers granted to municipalities and those approved by adoption of a county charter, although each county charter is unique to the needs of its electorate. However, it is hypothesized that counties that have adopted home rule charters will respond to the Great Recession of 2008 more similar to municipalities than to non-charter counties.

Hypothesis 2: The proportionate share of expenditures for all cities for all three policy groups from pre to post-recession is within ±10%, indicating no significant difference in expenditure patterns.

Hypothesis 3: The proportionate share of expenditures for all counties for all three policy groups from pre to post-recession is within ±10%, indicating no significant difference in expenditure patterns.

Hypothesis 4: The proportionate share of developmental expenditures of charter counties from pre to post-recession is ±10% of that for non-charter counties.
RQ 3: What differences or similarities, if any, exist between the form of local government and changes in expenditure patterns from pre-recession to post-recession?

The literature on the relationship between the form of local government and expenditures from the 1960s and 70s indicates that Council-Manager form cities are likely to spend less than other forms of city government (Lineberry & Fowler, 1967; Lyons, 1978). However, there was no differentiation of funding for individual services amongst these studies. More recent studies are mixed regarding the existence of a professional manager and the impact on spending. Some concluded that administrative leadership as compared with elected leadership (Council - Strong Mayor form) resulted in higher per-capita expenditures (Coate & Knight, 2011; Eskridge & French, 2011). Nelson (2012) found that the existence of an appointed manager had no effect on any pattern of response to fiscal stress.

The finding that the Council-Manager form is more insulated from the politics of large changes in year to year budget priorities (Booms, 1966; Chapman & Gorina, 2012; Coate & Knight, 2011; DeSantis & Renner, 1994; Lineberry & Fowler, 1967; Stumm & Corrigan, 1998) supports the notion that there would be a finding of no policy shift in the City Limits typology from pre to post-recession for Council-Manager cities, affirming the existence of the decremental approach to budgeting. The same is likely for Commission-Manager form of county government.

The county reform movement in Florida started with Miami-Dade’s charter adoption in 1957 and has continued through decades of growth, leaving only ten rural
counties with the original Commission form (Jewett, 2010). Home rule charters are sought so that county government can gain control of local issues away from the state (Florida Association of Counties, 2009; Jewett, 2010). Home rule counties are better equipped to manage local issues under local governance rather than limited only to the powers authorized by the state (McCabe, 2000). Given the combination of home rule counties with a Commission-Manager form of government, it is hypothesized that these counties will have a similar detachment from the politics of large year-over-year changes in budget priorities and respond to fiscal stress in a manner similar to Council-Manager cities.

Hypothesis 5: The proportionate share of expenditures of Council-Manager cities and Commission-Manager form counties for all three policy groups from pre to post-recession is within ±10%, indicating no significant difference in expenditure patterns.

Hypothesis 6: The proportionate share of redistributive expenditures of Council-Manager cities for from pre to post-recession is ±10% of that for non-Council Manager cities.

In a Council-Strong Mayor form for cities and the Commission-Executive form for counties, the elected executive is responsible for policy as well as administrative leadership. It is the elected Executive’s budget that is presented to the Council or Commission. The coalition building required to successfully govern a more complex community results in compromise with interests groups that are well organized and have access to decision making at the highest level of local government. In turn, the existence
of Council-Strong Mayor form for cities, or a Commission-Executive form for counties, would be less likely to result in equity budgeting during times of fiscal stress.

Economic development policy is formed by policy actors and ultimately adopted by elected officials. The desire of politicians, especially city mayors and county executives, to remain in office is a ‘high-powered’ incentive to expend funds on economic development projects in their jurisdiction (Frant, 1996). Longoria (1994) confirmed that mayors in the U.S. prefer developmental expenditures to other spending demands. Hawkins (2010) identifies the orientation differences between forms of local government and developmental policy spending. A chief elected executive will have more urgency to promote economic development projects than will a city or county manager (Hawkins, 2010).

Hypothesis 7: The proportionate share of developmental expenditures of Council-Strong Mayor form cities from pre to post-recession is ± 10% of that for other forms of city government

RQ 4: What relationships exist, if any, between the socioeconomic characteristics of a local government, and changes in expenditure patterns from pre-recession to post-recession?

Local government’s response to fiscal stress is influenced by a number of socio-economic attributes of the community it serves, including, the size and density of the population, and level of income in the community. These are key factors in determining the demand for governmental services (Choi et al., 2010; Maher & Deller, 2007; Pammer, 1990; Peterson & Rom, 1989). There is a positive relationship between household income
and higher levels of per capita expenditures, which would be hypothesized to continue post-recession (Chicoine & Walzer, 1985; Choi et al., 2010). The increase or decrease in population of the community over the measurement period, and the level of crime rate can be significant factors affecting response to fiscal stress (Chapman & Gorina, 2012).

Peterson (1981) discussed the relationship between external elements such as the social and economic characteristics of the community as factors to better understand the interests of local government and their policy regime. Raimondo (1992) found a positive relationship between density, personal income, and police and fire expenditures. This finding would be hypothesized to a relationship between density, household income, and a policy regime favoring allocational expenditures.

The use of total population in the jurisdiction is as a control variable is intended to incorporate the concept of the size of the jurisdiction and its role as a determinant of expenditure patterns. There is precedence in using total population as a predictor variable in a model where the dependent variables have been standardized by measuring them on a per-capita basis (Storm & Feiock, 1999). In measuring the effects of support for higher education on statewide economic development outcomes, Storm and Feiock (1999) utilized total state population as one of several variables that predicted Gross State Product and personal income – two outcomes measured on a per capita basis.

Hypothesis 8: Average household income is positively associated with a change in the proportionate share of local government allocational expenditures from pre-recession to post-recession.
Hypothesis 9: Average household income is negatively associated with a change in the proportionate share of local government redistributive expenditures from pre-recession to post-recession.

Hypothesis 10: Population size is positively associated with a change in the proportionate share of local government developmental expenditures from pre-recession to post-recession.

Hypothesis 11: Population size is negatively associated with a change in the proportionate share of local government redistributive expenditures from pre-recession to post-recession.

Hypothesis 12: Population density is positively associated with a change in the proportionate share of local government allocational expenditures from pre-recession to post-recession.

Hypothesis 13: Population density is negatively associated with a change in the proportionate share of local government redistributive expenditures from pre-recession to post-recession.

Frant (1996) described how important visible economic development projects are to politicians who desire short-term success to retain their elected position. Hawkins (2010) noted that this is especially true for the Mayor in the Council-Strong Mayor form of government, where the time horizon for mayors is short term as opposed to the longer policy horizon held by city managers. This is consistent with observations made by Longoria (1994) that mayors in the U.S. prefer developmental expenditures to allocational and redistributive spending. The Mayors election cycle contributes to a shorter policy
horizon (Hawkins, 2010). The Council-Strong Mayor form will favor developmental expenditures over other expenditure types in a post-recession environment due to the political interests of the elected leadership (Feiock et al., 2003; Fleischmann et al., 1992). The Council-Strong Mayor form of city government is expected to be more responsive to pro-growth business and citizen interest groups, resulting in the adoption of policies that favor developmental expenditures (Basolo & Huang, 2001; Fleischmann et al., 1992).

Hypothesis 14: The Council-Strong Mayor form is positively associated with a change in the proportionate share of local government developmental expenditures from pre-recession to post-recession.

In Schneider and Park’s (1989) national study of counties, they found that the Commission form and Commission-Manager form spent similar amounts on developmental expenditures, but far less than the Commission-Executive form. Choi et al. (2010) concluded that the Commission-Manager and Commission-Executive forms had a negative relationship with expenditures in the developmental and redistributive policy arenas. Some have explained this relationship as being the result of the efficiency orientation and commitment to formal process instilled in the training of the professional county manager, whereas the Commission form of county government is more responsive to the political demands for developmental and redistributive expenditures (Choi et al., 2010; Feiock, 2002, 2004; Lubell et al., 2005)

Hypothesis 15: The Commission-Manager form of county government is negatively associated with a change in the proportionate share of local government
developmental and redistributive expenditures from pre-recession to post-recession.

There are two types of counties in Florida - charter and non-charter. A county that properly adopts a home rule charter can operate in any manner not specifically prohibited by state law, similar to municipalities. A county with a home rule charter takes the Florida Legislature out of the settlement of local issues and puts it in the control of the local electorate (Florida Association of Counties, 2009; Jewett, 2010). When counties adopt home rule powers, they are better capable of providing services to meet the demands of a growing metropolitan, and unincorporated population (Benton, 2002; McCabe, 2000). Charter counties in Florida are differentiated from non-charter counties in that they can levy utility services taxes in the unincorporated areas of the county, a power that all municipalities have within their jurisdiction (Jewett, 2010). Benton (2002) concluded that the expenditure patterns of charter county governments place greater emphasis on local services, including developmental expenditures, when compared with non-charter counties regardless of the form of government. Choi et al. (2010) concluded that the existence of a home rule charter was associated with an increase in developmental and redistributive expenditures

Hypothesis 16: Home rule charter counties are positively associated with a change in the proportionate share of local government developmental expenditures from pre-recession to post-recession.
CHAPTER 4
METHODS

This Chapter is divided into sections to reflect the manner in which the research is separated into two distinct studies. Each of these sections will describe the elements of the research design and methodology applicable to that particular study. The first section, which includes the sources of data and measurement methods, is common to both studies.

Study #1 will examine whether or not the relative importance of per-capita expenditures among the three City Limits policy categories changed from pre-recession to post-recession for all local governments by type and form of government. This is a descriptive study. There are no independent variables, only control variables. This analysis utilizes the entire population of cities and counties in Florida. Hypotheses 1 through 7 are associated with this first analysis. Since this analysis is using data for the entire population, the findings represent real differences and not results based on inferential statistics.

Study #2 will focus on the determinants of change – what factors explain the proportional changes among and between the expenditure patterns from pre to post-recession, based on government type and form. This is an explanatory study will include the entire county population (N = 65) and a sample drawn from the 410 cities (n = 197) in the state, for a total n = 262. Hypotheses 8 through 16 are associated with the second study.
Common Aspects of Both Studies

Sources of Data

There are several sources of data necessary for the execution of this study. The primary source for city and county expenditure information is the state of Florida. Detailed data regarding the form of government will be derived from the Florida League of Cities. Similar data for counties will come from the Florida Association of Counties. Finally, additional demographic data will come from a variety of state and federal sources. Each is discussed briefly below.

Operationalization of the Study Variables

Tables 6 and 7 display the manner in which the variables required for the study are to be operationalized. Table 6 identifies the three dependent variables to be used in both studies.

Local Government Per-Capita Expenditure

The primary measure for quantifying city and county policy that has been selected for this research is per-capita expenditures. Measuring the scale of policy change from pre to post-recession can be achieved by transforming raw expenditure data from actual dollar change to per-capita expenditures. The use of per-capita expenditures is a means of standardizing expenditure data that will allow for the meaningful comparison of one local government’s pattern of expenditure change to another (Anderson & Harbridge, 2010; Eskridge & French, 2011; Wolman, 1982).
Table 6

*Dependent Variables for Both Studies*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Level of Measurement</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in per capita developmental expenditures</td>
<td>Ratio</td>
<td>The increase or decrease in developmental expenditures as a percentage of total expenditures, from pre-recession (average of FY2006 - FY2008) to post-recession (average of FY2009 – FY2011)</td>
</tr>
<tr>
<td>Change in per capita redistributive expenditures</td>
<td>Ratio</td>
<td>The increase or decrease in redistributive expenditures as a percentage of total expenditures, from pre-recession (average of FY2006 - FY2008) to post-recession (average of FY2009 – FY2011)</td>
</tr>
<tr>
<td>Change in per capita allocational expenditures</td>
<td>Ratio</td>
<td>The increase or decrease in allocational expenditures as a percentage of total expenditures, from pre-recession (average of FY2006 - FY2008) to post-recession (average of FY2009 – FY2011)</td>
</tr>
</tbody>
</table>

Section 218.30 of the Florida Statutes is also known as the Uniform Local Government Financial Management and Reporting Act. This Act requires each local government in the state to submit a copy of its annual financial report to the state of Florida at the close of each fiscal year. This section of the Statutes defines the fiscal year for local governments as beginning on October 1 and ending on September 30 of the following year. The Act authorizes the department of state government that receives the annual financial information to promulgate rules regarding proper accounting and fiscal management, including a uniform classification of revenue and expenditure accounts (State of Florida, 2013).
The responsibility of administering this section of Florida law has been delegated to the Office of the Chief Financial Officer. An amendment to the Florida Constitution resulted in the merging of the Departments of Treasury, Insurance, Banking and Finance, and Insurance into the Department of Financial Services (DFS), under the direction of the Chief Financial Officer in 2003. DFS is organized into 14 separate Divisions, including the Division of Accounting and Auditing. Each Division is organized into Bureaus. The Bureau of Local Government is responsible for implementing the laws prescribed in Chapter 218.30, F.S. (State of Florida Department of Financial Services, 2011).

DFS requires all local government financial reporting to be completed by June 30 of the year following the September 30 close of the local government fiscal year. The Department has established a Local Government Electronic Reporting (LOGER) system, and has promulgated procedures for submittal of revenue and expenditure data (Bureau of Local Government, 2005). To assist in the collection of uniform and consistent data, DFS has established manuals for uniform accounting and reporting practices. A separate manual exists for cities and one for counties. Fund type, organizational unit, function, activity, and object code classify data collected pursuant to this Uniform Accounting System. This ensures the functional equivalency of data collected from all governmental units in the state (Bureau of Local Government, 2011a, 2011b). Data has been acquired from the DFS for fiscal years 2005 – 2012.
The annual expenditures for the study population acquired from the Department of Financial Services will be matched with the annual population estimates\(^3\) for each local government from the Bureau of Business and Economic Research (BEBR) at the University of Florida to calculate annual per-capita expenditures. Averages will be calculated for the pre-recession period (FY2006 – FY2008) and the post-recession period (FY2009 – FY 2011) from these data sets.

The use of per-capita data for expenditures requires population figures for each of the fiscal years under study. The Office of Economic and Demographic Research (EDR) provides economic and social trend forecasting for the Florida Legislature. Section 216.133-138, F.S. enables the creation of an annual Revenue Generating Conference for the state’s planning and budgeting function. EDR, along with Governor’s Office, the Senate and House of Representatives, are official participants in developing agreed upon forecasts for the development of the annual state budget. As part of their annual work plan, EDR also provides technical support to Florida’s Demographic Estimating Conference, which is another critical component of forecasting to support the state’s annual budget process. Included in EDR’s annual responsibilities is to estimate municipal population for state revenue sharing purposes. The annual publication of EDR’s Local Government Financial Information Handbook contains estimates of municipal population

\(^3\) BEBR estimates of population use the housing unit method. Changes in population are based on changes in the number of households. A wide variety of data is used in this method and it is the most commonly used in the U.S. BEBR estimates are widely recognized by the state of Florida and its local governments for use in planning, budgeting and analytical purposes (Bureau of Economic and Business Research. (2014). *Population studies methodology.* Retrieved from http://www.bebr.ufl.edu/content/methodology-producing-estimates-total-population-counties-and-subcounty-areas-florida
and unincorporated population for charter counties (Office of Economic and Demographic Research, 2013b). This research will rely upon EDR for municipal and county population estimates. The U.S. Census figures for 2010 are used by EDR in calibrating their population estimates and actual 2010 population counts from the Census Bureau will be used for 2010.

Independent and Control Variables

The variables used as either independent or control variables for both studies are the same. Tables 7 and 8 identify all non-dependent variables to be used in each study and what function they perform by study. The nominal variables are operationalized as dummy variables.

All of the data in Table 8 will be sourced from the 2000 U.S. Census except the data for the Financial Condition Ratio variable. Year 2000 data is used because the post-recession measurement period (FY09-11) transcended the next decennial census (2010). The use of the 2000 census data for the designated variables resolves any validity issues that could arise as a result from the timing of the study periods.
Table 7

Independent and Control Variables - Description

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Description</th>
<th>Source of Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>City</td>
<td>A municipality as defined by Chapter 165.031, Florida Statutes</td>
<td>State of Florida</td>
</tr>
<tr>
<td>County</td>
<td>A county as defined by Chapter 165.031, Florida Statutes</td>
<td>State of Florida</td>
</tr>
<tr>
<td>Council – Manager Form City</td>
<td>Municipal form of government</td>
<td>FL League of Cities</td>
</tr>
<tr>
<td>Council – Strong Mayor Form City</td>
<td>Municipal form of government</td>
<td>FL League of Cities</td>
</tr>
<tr>
<td>Council – Weak Mayor City</td>
<td>Municipal form of government</td>
<td>FL League of Cities</td>
</tr>
<tr>
<td>Commission Form City</td>
<td>Municipal form of government</td>
<td>FL League of Cities</td>
</tr>
<tr>
<td>Hybrid Form City</td>
<td>Municipal form of government</td>
<td>FL League of Cities</td>
</tr>
<tr>
<td>Commission Form County</td>
<td>County form of government</td>
<td>FL Association of Counties; Jewett, 2010</td>
</tr>
<tr>
<td>Commission– Manager Form County</td>
<td>County form of government</td>
<td>Florida Association of Counties; Jewett, 2010</td>
</tr>
<tr>
<td>Commission– Executive Form</td>
<td>County form of government</td>
<td>Florida Association of Counties; Jewett 2010</td>
</tr>
<tr>
<td>County Charter</td>
<td>County Charter adopted pursuant to Florida Statutes</td>
<td>Jewett, 2010</td>
</tr>
<tr>
<td>Total City Population</td>
<td>Total resident population within the municipal jurisdiction</td>
<td>U.S. Census, 2000</td>
</tr>
<tr>
<td>Total County Population</td>
<td>Total resident population within the entire County</td>
<td>U.S. Census, 2000</td>
</tr>
<tr>
<td>Unincorporated Population</td>
<td>Percentage of total County population within the unincorporated areas of the County</td>
<td>Bureau of Economic and Business Research, University of Florida</td>
</tr>
<tr>
<td>Poverty Rate</td>
<td>Percentage of residents living in poverty</td>
<td>U.S. Census, 2000</td>
</tr>
<tr>
<td>Variable Name</td>
<td>Description</td>
<td>Source of Data</td>
</tr>
<tr>
<td>--------------------------</td>
<td>--------------------------------------------------</td>
<td>-------------------------------------</td>
</tr>
<tr>
<td>Population Density</td>
<td>Resident population per 1000 acres of land</td>
<td>Florida League of Cities; U.S. Census, 2000</td>
</tr>
<tr>
<td>Age</td>
<td>Percentage of residents age 65 and up</td>
<td>U.S. Census, 2000</td>
</tr>
<tr>
<td>Education</td>
<td>Percentage of residents achieving high school education or equivalent</td>
<td>U.S. Census, 2000</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>Percentage of non-white residents</td>
<td>U.S. Census, 2000</td>
</tr>
<tr>
<td>Average Household Income</td>
<td>Average Income per household in the jurisdiction</td>
<td>U.S. Census, 2000</td>
</tr>
<tr>
<td>Financial</td>
<td>Change in Net Position as a % of Beginning Net Position at Start of FY06</td>
<td>State of Florida Auditor General</td>
</tr>
</tbody>
</table>

Table 8

Independent and Control Variables – Variable Types and Roles

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Variable Type</th>
<th>Measure</th>
<th>Role of Variable in Study #1</th>
<th>Role of Variable in Study #2</th>
</tr>
</thead>
<tbody>
<tr>
<td>City</td>
<td>Nominal</td>
<td>0 = No, 1 = Yes</td>
<td>Control</td>
<td>Independent</td>
</tr>
<tr>
<td>County</td>
<td>Nominal</td>
<td>0 = No, 1 = Yes</td>
<td>Control</td>
<td>Independent</td>
</tr>
<tr>
<td>Council – Manager Form City</td>
<td>Nominal</td>
<td>0 = No, 1 = Yes</td>
<td>Control</td>
<td>Independent</td>
</tr>
<tr>
<td>Council – Strong Mayor Form City</td>
<td>Nominal</td>
<td>0 = No, 1 = Yes</td>
<td>Control</td>
<td>Independent</td>
</tr>
<tr>
<td>Council – Weak Mayor City</td>
<td>Nominal</td>
<td>0 = No, 1 = Yes</td>
<td>Control</td>
<td>Independent</td>
</tr>
<tr>
<td>Commission Form City</td>
<td>Nominal</td>
<td>0 = No, 1 = Yes</td>
<td>Control</td>
<td>Independent</td>
</tr>
<tr>
<td>Hybrid Form City</td>
<td>Nominal</td>
<td>0 = No, 1 = Yes</td>
<td>Control</td>
<td>Independent</td>
</tr>
<tr>
<td>Variable Name</td>
<td>Variable Type</td>
<td>Measure</td>
<td>Role of Variable in Study #1</td>
<td>Role of Variable in Study #2</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------------</td>
<td>---------------</td>
<td>-----------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>Commission Form</td>
<td>Nominal</td>
<td>0 = No</td>
<td>Control</td>
<td>Independent</td>
</tr>
<tr>
<td>County</td>
<td></td>
<td>1 = Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commission–Manager Form</td>
<td>Nominal</td>
<td>0 = No</td>
<td>Control</td>
<td>Independent</td>
</tr>
<tr>
<td>County</td>
<td></td>
<td>1 = Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commission–Executive Form</td>
<td>Nominal</td>
<td>0 = No</td>
<td>Control</td>
<td>Independent</td>
</tr>
<tr>
<td>County</td>
<td></td>
<td>1 = Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>County Charter</td>
<td>Nominal</td>
<td>0 = No</td>
<td>Control</td>
<td>Independent</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 = Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total City Population</td>
<td>Continuous</td>
<td>Population count</td>
<td>Control</td>
<td>Independent</td>
</tr>
<tr>
<td>Total County Population</td>
<td>Continuous</td>
<td>Population count</td>
<td>Control</td>
<td>Independent</td>
</tr>
<tr>
<td>Unincorporated Population</td>
<td>Continuous</td>
<td>Population count</td>
<td>Control</td>
<td>Independent</td>
</tr>
<tr>
<td>Poverty Rate</td>
<td>Ratio</td>
<td>Percentage</td>
<td>Control</td>
<td>Control</td>
</tr>
<tr>
<td>Population Density</td>
<td>Ratio</td>
<td>People per 1000 acres</td>
<td>Control</td>
<td>Independent</td>
</tr>
<tr>
<td>Age</td>
<td>Ratio</td>
<td>% &gt; 65 years old</td>
<td>Control</td>
<td>Control</td>
</tr>
<tr>
<td>Education</td>
<td>Ratio</td>
<td>Percentage of total population</td>
<td>Control</td>
<td>Control</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>Ratio</td>
<td>Percentage of total population</td>
<td>Control</td>
<td>Control</td>
</tr>
<tr>
<td>Average Household Income</td>
<td>Ratio</td>
<td>Dollars/ household</td>
<td>Control</td>
<td>Independent</td>
</tr>
<tr>
<td>Financial Condition Ratio</td>
<td>Ratio</td>
<td>Increase/ Decrease in FY06 Net Position over Starting FY06 Net Position</td>
<td>Control</td>
<td>Independent</td>
</tr>
</tbody>
</table>
Type and Form of Government

The Florida Association of Counties (FAC) is a membership organization of county governments, designed to advance the interests of counties. The Association provides a wide array of services, including legislative advocacy, education, and collaborative enterprise programs (Florida Association of Counties, 2013). The FAC collects data regarding county governments and will be used as a source for land area and form of government variables (Florida Association of Counties, 2009).

A similar organization, the Florida League of Cities, provides the same type of function for Florida’s municipalities. The League has been collecting data from its member cities on a wide array of subjects, including population estimates. The League also maintains a current inventory of the form of government for each of the 410 cities in the state, and this will serve as the source of the variable in this study (Florida League of Cities, 2012).

Socioeconomic Characteristics

Socio-economic variables will be deployed to understand the relationship that certain community characteristics have with the dependent variables. These include variables such as household income, population density, poverty rate, resident population age 65 and older, percentage of residents achieving high school education or higher, and the percentage non-white population.

Socio-economic data for the county level is available through the Florida Statistical Abstract Online from the University of Florida’s Bureau of Economic and
Business Research. This extensive data set will be the source of annual population
estimates, population density, and median household income. Annual data from 2004 to
2012 is currently available (Bureau of Economic and Business Research, 2013).

Data for the socio-economic control variables will also be derived from the 2010
U.S. Census. Ideally, time series data for the control variables would be utilized to
coincide with the time series data for local government expenditures for pre and post-
recession measurement periods. The data for the entire study population is only available
from the decennial census. Researchers are often confronted with this dilemma and rely
upon one measure in time due to the availability and reliability of the U.S. Census.

Financial Condition Ratio

The Financial Condition Ratio variable was added to the research design as a
means of quantifying the relative state of the financial condition of the local government
prior to the onset of the Great Recession of 2008. The State of Florida’s Auditor General
has identified a series of financial indicators that are to be used by local governments
pursuant to Chapter 218, Florida Statutes. The rules of the Auditor General of the State
of Florida require all local governments to use financial condition assessment procedures
and certain financial indicators to identify deteriorating financial conditions in their
annual audits (State of Florida Auditor General, 2013). There are currently 18 such
indicators. The indicator chosen for this study is the change in net position as a
percentage of the beginning net position at the start of FY06, the first fiscal year in the
pre-recession measurement period. This indicator takes the broadest view of
government-wide activities, and shows how the financial position of the local
government changed during that fiscal year leading into the study period (State of Florida
Auditor General, 2013).

Validity and Reliability of Data

The research design envisioned for this study only requires the use of secondary
data and does not rely upon primary data collection. The dependent variable, change in
expenditures, is a product of a statutorily required compliance process for each city and
county in the state. The method of accounting and reporting to the state is set out in
procedural manuals promulgated by the Department of Financial Services.

The data used for the study’s independent and control variables come from a
variety of government and institutional sources. Socio-economic variables such as
population and income will be acquired from the U.S. Census Bureau from the 2010
decennial census. Annual projections of population and income will be derived from a
combination of sources, including the University of Florida’s Bureau of Economic and
Business Research (BEBR). The Florida Legislature often uses BEBR’s data and research
in the development of public policy and new legislation.

The source of data for the variable ‘form of government’ will be acquired from the
Florida League of Cities and the Florida Association of Counties. The form of a local
government is a fairly static attribute that nearly always requires an extensive charter
amendment process to change government form. These membership organizations are in
ongoing contact with their membership and update their databases when events warrant.
The sources of the data for this study are reliable governmental agencies and institutions that produce information that is highly utilized in program evaluations and policy development. These sources present minimal concerns for the validity of the research.

Measurement

The examination of whether or not a shift in local government policy has occurred due to the Great Recession can be measured by aggregating local government expenditures into Peterson’s three City Limits policy types. Table 9 identifies how the City Limits policy types are organized by the Uniform Expenditure Account Codes promulgated for local governments by the Florida Department of Financial Services. Choi, et al. (2008) utilized a similar method of organizing expenditures to analyze the impact of the county economy, citizen political ideology, and government form on local government policy. Table 9 reflects only those expenditure types that will be used in this research. Appendix B includes the entire list of Uniform Expenditure Account Codes from the Department of Financial Services.

Actual expenditure data are a measure of the true impact of local government policy (Kelly & Rivenbark, 2008). Basolo (2000) concluded that local government expenditures are one of the best indicators of policy choice. Per-capita expenditures represent one of the better measures to be able to compare one organization’s pattern of expenditure change and potential shift in policy position to another organization (Anderson & Harbridge, 2010; Eskridge & French, 2011; Wolman, 1982).
The Descriptive Analysis - Study #1

Study #1 is descriptive in nature. A robust descriptive analysis will be produced which will include the central tendency and variability of the data for groups defined by type of government and form of government. This analysis will be conducted to address Research Questions 1-3 and their associated hypotheses (H1 through H7). These data will be reported in tables and graphs, illustrating any trends that may exist within and between cities and counties from pre to post-recession.

Sampling

Of the 410 cities that exist today, 405 of them were in existence in the year 2000. Year 2000 socio-economic data is being used for this study. The 405 municipalities in the state range in population from 10 (Lake Buena Vista) to 399,508 (Miami). The 65 counties in Florida range in population from 8,365 (Liberty) to 1,748,066 (Broward; United States Census Bureau, 2010). Two of Florida’s counties - Miami-Dade and Jacksonville-Duval – are being excluded due to their unique organizational structure that resulted from charter amendments. Each county has evolved into different hybrids of traditional city and county functions that do not fit the government type classification approach used in this study. Including these two counties would distort the findings of the analysis.

This component of the study will include the entire population of cities (405) and counties (65) in Florida with N = 470. Since the entire population is included, there is no need for the use of inferential statistics in Study #1 (Gliner, Morgan, & Leech, 2009).
Analytical Method

Hypotheses are testable expectations based on general propositions (Babbie, 2010). In order to test the hypotheses in this study, a means of measuring the change in expenditures from pre to post-recession is required. Utilizing actual dollar amounts would produce a wide distribution of values for the dependent variables based on the variation in government size. In operationalizing the dependent variables by per-capita expenditures, the element of population size of each unit of analysis has been incorporated into the dependent variables and likely reduces the variation in the distribution.

Measuring the change in expenditures from pre-recession to post-recession is central to both studies in this research. Table 9 identifies the method for hypothesis testing in this research. The pre and post-recession percentage columns represent the proportionate share for that policy group of the three policy groups combined. The percentage change column is the increase or decrease that the proportionate share of expenditures for that policy group change post-recession.

Analytical Framework

Each of the study hypotheses associated with Study #1 are discussed below with the manner in which each will be tested. Decision criteria are provided to guide the data analysis.
Hypothesis 1: The proportionate share of expenditures of all Florida local governments for all three policy groups from pre to post-recession is within ±10%, indicating no significant difference in expenditure patterns as a result of the Great Recession.

A summary of per-capita expenditure change table will be produced for all cities and for all counties in the study population as one group. Measures of central tendency and dispersion will be calculated for pre and post-recession results. The results will be evaluated to identify similarities and/or differences between the two measurement periods. The percentage of expenditures for the three policy arenas will be compared pre to post-recession to test the hypothesis. If any of the percentages for the three policy arenas in the “Percent Change from Pre-Recession to Post-Recession” column exceed ±10%, then the hypothesis will be rejected.

Hypothesis 2: The proportionate share of expenditures for all cities for all three policy groups from pre to post-recession is within ±10%, indicating no significant difference in expenditure patterns.

Hypothesis 3: The proportionate share of expenditures for all counties for all three policy groups from pre to post-recession is within ±10%, indicating no significant difference in expenditure patterns.

Summary of expenditure change tables will be produced for all cities and for all counties in the study population as two separate groups. Measures of central tendency and dispersion will be calculated for pre and post-recession results for each group. The results
will be evaluated to identify similarities and/or differences between the two groups. The percentage of expenditures for the three policy arenas will be compared between groups pre to post-recession to test the hypothesis. If any of the percentages for the three policy arenas in the “Percent Change from Pre-Recession to Post-Recession” column exceed ± 10%, then the hypothesis will be rejected.

Hypothesis 4: The proportionate share of developmental expenditures of charter counties from pre to post-recession is ± 10% of that for non-charter counties.

Summary of expenditure change tables will be produced for charter counties and non-charter counties as two separate groups. Measures of central tendency and dispersion will be calculated for pre and post-recession results for each group. The results will be evaluated to identify similarities and/or differences between the two groups. The percentage of expenditures for the three policy arenas will be compared between groups pre- to post-recession to test the hypothesis. If the percentage for developmental expenditures in the “Percentage Change from Pre-Recession to Post-Recession” column is < 10%, then the hypothesis will be rejected.

Hypothesis 5: The proportionate share of expenditures of Council-Manager cities and Commission-Manager form counties for all three policy groups from pre to post-recession is within ± 10%, indicating no significant difference in expenditure patterns.

Summary of expenditure change tables will be produced for Council-Manager form cities and Commission-Manager form counties as two separate groups. Measures of central tendency and dispersion will be calculated for pre and post-recession results for
each group. The results will be evaluated to identify similarities and/or differences between the two groups. The percentage of expenditures for the three policy arenas will be compared between groups pre to post-recession to test the hypothesis. If any of the percentages for the three policy arenas in the “Percentage Change from Pre-Recession to Post Recession” column exceed ±10%, then the hypothesis will be rejected.

Hypothesis 6: The proportionate share of redistributive expenditures of Council-Manager cities for from pre to post-recession is ±10% of that for non-Council Manager cities.

Summary of expenditure change tables will be produced for Council – Manager cities and for all other forms of city government as two separate groups. Measures of central tendency and dispersion will be calculated for pre- and post-recession results for each group. The results will be evaluated to identify similarities and/or differences between the two groups. The percentage of expenditures for the three policy arenas will be compared between groups pre- to post-recession to test the hypothesis. If the percentage for redistributive expenditures in the “Percentage Change from Pre-Recession to Post-Recession” column is < 10%, then the hypothesis will be rejected.

Hypothesis 7: The proportionate share of developmental expenditures of Council-Strong Mayor form cities from pre- to post- recession is +10% of that for other forms of city government.

Summary of expenditure change tables will be produced for Council-Strong Mayor form cities and all other forms of city government as two separate groups. Measures of central tendency and dispersion will be calculated for pre and post-recession results for
each group. The results will be evaluated to identify similarities and/or differences between the two groups. The percentage of expenditures for the three policy arenas will be compared between groups pre to post-recession to test the hypothesis. If the percentage for developmental expenditures in the “Percentage Change from Pre-Recession to Post-Recession” column is < 10%, then the hypothesis will be rejected.

The Explanatory Analysis - Study #2

This study is a repeated measure design where more than one measurement is made for each local government over a period of time. In this study design, each participating local government serves as its own control. Its advantage in research is that the analysis can focus more on the effect of the intervention (Spatz, 2011). In this case, the treatment, or intervention, is the Great Recession of 2008, a natural exogenous event.

There are three components to the analysis in Study #2. First, a series of repeated measures t-tests will be conducted to understand the change in the mean per-capita expenditures from pre to post-recession for the three policy arenas. The second component of the analysis is the testing of hypotheses 8 through 15. Finally, an overall model will result in three linear equations – one for each of the dependent variables. Each uses the same data and similar, but not identical, analytical methods. The three components comprise the explanatory component of this research.
Sampling

Study #2 will include the total population of counties (N = 65) as defined by this research, and a sample drawn from the 405 cities in the state. Including all 405 cities in the explanatory analysis would likely skew the results given the large spread in population and related service delivery functions. A review of the data for cities indicates that those with very small resident population do not always have the full complement of services compared with larger cities. In addition, cities with small resident populations do not have consistent expenditure patterns conducive to this study. Given these factors, it was determined that a minimum population size criterion is necessary. An examination of the expenditure data indicates that cities with 2000 population below 5000 have a higher incidence of missing values for expenditure groups. This is not an indication of irregular data reporting, but is characteristic of smaller sized cities not providing the full complement of services. Using the 2000 minimum population of 5000 would yield a study sample of 197 cities out of a total population of 405 in Florida, or 48.6% of all cities. The use of this type of non-probability sampling, called purposive or judgmental sampling, is appropriate when the researcher has critical knowledge of the population and the negative effect that random sampling of that population would have on the usefulness of the study (Babbie, 2010).

The city sample of 197 added to the county population of 65 yields a total n for the research of 262. A power analysis was conducted to test n = 262 for use in a multiple linear regression model. Assuming a significance level of 0.05, 18 normally distributed covariates, a minimum $R^2$ of 0.10, and a power level of 80%, a minimum of n =192 would
be required. The sample size in this study of \( n = 262 \) exceeds the minimum power required to detect a specific alternative effect size (“Sample Size,” 2012).

Analytical Model: Paired-Samples \( t \)-Test

The first step in the explanatory component of the research involves comparing the mean per-capita expenditures from before the Great Recession of 2008 to after. A series of \( t \)-tests will be conducted on the entire group of local governments, as well as groups defined by government type and form of government. The results can provide insight into the variability of the data from before and after the recession.

There are general assumptions that apply to the utilization of the \( t \)-test. These include:

1. Level of Measurement – the dependent variable must be measured on a continuous basis;
2. Random Sampling – there must be a random sample from the population;
3. Independence of Observations – each observation or measurement must be independent of influence by another participant or measurement;
4. Normal Distribution – the scores for the dependent variables for the study population are normally distributed; and
5. Homogeneity of Variance – the variability of the scores for each paired group is similar.

Test – Levene’s test for equality of variance (Pallant, 2007).
Analytical Method: Multiple Linear Regression

This study of the effect of the Great Recession on local government policy in Florida requires an analytical tool that can measure the importance of the independent variables in predicting changes in local government policy shift, expressed as the percentage change in per-capita expenditures from pre-recession to post-recession, across the three City Limits policy regimes. The best explanatory analytical tool to use in this instance is multiple linear regression. This model is chosen to answer Research Question 4 and to test the associated hypotheses. Multiple regression allows for the exploration of the interrelationship between several independent and control variables and a continuous dependent variable. If the research design is based on sound theoretical principles, the outcome of a linear regression model will provide a tool for predicting the dependent variable (Spatz, 2011). The linear regression model also allows for the control of specific independent variables when there is one normally distributed dependent variable (Gliner et al., 2009; Pallant, 2007). The statistical software package selected to conduct the multiple regression model is SPSS version 22.

In attempting to understand the relationship of the independent variables with the three dependent variables, a regression model that is designed to find the best linear relationships is desired. Ordinary Least Squares (OLS) regression is a statistical method that assumes that the hypothesized relationships are linear. The objective of OLS is to estimate the impact of predictors and the variance of the linear equation based on the data (Pallant, 2007).
Assumptions of Multiple Regression

OLS regression has assumptions about the data that must be met. The following lists those assumptions with the corresponding test that will be conducted to confirm compliance:

1. Multicollinearity – the independent variables and control variable cannot be highly correlated ($r = .9$ and above);
   
   Test - Correlation analysis (table) to identify those independent and control variables that have a higher than acceptable correlation coefficient.

2. Normality – normal distribution of residuals is required;
   
   Tests – Q-Q Plots, skewness and kurtosis, Shapiro-Wilk

3. Linearity – residuals should be aligned in a straight line with the predicted dependent variable scores;
   
   Test – Scatterplots

4. Homoscedasticity – assumes that the variance of the residuals for all of the predicted dependent variable scores is the same.
   
   Test – Normal P-P Plot; scatterplots of residuals

5. Sample Size – in order to maintain generalizability of the findings, a sample of sufficient size is necessary. Differences exist in the literature regarding minimum size for multiple regression. This research has an $n = 262$ and is sufficient for use of the technique.
6. Outliers – This technique is sensitive to outliers. Standardized residuals will be tested for their influence on the model. Offending cases may be removed.

Test – Mahalanobis Distance; Cook’s Distance. (Pallant, 2007)

If the results from the testing of the assumptions indicate a deviation from a normal distribution, the use of a log transformation may be utilized to normalize the data. An initial correlation matrix of all independent and control variables will be developed as a data reduction strategy. If any two variables have a bivariate correlation of .7 or above, those variables will be examined further and consideration will be given to eliminating one of the variables from the model. For data reduction purposes, correlation coefficients of .25 and below will be reviewed for potential elimination.

The results of the SPSS collinearity diagnostics for Tolerance and Variance Inflation Factor (VIF) will be utilized to determine any multicollinearity issues not evident in the correlation matrix. A Tolerance value of < .10 or a VIF value of >10 for any variable will be identified for further examination and consideration for removal from the model (Pallant, 2007).

Statistical Inference in Multiple Regression

There are three steps to judging the output of a multiple linear regression model. The first step is to examine the value of $R^2$, the coefficient of determination, which will indicate the percentage of the variance in the dependent variable that is explained by the remaining independent and control variables included in the final model (Lewis-Beck,
This result is also known as goodness of fit. The higher the $R^2$ score the better the fit of the data to the model.

The second step of the output evaluation is to determine the statistical significance of the results. The SPSS output includes the ANOVA output component of the multiple linear regression analysis in the form of results for an F test. The F test indicates whether the result of the regression analysis is statistically significant and the variation explained in the model is not due to random error (Pallant, 2007).

The third and final step in evaluating the output of the multiple linear regression is to determine the relative importance of each of the independent and control variables in predicting the dependent variable. This is achieved first by evaluating the $t$-test for Betas ($\beta$) for all of the variables remaining in the model to determine if the variables are statistically significant at $p < 0.05$. Then an evaluation of the standardized coefficients expressed as beta ($\beta$) for the remaining statistically significant predictor variables in the final model will be conducted. The larger the Beta weight, the stronger the contribution the variable is making to the explanation of the dependent variable(s), without regard for the direction ($\pm$) of the relationship.

Standardized regression coefficients will be utilized in this study as opposed to unstandardized coefficients or betas ($\beta$). The independent and control variables in the study are expressed in a number of different measurement units. Unstandardized betas ($\beta$) represent the relative importance of the regression variables in the various measurement units. In order to better understand the relative importance that each variable has on predicting the dependent variable, standardized betas will be utilized.
Standardized coefficients are expressed in a common unit of measurement - standard deviations. The standardized beta represents how many standard deviations the dependent variable will change based on a one standard deviation change in the independent variable (Menard, 2004).

**Dummy Variables and Multiple Regression**

There are numerous nominal variables in this research that require the use of dummy variables to include them in the regression analysis. The inclusion of two or more dummy variables creates complications because the binary variables are mathematical functions of each other. This causes computational problems in the regression analysis (Allen, 1997). This issue will be addressed by utilizing all but one of the categories for the nominal variables.

**Analytical Framework**

Study #2 is an examination of the factors that might explain the changes in the expenditure patterns of Florida’s local governments from pre to post-recession. Hypotheses 8 through 16 are associated with this part of the study. The analytical approach to the study and the decision criteria that will be used to test the hypotheses are discussed below.

**Procedure – Data Reduction**

Utilizing the multiple regression module of version 22 of the SPSS statistical software, a separate regression model will be run for each of the three dependent variables.
For these three overall models, each of the dependent variables will be regressed against only the control variables, to determine which of the control variables reach a level of significance to be included in the final model. The results of these control models will establish the base $R^2$ and beta ($\beta$) levels for those control variables that reach a level of significance ($p < 0.05$) to be further included in the analysis.

A second set of three models, one for each of the dependent variables, will be created using only those control variables that were determined to be significant in the first series of models, along with all of the independent variables. The resulting $R^2$ and beta levels for those variables reaching the level of significance ($p < 0.05$) for these three models will be compared with the results of the three control models, to measure the effect of the control variables and the difference that each of the independent variables had on improving the $R^2$ of these last three models. By regressing the control variables first, the overall role of the independent variables in explaining the variance in the three dependent variables can be evaluated when controlling for various factors (Pallant, 2007). The resulting $R^2$ values, p-values and beta weights will be recorded.

Procedure – Hypothesis Testing

The second analytic component of Study #2 is the testing of hypotheses 8 through 13. This component will utilize a simple regression analysis since the hypotheses address the relationship between a single explanatory or predictor variable and a single dependent variable. Three critical outputs from SPSS version 22 will guide the analysis and testing of the hypotheses. First, the ANOVA results will be evaluated to determine if the model
is significant (p < 0.05). Second, the adjusted $R^2$ will be evaluated to identify the proportion of the dependent variable explained by the predictor variable. Finally, the standardized coefficient Beta will be evaluated to determine the level of change in the dependent variable created by one standard deviation change in the predictor variable.

Decision Criteria for Explanatory Hypotheses

The following are the decision criterion for testing each of the hypotheses H8 through H16:

Hypothesis 8: Average household income is positively associated with a change in the proportionate share of local government allocational expenditures from pre-recession to post-recession.

The dependent variable Change In Per Capita Allocational Expenditures will be regressed against the variable Average Household Income utilizing the SPSS simple linear regression module. The $R^2$, p-value, and standardized Beta output will be recorded. The results of the model will demonstrate the proportion of the variance in the change in allocational expenditures from pre to post-recession that is explained by the variable Average Household Income. If the results indicate that the model is statistically significant (p < 0.05) and the relationship with the Change in Per Capita Allocational Expenditures is positive, then there will be a finding that the hypothesis is supported. Overall observations regarding the results of the model run will be discussed.
Hypothesis 9: Average household income is negatively associated with a change in the proportionate share of local government redistributive expenditures from pre-recession to post-recession.

The dependent variable Change in Per Capita Redistributive Expenditures will be regressed against the variable Average Household Income utilizing the SPSS simple linear regression module. The $R^2$, p-value, and standardized Beta output will be recorded. The results of the model will demonstrate the proportion of the variance in the change in redistributive expenditures from pre to post-recession that is explained by the variable Average Household Income. If the results indicate that the model is statistically significant ($p < 0.05$) and the relationship with the Change in Per Capita Redistributive Expenditures is negative, then there will be a finding that the hypothesis is supported. Overall observations regarding the results of the final stepwise model run will be discussed.

Hypothesis 10: Population size is positively associated with a change in the proportionate share of local government developmental expenditures from pre-recession to post-recession.

The dependent variable Change in Per Capita Developmental Expenditures will be regressed against the variable Total Population utilizing the SPSS simple linear regression module. The $R^2$, p-value, and standardized Beta output will be recorded. The results of the model will demonstrate the proportion of the variance in the change in developmental expenditures from pre to post-recession that is explained by the variable Total Population. If the results indicate that the model is statistically significant ($p <
0.05) and the relationship with the Change in Per Capita Developmental Expenditures is positive, then there will be a finding that the hypothesis is supported. Overall observations regarding the results of the final stepwise model run will be discussed.

Hypothesis 11: Population size is negatively associated with a change in the proportionate share of local government redistributive expenditures from pre-recession to post-recession.

The dependent variable Change in Per Capita Redistributive Expenditures will be regressed against the variable Total Population utilizing the SPSS simple linear regression module. The $R^2$, p-value, and Beta output will be recorded. The results of the model will demonstrate the proportion of the variance in the change in redistributive expenditures from pre to post-recession that is explained by the variable Total Population. If the results indicate that the model is statistically significant ($p < 0.05$) and the relationship with the Change in Per Capita Redistributive Expenditures is negative, then there will be a finding that the hypothesis is supported. Overall observations regarding the results of the final stepwise model run will be discussed.

Hypothesis 12: Population density is positively associated with a change in the proportionate share of local government allocational expenditures from pre-recession to post-recession.

The dependent variable Change in Per Capita Allocational Expenditures will be regressed against the variable Population Density utilizing the SPSS simple linear regression module. The $R^2$, p-value, and Beta output will be recorded. The results of the model will demonstrate the proportion of the variance in the change in redistributive
expenditures from pre to post-recession that is explained by the variable Population Density. If the results indicate that the model is statistically significant (p < 0.05) and the relationship with the Change in Per Capita Allocational Expenditures is positive, then there will be a finding that the hypothesis is supported. Overall observations regarding the results of the final stepwise model run will be discussed.

Hypothesis 13: Population density is negatively associated with a change in the proportionate share of local government redistributive expenditures from pre-recession to post-recession.

The dependent variable Change in Per Capita Redistributive Expenditures will be regressed against the variable Population Density utilizing the SPSS simple linear regression module. The R², p-value, and Beta output will be recorded. The results of the model will demonstrate the proportion of the variance in the change in redistributive expenditures from pre to post-recession that is explained by the variable Population Density. If the results indicate that the model is statistically significant (p < 0.05) and the relationship with the Change in Per Capita Redistributive Expenditures is negative, then there will be a finding that the hypothesis is supported. Overall observations regarding the results of the final stepwise model run will be discussed.

Hypothesis 14: The Council-Strong Mayor form is positively associated with a change in the proportionate share of local government developmental expenditures from pre-recession to post-recession.

The dependent variable Change in Per Capita Developmental Expenditures will be regressed against the variable Form of City Government (all forms using dummy
variable coding) utilizing the SPSS simple linear regression module. The $R^2$, p-value, and Beta output will be recorded. The results of the model will demonstrate the proportion of the variance in the change in developmental expenditures from pre to post-recession that is explained by the variable Form of City Government. If the results indicate that the model is statistically significant ($p < 0.05$) for the Council-Strong Mayor Form, and the relationship with the Change in Per Capita Developmental Expenditures is positive, then there will be a finding that the hypothesis is supported. Overall observations regarding the results of the final stepwise model run will be discussed.

Hypothesis 15: The Commission-Manager form of county government is negatively associated with a change in the proportionate share of local government developmental and redistributive expenditures from pre-recession to post-recession.

The dependent variables Change in Per Capita Developmental Expenditures and Change in Per Capita Redistributive Expenditures will be regressed against the variable Form of County Government (all forms using dummy variable coding) utilizing the SPSS simple linear regression module. The $R^2$, p-value, and Beta output will be recorded. The results of the model will demonstrate the proportion of the variance in the change in developmental expenditures from pre to post-recession that is explained by the variable Form of County Government. If the results indicate that the model is statistically significant ($p < 0.05$) for the Commission-Manager Form, and the relationship with the Change in Per Capita Developmental and Redistributive Expenditures is negative, then
there will be a finding that the hypothesis is supported. Overall observations regarding the results of the final stepwise model run will be discussed.

Hypothesis 16: Home rule charter counties are positively associated with a change in the proportionate share of local government developmental expenditures from pre-recession to post-recession.

The dependent variable Change in Per Capita Developmental Expenditures will be regressed against the variable Home Rule Charter (using dummy variable coding) utilizing the SPSS simple linear regression module. The $R^2$, p-value, and Beta output will be recorded. The results of the model will demonstrate the proportion of the variance in the change in developmental expenditures from pre to post-recession that is explained by the variable Home Rule Charter. If the results indicate that the model is statistically significant ($p < 0.05$) for the variable Home Rule Charter, and the relationship with the Change in Per Capita Developmental Expenditures is positive, then there will be a finding that the hypothesis is supported. Overall observations regarding the results of the final stepwise model run will be discussed.

Resulting Linear Equations – Final Predictive Models

The multiple linear regression approach assumes that the relationship between the dependent variable $(Y)$ and the independent variables $(X_1, X_2, \ldots)$ is linear, as long as an unobserved variable $(\Sigma)$ is included to address random error. Each variable will have a resulting regression coefficient $(\beta)$, which represents the weighted significance for that specific predictor variable. The symbol $\alpha$ is used to depict the regression constant that is
a product of the model output. As a result, the linear regression equation (Spatz, 2011) takes the following form:

\[ Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \ldots + \sum \]

Three final linear regression equations will result from this analysis. These will be the predictive models for the three dependent variables.

**Summary of Model Specifications for the Testing of Hypotheses**

The use of descriptive statistics and two methods of regression analysis will provide the ability to answer the research questions and hypotheses presented in this research. A robust database will be constructed to support the needs of the study as well as provide additional insight into the behavior of local governments as a result of the Great Recession of 2008. The findings and conclusions of the descriptive study and the hypothesis testing, as well as any other ancillary findings will be reported in a systematic and orderly fashion.

**Study Limitations**

The financial database that is being used in this research is assembled by the State of Florida pursuant to statutory requirements. The value of the historical consistency of the aggregation and classification of the data cannot be underestimated. Without benefit of this existing data, the magnitude of collecting the information would render this study impractical. However, there are modest nuances in the data that reflect how the State of Florida has chosen to mandate the coding of expenditures. For instance, pension benefit payments are classified as Account Code 518, which falls under the General Government
category. In so doing, a significant personnel expense is aggregated as a general government expense, and not distributed amongst the different governmental functions. Therefore, the pension expenses of police and fire personnel are captured in General Government, and not in Public Safety. Since this is consistent amongst all governments in the database, it does not present an internal validity issue. In addition, both General Government and Public Safety are categorized as Allocational under the City Limits typology. The pension expenses of other governmental employees in the Developmental and Redistributive policy areas are accounted for in the Allocational policy expenditures. This will tend to inflate Allocational expenditures over what is actually occurring in cities and counties.

There may also be instances where specific services are provided through interlocal agreement or other cooperative mechanisms that may not be reflected in the financial data reported to the State of Florida. The level of data collection necessary to uncover these anomalies is well beyond the scope of this study but provides an opportunity to advance this research further.
CHAPTER 5
DISCUSSION AND CONCLUSION

This research examines the behavior of Florida’s local governments in response to the Great Recession of 2008 by using per-capita expenditure data categorized by Peterson’s (1981) City Limits typology - developmental, allocational and redistributive expenditures. This research is comprised of two distinct studies – one descriptive and the other explanatory. This chapter presents the findings and results of Study #1 – the Descriptive Study.

The Study Population

The Descriptive Study population consists of a total of 470 local governments – 65 counties and 405 cities. There are a total of 477 cities and counties in existence in Florida today - 67 counties and 410 cities. Two counties, Miami-Dade and Jacksonville-Duval were eliminated due to their unique form of government and whose data would skew the findings of the research. The number of cities included in this study is 405, or five less than the 410 that exist today. During this study’s pre and post-recession measurement periods, there were 405 cities that reported complete data. Five cities have been eliminated from consideration in the analysis due to not being in existence during both measurement periods. Four of these cities were newly created municipalities established during the study measurement periods and did not report complete data. The merger of two existing cities into a single municipality created the fifth city. As a result, the Descriptive Study
population size is 470, comprised of 405 cities and 65 counties.

Prior to examining characteristics of the data, an overview of the characteristics of the study population is warranted. Table 9 displays the distribution of the study population by type and form of government.

Table 9

*Composition of Descriptive Study Population by Type and Form of Government*

<table>
<thead>
<tr>
<th>Type of Government</th>
<th>Frequency</th>
<th>Share of All Local Governments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counties</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commission (County)</td>
<td>10</td>
<td>2.1%</td>
</tr>
<tr>
<td>Commission Executive</td>
<td>1</td>
<td>0.2%</td>
</tr>
<tr>
<td>Commission Manager</td>
<td>54</td>
<td>11.5%</td>
</tr>
<tr>
<td>Sub-Total</td>
<td>65</td>
<td>13.8%</td>
</tr>
<tr>
<td>Cities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commission (City)</td>
<td>3</td>
<td>0.6%</td>
</tr>
<tr>
<td>Council-Manager</td>
<td>268</td>
<td>57.0%</td>
</tr>
<tr>
<td>Council-Strong Mayor</td>
<td>49</td>
<td>10.4%</td>
</tr>
<tr>
<td>Council-Weak Mayor</td>
<td>83</td>
<td>17.8%</td>
</tr>
<tr>
<td>Hybrid</td>
<td>2</td>
<td>0.4%</td>
</tr>
<tr>
<td>Sub-Total</td>
<td>405</td>
<td>86.2%</td>
</tr>
<tr>
<td>Total</td>
<td>470</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

The Council-Manager form city is the predominant local government structure in the state, making up more than half (57%) of the entire study population. The Commission Manager form is the predominant form of county government in Florida.
Analysis of the Dependent Variables

The data used for the Descriptive Study is paired for each local government from the two measurement periods. Pre-recession data (FY06-08) is matched with post-recession data (FY09-11) to form matched pairs. Each of the three dependent variables in this Descriptive Study – percentage change in per-capita expenditures for developmental, allocational and redistributive purposes) was then calculated by comparing the paired data from the two measurement periods for each local government. Complete data (n = 470) is reported for two of the three dependent variables in the study. Table 10 shows the study population reporting complete data to allow for the calculation of each dependent variable.

Table 10

*Local Governments Reporting Data by Dependent Variable*

<table>
<thead>
<tr>
<th>Type of Government</th>
<th>Developmental Expenditures</th>
<th>Allocational Expenditures</th>
<th>Redistributive Expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td>City</td>
<td>405</td>
<td>405</td>
<td>95</td>
</tr>
<tr>
<td>% Of Total</td>
<td>86.2</td>
<td>86.2</td>
<td>59.4</td>
</tr>
<tr>
<td>n</td>
<td>65</td>
<td>65</td>
<td>65</td>
</tr>
<tr>
<td>% Of Total</td>
<td>13.8</td>
<td>13.8</td>
<td>40.6</td>
</tr>
<tr>
<td>County</td>
<td>470</td>
<td>470</td>
<td>160</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

119
Table 10 shows the 470 local governments in the Descriptive Study based on the reporting of complete matched pair data used to calculate each dependent variable. All 470 local governments reported complete data for developmental and allocational expenditures. Only 160 of the 470 local governments reported complete data for the third dependent variable – (percent change in redistributive expenditures). This represents 34% of all local governments in this study. All 65 counties reported complete data for all three dependent variables.

Only 95 of the 405 cities in the Descriptive Study reported complete paired data for the dependent variable percent change in redistributive expenditures. This represents 23.5% (95/405) of the total population of cities in this study. Most of the cities in the state did not make redistributive expenditures during the two measurement periods in this study. This finding is likely due to the different roles that counties and cities have played in the provision of various social and human services in the history of the US and in Florida. City governments have historically existed for the interests and convenience of their residents. County government have historically existed to oversee the administration of specified state responsibilities, including civil administration, finance, education, and provision for the poor (Martin, 1993). It is this historic role difference that explains the vast majority of redistributive services made by local governments in Florida have been the responsibility county governments. This historic difference also explains why the majority of Florida’s municipalities reported no expenditures in this City Limits category for this study’s measurement periods.
Findings for the Descriptive Hypotheses

The results of the testing of the Descriptive hypotheses were derived from the comparison of means of the paired data for each of the dependent variables. It is not necessary to conduct parametric statistical tests to determine the statistical significance of the comparison of means between the two measurement periods. Since this first study is analyzing the entire population of local governments in Florida, any differences in means from T1 (pre-recession) to T2 (post-recession) are real and not an artifact of sampling error. Consequently, the use of parametric statistics is not required.

Each of the study hypotheses associated with this Descriptive Study are presented below along with the decision criteria to guide the data analysis. The results are generated through a comparison of pre-recession to post-recession mean percentage expenditures for the applicable dependent variable(s). The following is a discussion of the findings.

Hypothesis 1 – All Local Governments

Hypothesis 1 requires the examination of the change in proportional share of expenditures for all three dependent variables for all 470 local governments in Florida.

Hypothesis 1: The proportionate share of expenditures of all Florida local governments for all three policy groups from pre to post-recession is within ±10%, indicating no significant difference in expenditure patterns as a result of the Great Recession.
Decision Criteria: If any of the percentages for the three policy arenas in the “Percent Change from Pre-Recession to Post-Recession” column exceed ± 10%, then the hypothesis will be rejected.

The data for analyzing Hypothesis 1 is derived from the mean of each of the expenditure policy groups as a proportion of the total expenditures for a single population of local governments (cities and counties, n = 470) for each of the measurement periods. The paired sample data was analyzed to compare the pre and post-recession means for the entire population of local governments. Table 11 displays the results for Hypothesis 1.

Table 11

| Change in Proportional Share of Expenditures by Policy Group for All Cities and Counties |
|-----------------------------------------------|-----------------|-----------------|-----------------|-----------------|
| Expenditure Policy Group                      | N               | Mean % of Total Expenditures (T1) | Mean % of Total Expenditures (T2) | Mean % of Change (T1-T2) | Standard Deviation (T1 – T2) |
| Developmental                                 | 470             | 40.5                         | 41.1                         | 0.6                          | .088                        |
| Allocational                                  | 470             | 58.6                         | 57.9                         | -0.7                         | .088                        |
| Redistributive                                | 160             | 2.5                          | 2.8                          | 0.3                          | .022                        |

The mean percentage change from pre to post-recession for each of the three City Limits policy groups is less than 1%, illustrating a level of stability in the profile of local governmental expenditures from pre to post-recession. This modest expenditure pattern change (< ± 1%) exhibited by the study population for each of the expenditure policy groups supports the existence of budgetary incrementalism between the measurement periods in this study. The lack of significant shifts in the proportional share of
expenditures amongst the *City Limits* policy arenas is indicative of organizations seeking stability in resource allocation and relying on previous spending patterns as legitimate public policy (Boyne et al., 2000; Breunig & Koski, 2012; Davis et al., 1966; Lewis, 1984).

The decision criteria established for testing Hypothesis 1 requires an examination of the percentage change from pre-recession to post-recession for all three expenditure policy groups. If the results for any of the three expenditure policy groups shown in the “Percentage Change from Pre to Post-Recession” column exceed ± 10%, then the hypothesis would not be supported. Since none of the percentages exceed the decision criteria, Hypothesis 1 is supported.

This finding is consistent with the majority of the research in the literature that local governments seek to stabilize their policy environment during times of fiscal stress (Baker, 2011; Hoene & Pagano, 2009; Levine et al., 1981; Lewis, 1984; Wolman, 1980, 1982). This is one of the key attributes of Lindbloom’s (1959) theory of budgetary incrementalism.

**Hypothesis 2 – All Cities**

Hypothesis 2 requires the examination of the change in proportional share of expenditures for all three dependent variables for all 405 cities in Florida during the study measurement periods.
Hypothesis 2: The proportionate share of expenditures for all cities for all three policy groups from pre to post-recession is within ± 10%, indicating no significant difference in expenditure patterns.

Decision Criteria: If any of the percentages for the three policy arenas in the “Percentage Change from Pre-Recession to Post-Recession” column exceed ± 10%, then the hypothesis will be rejected.

The data for testing Hypothesis 2 is derived from the mean of each of the expenditure policy groups as a proportion of the total expenditures for all cities (cities, n = 405) for each of the measurement periods. The paired sample data was analyzed to compare the pre and post-recession means for all cities. Table 12 displays the results for Hypothesis 2.

Table 12

<table>
<thead>
<tr>
<th>Expenditure Policy Group</th>
<th>N</th>
<th>Mean % of Total Expenditures (T1)</th>
<th>Mean % of Total Expenditures (T2)</th>
<th>Mean % of Change (T1-T2)</th>
<th>Standard Deviation (T1 − T2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developmental</td>
<td>405</td>
<td>41.4</td>
<td>42.4</td>
<td>1.0</td>
<td>.092</td>
</tr>
<tr>
<td>Allocational</td>
<td>405</td>
<td>58.3</td>
<td>58.3</td>
<td>-1.0</td>
<td>.092</td>
</tr>
<tr>
<td>Redistributive</td>
<td>95</td>
<td>1.3</td>
<td>1.3</td>
<td>0.2</td>
<td>.018</td>
</tr>
</tbody>
</table>

The mean changes in proportional share of total spending for both the developmental and allocational categories approximate 1%. However, the direction of the mean change in developmental expenditures is positive, reflecting an increase in the
The mean change in allocational expenditures is negative, indicating a reduction in the percentage of overall expenditures for the post-recession period. The mean change for redistributive expenditures is positive at 0.25. The mean changes for all three City Limits policy expenditure groups for cities reflect very slight expenditure pattern changes between negative and positive 1%. This finding of slight adjustments to the proportionate share of expenditure categories for Florida city governments supports the existence of budgetary incrementalism between the two measurement periods in this study.

The decision criteria established for testing Hypothesis 2 requires an examination of the percentage change from pre-recession to post-recession for all three expenditure policy groups. If the results for any of the three expenditure policy groups shown in the “Percentage Change from Pre to Post-Recession” column exceed ±10%, then the hypothesis would not be supported. Since none of the percentages exceed the decision criteria, Hypothesis 2 is supported.

The results show that the proportional change amongst the expenditure policy groups remains relatively stable from pre to post-recession. This confirms the presence of incrementalism throughout the study period. The scale of the shift between groups of less than 10% is consistent with the finding of incrementalism in prior work presented in the literature (Anderson & Harbridge, 2010; LeLoup, 1978; Wildavsky, 1974).
Hypothesis 3 – All Counties

Hypothesis 3 requires the examination of the change in proportional share of expenditures for all three dependent variables for the 65 counties included in this study.

Hypothesis 3: The proportionate share of expenditures for all counties for all three policy groups from pre to post-recession is within ± 10%, indicating no significant difference in expenditure patterns.

Decision Criteria: If any of the percentages for the three policy arenas in the “Percentage Change from Pre-Recession to Post-Recession” column exceed ± 10%, then the hypothesis will be rejected.

The data for testing Hypothesis 3 is derived from the mean of each of the expenditure policy groups as a proportion of the total expenditures for all counties (N = 65) for each of the measurement periods. The paired sample data was analyzed to compare the pre and post-recession means for all counties. Table 13 displays the results for Hypothesis 3.

Table 13

<table>
<thead>
<tr>
<th>Expenditure Policy Group</th>
<th>N</th>
<th>Mean % of Total Expenditures (T1)</th>
<th>Mean % of Total Expenditures (T2)</th>
<th>Mean % of Change (T1-T2)</th>
<th>Standard Deviation (T1 – T2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developmental</td>
<td>65</td>
<td>35.4</td>
<td>33.2</td>
<td>-2.2</td>
<td>.047</td>
</tr>
<tr>
<td>Allocational</td>
<td>65</td>
<td>60.4</td>
<td>62.1</td>
<td>-1.7</td>
<td>.053</td>
</tr>
<tr>
<td>Redistributive</td>
<td>65</td>
<td>4.2</td>
<td>4.7</td>
<td>0.5</td>
<td>.028</td>
</tr>
</tbody>
</table>
The mean change for the developmental and allocational categories for counties approximates 2%. However, the direction of the change for developmental expenditures is negative, reflecting a decrease in the post-recession proportional share of overall expenditures. The mean of the change in allocational expenditures is positive, indicating an increase in the percentage of overall expenditures for counties post-recession. This finding is in direct contrast to the findings for cities in Hypothesis 2. The data indicate that as groups, cities and counties shifted their developmental and allocational expenditures in opposite directions between the two measurement periods. This finding might be explained when the evolving role of county government in Florida is considered. Twenty of Florida’s counties have adopted home rule charters, breaking away from the traditional constitutional role. Eighteen of those counties are included in this study population (n = 65). When counties adopt home rule charters, they are better capable of providing services to meet the demands of a growing metropolitan, unincorporated population addressing similar issues that face Florida’s cities (Benton, 2002; McCabe, 2000). The majority of counties still operate without the benefit of a charter and function in the traditional constitutional role, differentiating their expenditure priorities from cities. The role of the form of county government in explaining differences in expenditures from pre to post-recession is explored further in Chapter 6 – Results of the Explanatory Study.

In contrast to the divergence in developmental and allocational expenditures, counties and cities shared similar scale and direction of the mean change in redistributive expenditures between the measurement periods. The mean change in county redistributive expenditures was positive at 0.5%.
The decision criteria established for testing Hypothesis 3 requires an examination of the percentage change from pre-recession to post-recession for all three expenditure policy groups. If the results for any of the three expenditure policy groups shown in the “Percentage Change from Pre to Post-Recession” column exceed ± 10%, then the hypothesis would not be supported. Since none of the percentages exceed the decision criteria, Hypothesis 3 is supported.

Similar to the results for Hypothesis 2 (cities), these results for counties show that the proportional change amongst the expenditure policy groups remains relatively stable from pre to post-recession. The scale of the shift between policy expenditure groups of less than 10% confirms the presence of incrementalism through the study period. The scale of these changes in proportional spending is identified as incremental in prior work presented in the literature (Anderson & Harbridge, 2010; LeLoup, 1978; Wildavsky, 1974).

Hypothesis 4 – Charter vs. Non-Charter Counties

Hypothesis 4 requires the examination of the change in proportional share of developmental expenditures for the 65 counties included in this study based on their home rule charter status.

Hypothesis 4: The proportionate share of developmental expenditures of charter counties from pre to post-recession is ±10% of that for non-charter counties.
Decision Criteria: If the percentage for developmental expenditures in the “Percentage Change from Pre-Recession to Post-Recession” column is < 10%, then the hypothesis will be rejected.

The data for testing Hypothesis 4 is derived from the mean of the developmental expenditure policy group as a proportion of the total expenditures for non-charter counties (n = 47) and charter counties (n = 18) for each of the measurement periods. The paired sample data was analyzed to compare the pre and post-recession means for developmental expenditures as a percentage of overall spending for all counties based on their charter status. Table 14 displays the results for Hypothesis 4.

Table 14

*Change in Proportional Share of Developmental Expenditures as a Percentage of Total Expenditures for All Counties by Charter/Non-Charter Status*

<table>
<thead>
<tr>
<th>Developmental Expenditure Policy Group</th>
<th>n</th>
<th>Mean Pre-Recession % of Total Expenditures</th>
<th>Mean Post-Recession % of Total Expenditures</th>
<th>Mean % Change from Pre to Post-Recession</th>
<th>Difference in Change (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charter Counties</td>
<td>18</td>
<td>34.4</td>
<td>32.8</td>
<td>-1.6</td>
<td>0.70%</td>
</tr>
<tr>
<td>Non-Charter Counties</td>
<td>47</td>
<td>35.7</td>
<td>33.4</td>
<td>-2.3</td>
<td></td>
</tr>
</tbody>
</table>

The results shown in Table 14 demonstrate that charter counties reduced their developmental expenditures as a proportion of overall spending less than non-charter counties between the two measurement periods. This direction is consistent with
hypothesized relationship established in Hypothesis 4. The difference between the changes in the means for the two forms of government was 0.7%.

The decision criteria established for testing Hypothesis 4 requires an examination of the percentage change of the mean from pre-recession to post-recession for developmental expenditures of charter and non-charter counties. If the results for the developmental expenditure policy groups shown in the “Percentage Change from Pre to Post-Recession” column exceed ± 10%, then the hypothesis would not be supported. The results of the analysis indicate that non-charter counties reduced their developmental expenditures as a percentage of overall spending greater than charter counties between the two measurement periods. However, the difference in the change between the two types of counties was only 0.7%. Since the difference between the groups is less than 10%, Hypothesis 4 is not supported.

Although the Hypothesis was not supported, these results demonstrate that charter counties favor developmental expenditures in this study more than non-charter counties, and perhaps acting more similar, but not identical, to cities. This finding might be explained by the similarity in service delivery challenges facing charter counties and cities in Florida. Large unincorporated areas with growing populations with increasing demands for municipal type services are characteristic of Florida’s charter counties (Benton, 2002; McCabe, 2000).
Hypothesis 5 – Council-Manager Cities and Commission-Manager Counties

Hypothesis 5 requires the examination of the change in proportional share of expenditures for all three dependent variables for all Council-Manager form cities (n = 268) and Commission-Manager form counties (n = 54) in Florida during the study measurement periods.

Hypothesis 5: The proportionate share of expenditures of Council-Manager cities and Commission-Manager form counties for all three policy groups from pre to post-recession is within ± 10%, indicating no significant difference in expenditure patterns.

Decision Criteria: If any of the percentages for the three policy arenas in the “Percentage Change from Pre-Recession to Post-Recession” column exceed ± 10%, then the hypothesis will be rejected.

The data for testing Hypothesis 5 is derived from the mean of each of the expenditure policy groups as a proportion of the total expenditures for Council Manager cities and Commission Manager form counties for each of the measurement periods. The two groups compared in this Hypothesis share a common trait in their form of government. They are professionally managed with elected officials serving in a policy making role with professional staff executing policy directives and overseeing various administrative functions (Jewett, 2010). The paired sample data was analyzed to compare the pre and post-recession means for all expenditure policy groups for all Council-Manager cities and Commission-Manager counties. Table 15 displays the results for Hypothesis 5.
The direction of the changes in the means for these two forms of government for all three expenditure categories are consistent with the results for all cities and counties, as shown in hypotheses 1 through 3 above. Cities increased the proportionate share of development expenditures and reduced the proportion of allocational expenditures. The opposite was true for counties. Table 15 shows that same trend continued when comparing the means for those two expenditure categories for these two forms of government.

Table 15

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>Mean Pre-Recession % of Total Expenditures</td>
<td>Mean Post-Recession % of Total Expenditures</td>
<td>% Change from Pre to Post-Recession</td>
<td>Difference in Change (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Developmental</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Council-Manager Cities</td>
<td>268</td>
<td>40.9</td>
<td>41.4</td>
<td>0.5</td>
<td>2.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commission-Manager Counties</td>
<td>54</td>
<td>33.7</td>
<td>31.8</td>
<td>-1.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Allocational</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Council-Manager Cities</td>
<td>268</td>
<td>58.7</td>
<td>58.1</td>
<td>-0.6</td>
<td>2.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commission-Manager Counties</td>
<td>54</td>
<td>62.3</td>
<td>63.7</td>
<td>1.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Redistributive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Council-Manager Cities</td>
<td>67</td>
<td>1.3</td>
<td>1.6</td>
<td>0.3</td>
<td>0.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commission-Manager Counties</td>
<td>54</td>
<td>4.1</td>
<td>4.4</td>
<td>0.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Commission-Manager counties and Council-Manager cities showed a similar increase in the mean proportionate share for redistributive expenditures between the two measurement periods. The increase for Council-Manager cities runs slightly higher at
0.3% than the findings for Hypothesis 2 (all cities) where redistributive expenditures as a share of total spending increased 0.2% from pre-recession to post-recession. These two forms of government showed the same size and direction of change in proportional expenditures for redistributive spending as compared to the larger city and county populations. Council-Manager cities showed a slightly higher change (0.3%) than all cities (0.2%) as determined in Hypothesis 2. Commission-Manager counties exhibited a smaller change (0.3%) than all counties (0.5%) as demonstrated in the results for testing of Hypothesis 3.

The testing results for this hypothesis reflect a similar pattern of size and direction of change in proportional expenditures for all cities and counties. This raises the possibility that the form of government may not be as influential on the change in the proportional share of City Limits policy group expenditures from pre to post-recession as other factors such as the type of government. Further consideration of this finding will be analyzed in Study #2 – the Explanatory Study.

The decision criteria established for testing Hypothesis 5 requires an examination of the percentage change from pre-recession to post-recession for all three City Limits expenditure policy groups between Council Manager cities and Commission Manager counties. The comparison of changes in the proportion of expenditures between the two groups over the two measurement periods indicate that the difference in all three City Limits policy groups fall within the ± 10% decision criteria established for Hypothesis 5. Therefore, Hypothesis 5 is supported.
Hypothesis 6 – Council-Manager Form Cities vs. All Other Forms of City Government

Hypothesis 6 requires the examination of the change in proportional share of redistributive expenditures for all Council-Manager form cities (n = 67) and all non-Council-Manager form cities (n = 28) in Florida during the study measurement periods.

Hypothesis 6: The proportionate share of redistributive expenditures of Council-Manager cities for from pre to post-recession is +10% of that for non-Council Manager cities.

Decision Criteria: The percentage of redistributive expenditures will be compared between groups pre to post-recession to test the hypothesis. If the percentage for redistributive expenditures in the “Percentage Change from Pre-Recession to Post-Recession” column is < 10%, then the hypothesis will be rejected.

The data for testing Hypothesis 6 is derived from the mean of the redistributive expenditure policy group as a proportion of the total expenditures for Council Manager cities and all other cities (non-Council-Manager cities) for each of the measurement periods. The paired sample data was analyzed to compare the pre and post-recession means for redistributive expenditures for Council-Manager cities and non-Council-Manager cities. Table 16 displays the results for Hypothesis 6.
Table 16

*Change in Proportional Share of Redistributive Expenditures for Council-Manager and Non-Council-Manager Cities*

<table>
<thead>
<tr>
<th>Expenditure Policy Group by Form of Government</th>
<th>$n$</th>
<th>Mean Pre-Recession % of Total Expenditures</th>
<th>Mean Post-Recession % of Total Expenditures</th>
<th>% Change from Pre to Post-Recession</th>
<th>Difference in Change (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Redistributive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Council-Manager Cities</td>
<td>67</td>
<td>1.3</td>
<td>1.6</td>
<td>0.3</td>
<td>0.4</td>
</tr>
<tr>
<td>Non-Council Manager Cities</td>
<td>28</td>
<td>1.2</td>
<td>1.1</td>
<td>-0.1</td>
<td></td>
</tr>
</tbody>
</table>

The results indicate that Council-Manager cities increased redistributive expenditures between the two measurement periods by a proportionate 0.3% of total expenditures. Non Council-Manager cities slightly reduced proportionate expenditures by 0.1%. The hypothesized relationship between these two sub-groups of cities assumed that the Council-Manager form of city government would exhibit a larger increase in the change in redistributive expenditures from pre to post-recession than non-Council-Manager cities. The results indicate that the hypothesized direction of the relationship is confirmed.

The decision criteria established for testing Hypothesis 6 requires an examination of the percentage change from pre-recession to post-recession for redistributive expenditures of Council-Manager cities and Non Council-Manager cities. The comparison of changes in the mean expenditures between the two groups over the two measurement periods indicate that the difference in the *City Limits* redistributive expenditures between the two forms of city governments is 0.4%, which is below the ±
percent minimum decision criteria established for Hypothesis 6. While the direction of the findings is consistent with the Hypothesis, the strength of the difference falls short of what was predicted. Therefore, Hypothesis 6 is not supported.

Hypothesis 7 - Council-Strong Mayor Form Cities vs. All Other Forms of City Government

Hypothesis 7 requires the examination of the change in proportional share of developmental expenditures for all Council-Strong Mayor form cities (n = 49) and all non-Council-Strong Mayor for cities (n = 356) in Florida during the study measurement periods.

Hypothesis 7: The proportionate share of developmental expenditures of Council-Strong Mayor form cities from pre to post-recession is ± 10% of that for other forms of city government.

Decision Criteria: The percentage of expenditures for the three policy arenas will be compared between groups pre to post-recession to test the hypothesis. If the percentage for developmental expenditures in the “Percentage Change from Pre-Recession to Post-Recession” column is < 10%, then the hypothesis will be rejected.

The data for testing Hypothesis 7 is derived from the mean of the developmental expenditure policy group as a proportion of the total expenditures for Council-Strong Mayor form cities and all other cities (Non Council-Strong Mayor form cities) for each of the measurement periods. The paired sample data was analyzed to compare the pre and
post-recession means for redistributive expenditures for Council-Manager cities and non Council-Manager cities. Table 17 displays the results for Hypothesis 7.

The findings from Hypothesis 2 (all cities) indicated that the mean change in the proportion of all expenditures that were developmental increased between the measurement periods for all cities by 1.0%. Table 17 indicates that Council-Strong Mayor forms of city governments, on average, increased proportional spending on developmental activities more than other forms of city government between the measurement periods. That difference was just a modest 0.2%. This finding is consistent with direction of the relationship predicted in Hypothesis 7.

Table 17

<table>
<thead>
<tr>
<th>Expenditure Policy Group by Form of Government</th>
<th>n</th>
<th>Mean Pre-Recession % of Total Expenditures</th>
<th>Mean Post-Recession % of Total Expenditures</th>
<th>% Change from Pre to Post-Recession</th>
<th>Difference in Change (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developmental</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Council-Strong Mayor Cities</td>
<td>49</td>
<td>39.1</td>
<td>40.2</td>
<td>1.1</td>
<td>0.2</td>
</tr>
<tr>
<td>Non-Council Strong Mayor Cities</td>
<td>356</td>
<td>41.7</td>
<td>42.6</td>
<td>0.9</td>
<td></td>
</tr>
</tbody>
</table>

The decision criteria established for testing hypothesis 7 requires an examination of the proportional change in developmental expenditures as a share of overall spending for Council-Strong Mayor form cities and Non Council-Strong Mayor form cities. The comparison of changes in mean proportionate share of developmental expenditures between the two groups over the two measurement periods indicates that the difference is
0.2%. This is below the hypothesized ± 10% decision criteria established for this hypothesis. Therefore, Hypothesis 7 is not supported.

**Summary of Hypothesis Testing**

The findings for the testing of the Hypotheses in Study #1, the Descriptive Study, are summarized in Table 18.

The results for the testing of the hypotheses in this chapter begin to indicate how Florida’s local governments responded to the Great Recession of 2008. When all local governments are considered as a single group as in Hypothesis 1, there is an increase (.6%) in spending in the developmental policy category which is offset by a corresponding decrease (-.7%) in allocational expenditures. Mean redistributive expenditures increased only modestly (.3%) from T1 to T2.

However, when the type of government is examined in hypotheses 2 and 3, a pattern begins to emerge which illustrates real differences between cities and counties. Cities increased their proportional share of developmental spending by 1.0% and reduced their allocational spending by the same amount (-1.0%), displaying the pro-developmental characteristic of cities espoused by Peterson (1981). Counties exhibited the opposite tendency from pre to post-recession. Counties reduced their developmental spending (-2.2%) and increased their allocational (1.7%) and redistributive expenditures (.5%), displaying a much different response from T1 to T2.

Further examination of the data indicates other differences between the two types of governments. When comparing the proportional share of spending among the three
policy arenas, the overall distribution of spending between the types of government is different. Cities spent 6% more on a proportional basis for developmental activities than counties in T1 (41.4% vs. 35.4%) and 9.2% more in T2 (42.4% vs. 33.2%). Counties spent 2.1% more than cities for allocational expenditures in T1 (60.4% vs. 58.3%) and 4.8% more during T2 (62.1% vs. 57.3%). There is also a difference between cities and counties in the proportional share for redistributive expenditures of total spending. Counties spent 2.9% more than cities in T1 (4.2% vs. 1.3%). This difference remained nearly the same at 3.0% in T2 (4.5% vs. 1.5%).

This discussion of proportional spending in the two measurement periods indicates that cities and counties in Florida had different spending models based on the City Limits typology. In the pre-recession measurement period, both types of governments spent a majority of their funds on allocational expenditures. Cities made a higher share of expenditures on developmental policy matters while counties favored redistributive activities. In the post-recession measurement period, this difference in spending patterns between the two was amplified with counties increasing the share of spending for allocational matters and cities doing the same for developmental activities. The relative share of redistributive spending remained constant from T1 to T2 when comparing cities and counties.
Table 18

*Summary of the Results for Hypothesis Testing in Descriptive Study*

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Subject</th>
<th>Group(s)</th>
<th>Hypothesized Result</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Change in % of all three expenditure categories</td>
<td>All Local Governments</td>
<td>% Change for each category is within ±10%</td>
<td>Supported</td>
</tr>
<tr>
<td>H2</td>
<td>Change in % of all three expenditure categories</td>
<td>All Cities</td>
<td>% Change for each category is within ±10%</td>
<td>Supported</td>
</tr>
<tr>
<td>H3</td>
<td>Change in % of all three expenditure categories</td>
<td>All Counties</td>
<td>% Change for each category is within ±10%</td>
<td>Supported</td>
</tr>
<tr>
<td>H4</td>
<td>Change in % of developmental expenditures</td>
<td>Charter and Non-Charter Counties</td>
<td>% Change for Charter Counties &gt; 10% for Non-Charter Counties</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H5</td>
<td>Change in % of developmental expenditures</td>
<td>Council-Manager Cities and Commission-Manager Counties</td>
<td>% Change is within ±10%</td>
<td>Supported</td>
</tr>
<tr>
<td>H6</td>
<td>Change in % of redistributive expenditures</td>
<td>Council-Manager Cities and Non Council-Manager Cities</td>
<td>% Change is &gt; 10%</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H7</td>
<td>Compare Changes in % developmental expenditures</td>
<td>Council-Strong Mayor cities and Non Council Strong Mayor Cities</td>
<td>% Change for Council-Strong Mayor Cities is &gt; 10%</td>
<td>Not Supported</td>
</tr>
</tbody>
</table>

This finding indicates that by utilizing Peterson’s *City Limits* typology as a theoretical framework, expenditure data can be instrumental in deciphering policy differences between the two types of local governments. The typology can be used to
measure the policy changes or ‘shifts’ made in response to a significant natural event such as the Great Recession of 2008. This is an application of Peterson’s (1981) theory that has not been utilized before in the literature.

The Explanatory Study in Chapter 6 is designed to further explore and identify the underlying reasons why the policy differences identified in this Descriptive Study occurred between Florida’s local governments from pre to post-recession.
CHAPTER 6
RESULTS OF THE EXPLORATORY STUDY

There are three components to the analysis in Study #2. First, an analysis will be conducted to understand the change in the mean per-capita expenditures from pre to post-recession for the three City Limits policy arenas. The second component of the analysis is the testing of hypotheses 8 through 15. Finally, three final overall models are constructed and evaluated— one for each of the dependent variables. The results for the final models are shown in Chapter 7. These three components comprise the Explanatory Study component of this research.

The Study Sample

The study sample consists of a total of 262 local governments. This represents all counties included in this research (n = 65) and a sample of Florida’s 410 cities. The cities included (n = 197) are those whose population exceeded 5000 in the 2000 U.S. Census. The number of cases in this study (n = 262) exceeds the 192 cases required by the power analysis.

Descriptive Statistics

The composition of the independent variables in this component of the study is shown in Table 19. There are a total of eight different forms of government classifications representing all of Florida’s 470 local governments that were included in the earlier Descriptive Study in Chapter 5. Table 19 shows that two forms of local
government dominate this Explanatory Study sample - Council-Manager form cities and Commission-Manager form counties. Collectively, they comprise close to 90% of all of the 262 local governments. Since three of the forms of government – Commission City, Hybrid City, and Commission-Executive County - have only one instance in this study sample, they have been eliminated from this analysis. This leaves five forms of government to be analyzed.

Table 19

Descriptive Statistics for Independent Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>% Of Cases (N = 262)</th>
</tr>
</thead>
<tbody>
<tr>
<td>City</td>
<td>197</td>
<td>75.2</td>
</tr>
<tr>
<td>County</td>
<td>65</td>
<td>24.8</td>
</tr>
<tr>
<td>Council-Manager Form City</td>
<td>175</td>
<td>66.8</td>
</tr>
<tr>
<td>Council-Strong Mayor Form City</td>
<td>14</td>
<td>5.3</td>
</tr>
<tr>
<td>Council-Weak Mayor Form City</td>
<td>6</td>
<td>2.3</td>
</tr>
<tr>
<td>Commission-Manager Form County</td>
<td>54</td>
<td>20.6</td>
</tr>
<tr>
<td>Commission Form County</td>
<td>10</td>
<td>3.8</td>
</tr>
<tr>
<td>County Charter</td>
<td>262</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The independent variable ‘Charter County’ is shown as having 262 cases. There are only 18 charter counties in Florida. If a municipality was located within a charter county, the variable was coded as ‘yes’ to explore the relationship between charter county status and municipal expenditures. Therefore, all 262 cases had a value for this variable.
Descriptive statistics for the three dependent variables for the study sample (n = 262) are shown in Table 20.

Table 20

*Descriptive Statistics for the Dependent Variables*

<table>
<thead>
<tr>
<th></th>
<th>% Change in Developmental Expenditures (n = 262)</th>
<th>% Change in Allocational Expenditures (n = 262)</th>
<th>% Change in Redistributive Expenditures (n = 134)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Data</td>
<td>0</td>
<td>0</td>
<td>128</td>
</tr>
<tr>
<td>Mean</td>
<td>-0.005</td>
<td>0.0035</td>
<td>0.0028</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0.063</td>
<td>0.064</td>
<td>0.021</td>
</tr>
<tr>
<td>Skewness</td>
<td>-0.764</td>
<td>0.739</td>
<td>4.915</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>6.42</td>
<td>6.03</td>
<td>44.35</td>
</tr>
</tbody>
</table>

All local governments included in this study reported complete expenditure data for two of the three dependent variables for both measurement periods – developmental and allocational expenditures. Table 20 shows that nearly half of the 262 local governments (129) had no data for redistributive expenditures. All 129 of these governments are cities. The original data collected from the State of Florida indicated that these cities did not have any redistributive expenditures in either of the two measurement periods.

**Comparing Group Means**

The first analytical component of Study #2 calls for comparing the mean per-capita expenditures for each of the *City Limits* expenditure categories between the two measurement periods. The initial research design called for the use of the paired sample
\( t \)-test to analyze the data for three separate grouping of the cases - all local governments as a single group, a group based on type of government, and the third group analyzed by form of government. There are general assumptions that apply to the utilization of the paired sample \( t \)-test. One of those assumptions is that the data for the dependent variables is normally distributed (Gliner et al., 2009; Pallant, 2007).

Assessing Normality

Table 20 displays the outcome of testing of the distribution of each of the dependent variables in the study. Measures of skewness and kurtosis are indicators of normality when the scores fall between -2 and +2 (Pallant, 2007). In the case of kurtosis, all three distributions fall outside the acceptable range to be considered a normal distribution. The same is true for the skewness for the percent change in redistributive expenditures distribution. These findings were confirmed utilizing a number of other tests used to assess the normality of the distribution of data. These include comparing the mean and 5% trimmed mean, review of Q-Q plots, and the Kolmogorov-Smirnov statistic (Pallant, 2007). In addition, histograms with a normal distribution curve overlay provided visual confirmation of the statistical results.

These findings led to the conclusion that the \( t \)-test requirement for a normal distribution for all three dependent variables could not be attained in order to utilize one common parametric test. Therefore, the non-parametric Wilcoxon Signed Ranks matched pairs test was selected to compare the means between the various groups in this study. The Wilcoxon test is used when there has been a violation of the assumption of
normality when comparing group means from the effect of a single independent variable with two levels (Gliner et al., 2009). In this instance, the independent variable would be considered time, with the pre-recession measurement period (FY06-08) being T1 and the post-recession measurement (FY09-11) period being T2.

Analysis of All Local Governments as a Single Group

The mean proportion of total expenditures for the three City Limits policy groups for the pre-recession period FY06-08 (T1) was compared to the mean proportion of total expenditures for the post-recession period FY09-11 (T2) for all local governments (n = 262). The results of the Wilcoxon signed ranks matched pairs test are shown in Table 21.

Table 21

Changes in Mean Expenditures from T1 to T2 for All Local Governments

<table>
<thead>
<tr>
<th>Expenditure Policy Group</th>
<th>N</th>
<th>Mean % of Total Expenditures</th>
<th>% Change from T1-T2</th>
<th>Standard Deviation</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developmental - T1</td>
<td>262</td>
<td>39.68</td>
<td>-0.50</td>
<td>0.13796</td>
<td>.235</td>
</tr>
<tr>
<td>Developmental - T2</td>
<td></td>
<td>39.18</td>
<td></td>
<td>0.13924</td>
<td></td>
</tr>
<tr>
<td>Allocational - T1</td>
<td>262</td>
<td>58.88</td>
<td>0.35</td>
<td>0.13657</td>
<td>.507</td>
</tr>
<tr>
<td>Allocational - T2</td>
<td></td>
<td>59.23</td>
<td></td>
<td>0.13780</td>
<td></td>
</tr>
<tr>
<td>Redistributive - T1</td>
<td>134</td>
<td>2.82</td>
<td>0.28</td>
<td>0.04757</td>
<td>.238</td>
</tr>
<tr>
<td>Redistributive - T2</td>
<td></td>
<td>3.10</td>
<td></td>
<td>0.05433</td>
<td></td>
</tr>
</tbody>
</table>

* p < .05

Two of the three expenditure policy groups – allocational and redistributive – increased from pre to post-recession as indicated by the positive direction in the “Percentage Change from T1 to T2” column in Table 21. Only developmental expenditures decreased as a proportion of all spending between the two measurement
periods (-0.50). The results in Table 2 indicate that none of the changes from T1 to T2 reached statistical significance. Collectively, all of the shifts in the proportion of total spending were less than 1%. Given these findings, the possibility that the difference in the means between the two measurement periods was due to random error cannot be eliminated.

The relatively small percentage change from T1 to T2 for all three City Limits policy regimes supports the existence of incrementalism. The changes from pre to post-recession do not rise to the level of significant shifts in local government policy (Anderson & Harbridge, 2010; Boyne et al., 2000; Dempster & Wildavsky, 1979). The data further support the notion that local governments operating in an environment of economic stress seek to maintain their political equilibrium by avoiding significant shifts in policy (Baker, 2011; Hoene & Pagano, 2009; Levine et al., 1981; Lewis, 1984; Wolman, 1980, 1982).

The data in Table 2 shows the results when all types and forms of government are grouped together. This overall analysis will tend to mask differences that might exist between type and form of government, resulting in outcomes that are not statistically significant. To further understand and explain the factors affecting the shift in proportional spending by City Limits policy categories as a result of the Great Recession, the study sample is evaluated based on other grouping attributes.

Analysis by Type of Government

The mean proportion of total expenditures for the three City Limits policy groups
for the pre-recession period FY06-08 (T1) was compared to the mean proportion of total expenditures for the post-recession period FY09-11 (T2) for two groups – cities (n = 197) and counties (n = 65). The results of the Wilcoxon signed ranks matched pairs test are shown in Table 22.

Table 22

Changes in Expenditures by Type of Government

<table>
<thead>
<tr>
<th>Type of Govt</th>
<th>Expenditure Policy Group</th>
<th>N</th>
<th>Mean % of Total Expenditures</th>
<th>% Change from T1-T2</th>
<th>Standard Deviation</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cities</td>
<td>Developmental - T1</td>
<td>197</td>
<td>41.10</td>
<td>0.05</td>
<td>0.14642</td>
<td>.476</td>
</tr>
<tr>
<td></td>
<td>Developmental - T2</td>
<td></td>
<td>41.15</td>
<td></td>
<td>0.14688</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Allocational - T1</td>
<td>197</td>
<td>58.38</td>
<td>- 0.09</td>
<td>0.14820</td>
<td>.321</td>
</tr>
<tr>
<td></td>
<td>Allocational - T2</td>
<td></td>
<td>58.27</td>
<td></td>
<td>0.15092</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Redistributive -T1</td>
<td>69</td>
<td>1.48</td>
<td>0.16</td>
<td>0.05879</td>
<td>.865</td>
</tr>
<tr>
<td></td>
<td>Redistributive -T2</td>
<td></td>
<td>1.64</td>
<td></td>
<td>0.05404</td>
<td></td>
</tr>
<tr>
<td>Counties</td>
<td>Developmental - T1</td>
<td>65</td>
<td>35.37</td>
<td>- 2.16</td>
<td>0.08583</td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td>Developmental - T2</td>
<td></td>
<td>33.21</td>
<td></td>
<td>0.08244</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Allocational - T1</td>
<td>65</td>
<td>60.40</td>
<td>1.74</td>
<td>0.08156</td>
<td>.005</td>
</tr>
<tr>
<td></td>
<td>Allocational - T2</td>
<td></td>
<td>62.14</td>
<td></td>
<td>0.08418</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Redistributive -T1</td>
<td>65</td>
<td>4.23</td>
<td>0.42</td>
<td>0.04460</td>
<td>.288</td>
</tr>
<tr>
<td></td>
<td>Redistributive -T2</td>
<td></td>
<td>4.65</td>
<td></td>
<td>0.03470</td>
<td></td>
</tr>
</tbody>
</table>

*p < .05

The difference in the means for all three dependent variables for cities shows only slight change between the measurement periods. The direction of the change is positive for development and redistributive expenditures, and negative for the change in the proportion of allocational spending. None of the changes in proportional spending by expenditure policy group for cities is found to be statistically significant.
The county data shown on Table 22 illustrates a more pronounced shift in spending between the two measurement periods in this study. Counties decreased developmental spending by 2.16% and increased allocational expenditures by 1.74%. Both of these shifts in proportional spending were found to be statistically significant at \( p < .05 \). Redistributive expenditures remained relatively flat with a modest 0.42% increase from T1 to T2.

The results indicate that counties had a more pronounced shift in proportional spending as compared with cities, but these changes appear to be consistent with Lindbloom’s (1959) theory of budgetary incrementalism. The data also highlights the differences between cities and counties in the proportion of spending between policy groups. Counties have a higher proportion of allocational and redistributive expenditures whereas cities focus more on developmental spending. This observation goes to the central focus of the theoretical framework of this research - the driving force behind local government expenditure policy is the economic survival of the community, and improving the local jurisdiction’s position in the national, state, and regional economy (Peterson, 1981, p. 41). The City Limits typology characterizes each of the policy categories by its accretive, dilutive, or neutral relationship with the local economy. Based on this typology, cities favor accretive (developmental) expenditures over counties. The regression analysis in Chapter 7 will further illuminate this observation.

Analysis by Form of Government

The mean proportion of total expenditures for the three City Limits policy groups
for the pre-recession period FY06-08 (T1) was compared to the mean proportion of total expenditures for the post-recession period FY09-11 (T2) for all local governments (n = 262) by form of government. The results of the Wilcoxon signed ranks matched pairs test are shown in Table 23.

The Council-Strong Mayor form of city government is the only form of government, including counties, to increase developmental expenditures from pre to post-recession. This finding is consistent with much of the literature surrounding the City Limits typology and the Council-Strong Mayor form of government. Hawkins (2010) noted that strong mayors are viewed as dealmakers in the economic development arena, with a shorter time horizon than appointed city managers. The Council-Strong Mayor form of city government has been found to generally favor developmental policies over redistributive expenditures, and to be more sensitive to economic development interest groups (Basolo & Huang, 2001; Clingermayer & Feiock, 2001; Fleischmann et al., 1992; Longoria, 1994). In an environment where short term economic recovery is highly desired, such as in the aftermath of the Great Recession of 2008, the Council-Strong Mayor form will favor developmental expenditures (Feiock et al., 2003).
### Table 23

**Changes in Expenditures by Form of Government**

<table>
<thead>
<tr>
<th>Form of Government</th>
<th>Expenditure Policy Group</th>
<th>Mean % of Total Expenditures</th>
<th>% Change from T1 to T2</th>
<th>Standard Deviation</th>
<th>Sig. (p) 2-tailed*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Council-Manager Cities</strong></td>
<td>Developmental - T1</td>
<td>41.33</td>
<td>-0.10</td>
<td>0.15034</td>
<td>.566</td>
</tr>
<tr>
<td></td>
<td>Developmental - T2</td>
<td>41.23</td>
<td></td>
<td>0.15025</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Allocational - T1</td>
<td>58.16</td>
<td>0.04</td>
<td>0.15187</td>
<td>.381</td>
</tr>
<tr>
<td></td>
<td>Allocational - T2</td>
<td>58.20</td>
<td></td>
<td>0.15235</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Redistributive - T1</td>
<td>1.61</td>
<td>0.40</td>
<td>0.06461</td>
<td>.122</td>
</tr>
<tr>
<td></td>
<td>Redistributive - T2</td>
<td>2.01</td>
<td></td>
<td>0.06988</td>
<td></td>
</tr>
<tr>
<td><strong>Council-Strong Mayor Cities</strong></td>
<td>Developmental - T1</td>
<td>36.83</td>
<td>2.73</td>
<td>0.12500</td>
<td>.221</td>
</tr>
<tr>
<td></td>
<td>Developmental - T2</td>
<td>39.56</td>
<td></td>
<td>0.12711</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Allocational - T1</td>
<td>62.90</td>
<td>-2.61</td>
<td>0.12193</td>
<td>.272</td>
</tr>
<tr>
<td></td>
<td>Allocational - T2</td>
<td>60.19</td>
<td></td>
<td>0.12547</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Redistributive - T1</td>
<td>0.27</td>
<td>0.02</td>
<td>0.00548</td>
<td>.600</td>
</tr>
<tr>
<td></td>
<td>Redistributive - T2</td>
<td>0.25</td>
<td></td>
<td>0.00594</td>
<td></td>
</tr>
<tr>
<td><strong>Council-Weak Mayor Cities</strong></td>
<td>Developmental - T1</td>
<td>44.74</td>
<td>-0.58</td>
<td>0.17662</td>
<td>.917</td>
</tr>
<tr>
<td></td>
<td>Developmental - T2</td>
<td>44.16</td>
<td></td>
<td>0.18017</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Allocational - T1</td>
<td>55.24</td>
<td>0.49</td>
<td>0.17667</td>
<td>.917</td>
</tr>
<tr>
<td></td>
<td>Allocational - T2</td>
<td>55.83</td>
<td></td>
<td>0.18017</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Redistributive - T1</td>
<td>0.01</td>
<td>-</td>
<td>0.00033</td>
<td>.317</td>
</tr>
<tr>
<td></td>
<td>Redistributive - T2</td>
<td>0.01</td>
<td></td>
<td>0.00023</td>
<td></td>
</tr>
<tr>
<td><strong>Commission Counties</strong></td>
<td>Developmental - T1</td>
<td>44.29</td>
<td>-4.49</td>
<td>0.12615</td>
<td>.047</td>
</tr>
<tr>
<td></td>
<td>Developmental - T2</td>
<td>39.80</td>
<td></td>
<td>0.10600</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Allocational - T1</td>
<td>51.16</td>
<td>3.49</td>
<td>0.10521</td>
<td>.139</td>
</tr>
<tr>
<td></td>
<td>Allocational - T2</td>
<td>54.65</td>
<td></td>
<td>0.10293</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Redistributive - T1</td>
<td>4.55</td>
<td>1.00</td>
<td>0.0685</td>
<td>.114</td>
</tr>
<tr>
<td></td>
<td>Redistributive - T2</td>
<td>5.55</td>
<td></td>
<td>0.08129</td>
<td></td>
</tr>
<tr>
<td><strong>Commission-Manager Counties</strong></td>
<td>Developmental - T1</td>
<td>33.65</td>
<td>-1.81</td>
<td>0.06611</td>
<td>.002</td>
</tr>
<tr>
<td></td>
<td>Developmental - T2</td>
<td>31.84</td>
<td></td>
<td>0.07190</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Allocational - T1</td>
<td>62.27</td>
<td>1.46</td>
<td>0.06361</td>
<td>.014</td>
</tr>
<tr>
<td></td>
<td>Allocational - T2</td>
<td>63.73</td>
<td></td>
<td>0.07228</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Redistributive - T1</td>
<td>4.08</td>
<td>0.35</td>
<td>0.02455</td>
<td>.483</td>
</tr>
<tr>
<td></td>
<td>Redistributive - T2</td>
<td>4.43</td>
<td></td>
<td>0.03528</td>
<td></td>
</tr>
</tbody>
</table>

*p < .05
The three instances of statistical significance shown on Table 23 all occur with county forms of government. The reduction in developmental expenditures from T1 to T2 for Commission form counties is significant at $p = .047$. At 4.49%, it is the largest single shift in proportional spending from pre to post-recession for all forms of government in this study. Commission form counties also had the largest increase in proportional spending in this study with a 3.49% increase in allocational spending between T1 and T2. There is little in the way of past research that has examined this pronounced shift in spending priorities as a result of an external event such as the Great Recession of 2008 for Commission form counties. What is known is that this traditional ‘unreformed’ model of county government in Florida has no single individual in administrative or political leadership like Commission-Manager form counties (Feiock, 2004; Jewett, 2010). That void of leadership is the antithesis of the Council-Strong Mayor form of city government that has been shown to be a form of local government that prioritizes developmental expenditures. However, the lack of individual leadership in the Commission form county leads to more support for the political demands for developmental and redistributive expenditures (Choi et al., 2010; Feiock, 2002, 2004; Lubell et al., 2005). This past research holds true in these findings for redistributive spending but does not for developmental expenditures.

The data for Commission-Manager counties was statistically significant for the changes in developmental and allocational expenditures. The direction of change for all three City Limits spending categories was the same as the Council-Manager form city, but the size of the change was larger for counties. The reduction in proportional spending by
Commission-Manager form counties from pre to post-recession runs counter to the finding that there is a positive relationship between this form of county government and developmental policies (Feiock et al., 2008).

Some interesting patterns among and between the five forms of government begin to emerge from the data in Table 23. Of all cities, the Council-Weak Mayor form had the highest proportion of developmental spending, either in T1 or T2. This finding conflicts with prior research that found that the Council-Strong Mayor form would be more responsive to policies that favor developmental expenditures (Basolo & Huang, 2001; Fleischmann et al., 1992; Longoria, 1994). However, it should be noted that Council-Strong Mayor cities had the largest proportional increase in developmental spending from T1 to T2 of any of the five forms of government in this study.

Council-Strong Mayor cities had the highest proportion of allocational spending, either pre or post-recession than the other two city forms. Public safety expenditures make up the largest component of allocational spending. Other factors may explain the proportion of allocational expenditures exhibited by Council-Strong Mayor cities, including the socio-economic characteristics of the community, which are analyzed in the final regression analyses in Chapter 7.

Council-Manager form cities had the highest level of redistributive spending when compared to the other city forms of government. This last observation confirms Hawkins (2010) finding that the Council-Manager form of city government will favor redistributive expenditures based on the professional guidelines for City Managers that stresses citizen access and equity in the distribution of resources.
There is a significant difference in the proportional spending when comparing county forms of government. The Commission form favors developmental expenditures over the Commission-Manager form by a wide margin – over 10% pre-recession and nearly 8% post-recession. This confirms the research by Choi et al. (2010), that the Commission-Manager form has a negative relationship with developmental expenditures. The data in Table 23 conflicts with Schneider and Park (1989) who found that the Commission form and Commission-Manager form counties spent similarly on developmental expenditures.

Hypothesis Testing

This component of the Explanatory Study is an examination of the relationship between certain hypothesized factors and a dependent variable that might explain the changes in the expenditure patterns of Florida’s local governments that occurred from pre to post-recession. There are nine hypotheses associated with this part of the study (H8 – H16). Ordinary least squares regression analysis is used to test the study hypotheses.

Descriptive Statistics

In addition to the variables for type and form of government, three additional independent variables are introduced into the testing of hypotheses H8 through H16. The descriptive statistics for these variables are shown in Table 24.
Table 24

Independent Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Population</td>
<td>262</td>
<td>5072</td>
<td>1,623,018</td>
<td>75,394</td>
<td>171,833</td>
</tr>
<tr>
<td>Median Household Income</td>
<td>262</td>
<td>$14,923</td>
<td>$107,507</td>
<td>$39,021</td>
<td>$13,386</td>
</tr>
<tr>
<td>Population Density</td>
<td>262</td>
<td>8.4</td>
<td>20,267.10</td>
<td>2,506.30</td>
<td>2,885.60</td>
</tr>
</tbody>
</table>

Findings for the Explanatory Hypotheses (H8 – H16)

The results for each of the hypotheses tested in this explanatory study were derived from a regression analysis conducted pursuant to the analytical framework established during the research design. The results of the ANOVA test are indicated in the significance column (p) indicating whether the result of the regression analysis is statistically significant (p < .05) and the variation explained in the model is not due to random error (Pallant, 2007). Each of the study hypotheses are presented below along with the decision criteria to guide the analysis, followed by a brief discussion of the findings.

Hypothesis 8 – Median Household Income and Allocational Expenditures

Hypothesis 8: Median household income is positively associated with a change in the proportionate share of local government allocational expenditures from pre-recession to post-recession.
Decision Criteria: The dependent variable Change In Per Capita Allocational Expenditures will be regressed against the variable Median Household Income utilizing the SPSS simple linear regression module. The $R^2$, $p$-value, and standardized Beta output will be recorded. The results of the model will demonstrate the proportion of the variance in the change in allocational expenditures from pre to post-recession that is explained by the variable Median Household Income. If the results indicate that the model is statistically significant ($p < 0.05$) and the relationship with the Change in Per Capita Allocational Expenditures is positive, then there will be a finding that the hypothesis is supported.

Table 25 displays the results of the simple linear regression analysis conducted to evaluate the efficacy of Hypothesis 8.

Table 25

*Effect of Median Household Income on Change in Allocation Expenditures for All Local Governments*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Unstandardized Beta</th>
<th>Standardized Beta</th>
<th>$t$-test</th>
<th>$p^*$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>.016</td>
<td></td>
<td>1.755</td>
<td>.081</td>
</tr>
<tr>
<td>Median Household Income</td>
<td>3.332E7</td>
<td>-.095</td>
<td>-1.512</td>
<td>.132</td>
</tr>
</tbody>
</table>

*Note: $F = 2.287$; $R^2 = .009$    
*p < .05

The $R^2$ (.009) shows that the proportion of the variance in the dependent variable (DV), percentage change in allocation expenditures, which is explained by the
independent variable (IV), median household income, for all local governments. This result means that less than 1% of the variance in the DV can be explained by median household income.

The hypothesized effect of median household income on the change in allocation expenditures in Hypothesis 8 is positive, meaning that it would be expected that as median household income increased or decreased, so would the change in allocational expenditures from pre to post-recession. The beta (-.095) is negative, indicating the results are not consistent with the hypothesized positive relationship between the variables. The p-value (.152) for household income’s effect on the change in allocational expenditures does not reach the level of statistical significance at p < .05.

These results were evaluated in light of the decision criteria established in the research design. The findings indicate that the data fails to support the hypothesized direction of the linear relationship and does not attain statistical significance. Therefore, Hypothesis 8 is not supported.

Hypothesis 9 – Median Household Income and Redistributive Expenditures

Hypothesis 9: Median household income is negatively associated with a change in the proportionate share of local government redistributive expenditures from pre-recession to post-recession.

Decision Criteria: The dependent variable Change in Per Capita Redistributive Expenditures will be regressed against the variable Median Household Income utilizing the SPSS simple linear regression module. The R², p-value, and
standardized Beta output will be recorded. The results of the model will demonstrate the proportion of the variance in the change in redistributive expenditures from pre to post-recession that is explained by the variable Median Household Income. If the results indicate that the model is statistically significant (p < 0.05) and the relationship with the Change in Per Capita Redistributive Expenditures is negative, then there will be a finding that the hypothesis is supported.

Table 26 displays the results of the simple linear regression analysis conducted to evaluate the efficacy of Hypothesis 9.

Table 26

*Effect of Median Household Income on Change in Redistribution Expenditures for All Local Governments*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Unstandardized Beta</th>
<th>Standardized Beta</th>
<th>t-test</th>
<th>p*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-.003</td>
<td>-1.040</td>
<td>.300</td>
<td></td>
</tr>
<tr>
<td>Median Household Income</td>
<td>1.048E-7</td>
<td>.135</td>
<td>1.497</td>
<td>.137</td>
</tr>
</tbody>
</table>

Note: F = 2.240; R² = .018
*p < .05

The R² (.018) shows the proportion of the variance in the DV, percentage change in redistributive expenditures, which is explained by the IV, median household income, for all local governments. This result means that slightly less than 2% of the variance in the dependent variable can be explained by median household income.
The hypothesized effect of median household income on the percentage change in redistributive expenditures in Hypothesis 9 is negative, meaning that as median household income decreases, the change in redistributive expenditures from pre to post-recession would increase. The result in Table 2 conflicts with the direction of the hypothesized relationship indicated by the beta (.135). The p-value (.137) for household income’s effect on the change in redistributive expenditures does not reach the level of statistical significance at p < .05.

These results were evaluated in light of the decision criteria established in the research design. The findings indicate that the data does not support the hypothesized direction of the linear relationship, and does not attain statistical significance. Therefore, Hypothesis 9 is not supported.

Hypothesis 10 – Population Size and Developmental Expenditures
Hypothesis 10: Population size is positively associated with a change in the proportionate share of local government developmental expenditures from pre-recession to post-recession.

Decision Criteria: The dependent variable Change in Per Capita Developmental Expenditures will be regressed against the variable Total Population utilizing the SPSS simple linear regression module. The $R^2$, p-value, and standardized Beta output will be recorded. The results of the model will demonstrate the proportion of the variance in the change in developmental expenditures from pre to post-recession that is explained by the variable Total Population. If the results indicate
that the model is statistically significant \((p < 0.05)\) and the relationship with the Change in Per Capita Developmental Expenditures is positive, then there will be a finding that the hypothesis is supported.

Table 27 displays the results of the simple linear regression analysis conducted to evaluate the efficacy of Hypothesis 10.

### Table 27

**Effect of Total Population on Change in Developmental Expenditures for All Local Governments**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Unstandardized Beta</th>
<th>Standardized Beta</th>
<th>t-test</th>
<th>p*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-.001</td>
<td>-1.040</td>
<td></td>
<td>.300</td>
</tr>
<tr>
<td>Total Population</td>
<td>-1.299E-8</td>
<td>-.049</td>
<td>-.779</td>
<td>.437</td>
</tr>
</tbody>
</table>

*Note: \(F = .606; R^2 = .020\)*

*\(p < .05\)

The \(R^2 (.020)\) shows the proportion of the variance in the DV, percentage change in developmental expenditures, which is explained by the IV, total population, for all local governments. This result means that total population can explain 2% of the variance in the dependent variable.

The hypothesized effect of total population on the percentage change in developmental expenditures in Hypothesis 10 is positive, meaning that as total population increases, the change in developmental expenditures from pre to post-recession would increase. The result in Table 28 conflicts with the direction of the hypothesized relationship indicated by the direction of the beta (-.049). The p-value (.437) for
household income’s effect on the change in allocational expenditures does not reach the level of statistical significance at p < .05.

These results were evaluated in light of the decision criteria established in the research design. The findings indicate that the data does not support the hypothesized direction of the linear relationship and does not attain statistical significance. Therefore, Hypothesis 10 is not supported.

Hypothesis 11 – Population Size and Redistributive Expenditures

Hypothesis 11: Population size is negatively associated with a change in the proportionate share of local government redistributive expenditures from pre-recession to post-recession.

Decision Criteria: The dependent variable Change in Per Capita Redistributive Expenditures will be regressed against the variable Total Population utilizing the SPSS simple linear regression module. The $R^2$, p-value, and Beta output will be recorded. The results of the model will demonstrate the proportion of the variance in the change in redistributive expenditures from pre to post-recession that is explained by the variable Total Population. If the results indicate that the model is statistically significant (p < 0.05) and the relationship with the Change in Per Capita Redistributive Expenditures is negative, then there will be a finding that the hypothesis is not supported.

Table 28 displays the results of the simple linear regression analysis conducted to evaluate the efficacy of Hypothesis 11.
The $R^2$ (.016) shows the proportion of the variance in the DV, percentage change in redistributive expenditures, which is explained by the IV, total population, for all local governments. This result means that 1.6% of the variance in the dependent variable can be explained by total population.

The hypothesized effect of total population on the change in redistributive expenditures in Hypothesis 11 is negative, meaning that as total population increases, the change in redistributive expenditures from pre to post-recession decreases. The beta (-.125) in Table 30 is negative, confirming the hypothesized direction of the relationship between these two variables. The p-value (.162) for the effect of population on the change in redistributive expenditures does not reach the level of statistical significance at $p < .05$.

These results were evaluated in light of the decision criteria established in the research design. The findings indicate that the data supports the hypothesized direction of the linear relationship, but did not attain statistical significance. Therefore, Hypothesis 11 is not supported.
Hypothesis 12 – Population Density and Allocational Expenditures

Hypothesis 12: Population density is positively associated with a change in the proportionate share of local government allocational expenditures from pre-recession to post-recession.

Decision Criteria: The dependent variable Change in Per Capita Allocational Expenditures will be regressed against the variable Population Density utilizing the SPSS simple linear regression module. The R², p-value, and Beta output will be recorded. The results of the model will demonstrate the proportion of the variance in the change in redistributive expenditures from pre to post-recession that is explained by the variable Population Density. If the results indicate that the model is statistically significant (p < 0.05) and the relationship with the Change in Per Capita Allocational Expenditures is positive, then there will be a finding that the hypothesis is supported.

Table 29 displays the results of the simple linear regression analysis conducted to evaluate the efficacy of Hypothesis 12.
Table 29

Effect of Population Density on Change in Allocational Expenditures for All Local Governments

<table>
<thead>
<tr>
<th>Variable</th>
<th>Unstandardized Beta</th>
<th>Standardized Beta</th>
<th>t-test</th>
<th>p*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-.012</td>
<td></td>
<td>2.892</td>
<td>.004</td>
</tr>
<tr>
<td>Population Density</td>
<td>-4.827E-9</td>
<td>-.184</td>
<td>-2.942</td>
<td>.004</td>
</tr>
</tbody>
</table>

Note: $F = 8.656$; $R^2 = .034$
*p < .05

The $R^2 (.034)$ shows the proportion of the variance in the DV, percentage change in allocational expenditures, which is explained by the IV, population density for all local governments. This result means that 3.4% of the variance in the dependent variable can be explained by population density.

The hypothesized effect of population density on the change in allocational expenditures in Hypothesis 12 is positive, meaning that as population density increases, the change in allocational expenditures from pre to post-recession would increase. The beta (-.184) in Table 29 conflicts with the direction of the hypothesized relationship between the two variables. The p-value (.004) for the effect of density on the change in allocation expenditures is statistically significant at $p < .05$. This finding is inconsistent with prior work in the literature conducted by Raimondo (1992), who found that a positive association exists between police and fire expenditures – the two largest components of Peterson’s (1981) allocational spending category – and the density of the community.
These results were evaluated in light of the decision criteria established in the research design. The finding indicates that the data did not support the hypothesized direction of the linear relationship. Therefore, Hypothesis 12 is not supported. The relationship between the IV and DV is statistically significant and can explain a small portion of the variance in the percentage change in allocational expenditures from T1 to T2.

Hypothesis 13 – Population Density and Redistributive Expenditures

Hypothesis 13: Population density is negatively associated with a change in the proportionate share of local government redistributive expenditures from pre-recession to post-recession.

Decision Criteria: The dependent variable Change in Per Capita Redistributive Expenditures will be regressed against the variable Population Density utilizing the SPSS simple linear regression module. The $R^2$, p-value, and Beta output will be recorded. The results of the model will demonstrate the proportion of the variance in the change in redistributive expenditures from pre to post-recession that is explained by the variable Population Density. If the results indicate that the model is statistically significant ($p < 0.05$) and the relationship with the Change in Per Capita Redistributive Expenditures is negative, then there will be a finding that the hypothesis is supported.

Table 30 displays the results of the simple linear regression analysis conducted to evaluate the efficacy of Hypothesis 13.
Table 30

Effect of Population Density on Change in Redistributive Expenditures for All Local Governments

<table>
<thead>
<tr>
<th>Variable</th>
<th>Unstandardized Beta</th>
<th>Standardized Beta</th>
<th>t-test</th>
<th>p*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>.004</td>
<td>1.613</td>
<td>.109</td>
<td></td>
</tr>
<tr>
<td>Population Density</td>
<td>-.852E-7</td>
<td>-.048</td>
<td>-.553</td>
<td>.581</td>
</tr>
</tbody>
</table>

Note: $F = .306$; $R^2 = .002$

*p < .05

The $R^2$ (.002) shows that the proportion of the variance in the DV, percentage change in redistributive expenditures, which is explained by the IV, total population for all local governments. This result means that less than 1% of the variance in the dependent variable can be explained by population density.

The hypothesized effect of population density on the change in redistributive expenditures in Hypothesis 13 is negative, meaning that as total population increases, the change in redistributive expenditures from pre to post-recession would decrease. The beta (-.048) in Table 30 supports the direction of the hypothesized relationship between the two variables. The p-value (.581) for the effect of population density on the DV% change in redistributive expenditures does not attain statistical significance at $p < .05$.

These results were evaluated in light of the decision criteria established in the research design. The finding indicates that the data supports the hypothesized direction of the linear relationship, but the relationship between the variables does not attain statistical significance. Therefore, Hypothesis 13 is not supported.
Hypothesis 14 – Council-Strong Mayor Form and Developmental Expenditures

Hypothesis 14: The Council-Strong Mayor form is positively associated with a change in the proportionate share of local government developmental expenditures from pre-recession to post-recession.

Decision Criteria: The dependent variable Change in Per Capita Developmental Expenditures will be regressed against the variable Form of City Government (all forms using dummy variable coding) utilizing the SPSS simple linear regression module. The $R^2$, p-value, and Beta output will be recorded. The results of the model will demonstrate the proportion of the variance in the change in developmental expenditures from pre to post-recession that is explained by the variable Form of City Government. If the results indicate that the model is statistically significant ($p < 0.05$) for the Council-Strong Mayor Form, and the relationship with the Change in Per Capita Developmental Expenditures is positive, then there will be a finding that the hypothesis is supported.

Table 3 displays the results of the simple linear regression analysis conducted to evaluate the efficacy of Hypothesis 14.
Table 31

*Effect of Council-Strong Mayor Form of City Government on Change in Developmental Expenditures*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Unstandardized Beta</th>
<th>Standardized Beta</th>
<th>t-test</th>
<th>p*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>- .003</td>
<td>- 1.056</td>
<td>.292</td>
<td></td>
</tr>
<tr>
<td>Council-Strong Mayor Form of Government</td>
<td>.031</td>
<td>-.136</td>
<td>.553</td>
<td>.029</td>
</tr>
</tbody>
</table>

*Note: F = 4.832; R² = .019
*p < .05*

The R² (.019) shows the proportion of the variance in the DV, percentage change in developmental expenditures, which is explained by the IV, Council-Strong Mayor Form, for all local governments. This result means that nearly 2% of the variance in the dependent variable can be explained by the presence of the Council-Strong Mayor form of city government.

The hypothesized effect of the Council-Strong Mayor form of city government on the change in developmental expenditures in Hypothesis 14 is positive, meaning that the presence of that form of city government would have a positive effect on the change in developmental expenditures from pre to post-recession. The beta (.136) in Table 31 confirms the direction of the hypothesized relationship between the two variables. The p-value (.029) for the effect of the Council-Strong Mayor form on the change in developmental expenditures attains statistical significance at p < .05.
These results were evaluated in light of the decision criteria established in the research design. The findings indicate that the data supported the hypothesized direction of the relationship, and is statistically significant. Therefore, Hypothesis 14 is supported.

The result of the testing of Hypothesis 14 confirms extensive prior research regarding the importance of economic development projects to Strong Mayors in municipal government due to their need to be more responsive to pro-growth business interests (Basolo & Huang, 2001; Feiock et al., 2003; Fleischmann et al., 1992; Frant, 1996). Hawkins (2010) and Longoria (1994) identified the priority that elected Strong Mayors will give to developmental type expenditures due to the desire to have short-term impacts on the community.

Hypothesis 15 – Commission-Manager Form, Developmental and Redistributive Expenditures

Hypothesis 15: The Commission-Manager form of county government is negatively associated with a change in the proportionate share of local government developmental and redistributive expenditures from pre-recession to post-recession

Decision Criteria: The dependent variables Change in Per Capita Developmental Expenditures and Change in Per Capita Redistributive Expenditures will be regressed against the variable Form of County Government (all forms using dummy variable coding) utilizing the SPSS simple linear regression module. The R², p-value, and Beta output will be recorded. The results of the model will
demonstrate the proportion of the variance in the change in developmental expenditures from pre to post-recession that is explained by the variable Form of County Government. If the results indicate that the model is statistically significant (p < 0.05) for the Commission-Manager Form, and the relationship with the Change in Per Capita Developmental and Redistributive Expenditures is negative, then there will be a finding that the hypothesis is supported.

Table 32 displays the results of the simple linear regression analysis conducted to evaluate the efficacy of Hypothesis 15.

Hypothesis 15 requires two separate linear regression computations to address two dependent variables. The first $R^2 (.037)$ shows the proportion of the variance in the DV, percentage change in developmental expenditures, which is explained by the IV, Commission-Manager Form, for all local governments. This result means that nearly 4% of the variance in the dependent variable can be explained by the presence of the Commission-Manager form of county government.
Table 32

*Effect of Commission-Manager Form of County Government on Change in Developmental and Redistributive Expenditures*

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Beta</th>
<th>Standardized Beta</th>
<th>t-test</th>
<th>p*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Developmental</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>.002</td>
<td>.786</td>
<td>.433</td>
<td></td>
</tr>
<tr>
<td>Commission Manager Form of Government</td>
<td>-.021</td>
<td>-.191</td>
<td>-3.072</td>
<td>.002</td>
</tr>
</tbody>
</table>

*Note: F = 9.440; R² = .037*

*p < .05

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Beta</th>
<th>Standardized Beta</th>
<th>t-test</th>
<th>p*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Redistributive</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>.002</td>
<td>2.113</td>
<td>.037</td>
<td></td>
</tr>
<tr>
<td>Commission Manager Form of Government</td>
<td>-.002</td>
<td>-.101</td>
<td>-1.139</td>
<td>.257</td>
</tr>
</tbody>
</table>

*Note: F = 1.298; R² = .010*

*p < .05

The hypothesized effect of the Commission-Manager form of county government on the change in developmental expenditures in Hypothesis 15 is negative, meaning that the presence of that form of county government would have a negative or opposite effect on the change in developmental expenditures from pre to post-recession. The beta (-.191) in Table 32 confirms the direction of the hypothesized relationship between the two variables. The p-value (.002) for the effect of the Commission-Manager Form on the change in developmental expenditures attains statistical significance at p < .05.

The second half of the testing of Hypothesis 15 addresses the relationship between the IV Commission-Manager Form of county government and the DV.
percentage change in redistributive expenditures. The $R^2 (.010)$ shows the proportion of the variance in the DV, percentage change in redistributive expenditures, which is explained by the IV, Commission-Manager Form, for all local governments. This result means that 1% of the variance in the dependent variable can be explained by the presence of the Commission-Manager form of county government.

The hypothesized effect of the Commission-Manager form of county government on the change in redistributive expenditures in Hypothesis 15 is negative, meaning that the presence of that form of county government would have a negative or opposite effect on the change in redistributive expenditures from T1 to T2. The beta ($- .101$) in Table 3 confirms the direction of the hypothesized relationship between the two variables. The p-value (.257) for the effect of the Commission-Manager form of county government on the change in redistributive expenditures does not attain statistical significance at $p < .05$.

Hypothesis 16 – Home Rule Charter and Developmental Expenditures

Hypothesis 16: Home rule charter counties are positively associated with a change in the proportionate share of local government developmental expenditures from pre-recession to post-recession.

Decision Criteria: The dependent variable Change in Per Capita Developmental Expenditures will be regressed against the variable Home Rule Charter (using dummy variable coding) utilizing the SPSS simple linear regression module. The $R^2$, p-value, and Beta output will be recorded. The results of the model will demonstrate the proportion of the variance in the change in developmental
expenditures from pre to post-recession that is explained by the variable Home Rule Charter. If the results indicate that the model is statistically significant (p < 0.05) for the variable Home Rule Charter, and the relationship with the Change in Per Capita Developmental Expenditures is positive, then there will be a finding that the hypothesis is supported.

Table 3 displays the results of the simple linear regression analysis conducted to evaluate the efficacy of Hypothesis 15.

The R^2 (.008) shows the proportion of the variance in the DV, percentage change in developmental expenditures, which is explained by the IV, Home Rule Charter, for all local governments. This result means that just less than 1% of the variance in the dependent variable can be explained by the presence of a Home Rule Charter County.

Table 3

<table>
<thead>
<tr>
<th>Effect of a County Home Rule Charter on Change in Developmental Expenditures for All Local Governments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developmental</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>Constant</td>
</tr>
<tr>
<td>Home Rule Charter</td>
</tr>
</tbody>
</table>

Note: F = 1.948; R^2 = .008
*p < .05

The hypothesized effect of the Home Rule Charter county government on the change in developmental expenditures in Hypothesis 16 is positive, meaning that the presence of that form of county government would have a positive effect on the change in
developmental expenditures from pre to post-recession. The beta (−.088) in Table 3 is opposite the direction of the hypothesized relationship between the two variables. The p-value (.164) for the effect of the Home Rule Charter on the percentage change in developmental expenditures fails to attain statistical significance at p < .05.

These results were evaluated in light of the decision criteria established in the research design. The findings indicate that the data supports the hypothesized direction of the relationship, but it is not statistically significant. Therefore, Hypothesis 16 is not supported.

**Summary of Findings for Explanatory Hypothesis Testing**

The findings for the testing of the hypotheses in Study #2, the Explanatory Study, are summarized in Table 34.

**Table 34**

*Summary of Hypothesis Testing in the Explanatory Study*

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Subject</th>
<th>Groups</th>
<th>Hypothesized Result</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H8</td>
<td>% Change in Allocational Expenditures as Predicted by Median Household Income</td>
<td>All Local Governments</td>
<td>Median Household Income is positively associated with % Change in Allocational Expenditures</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H9</td>
<td>% Change in Redistributive Expenditures as Predicted by Median Household Income</td>
<td>All Local Governments</td>
<td>Median Household Income is negatively associated with % Change in Redistributive Expenditures</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H10</td>
<td>% Change in Developmental Expenditures as Predicted by Total Population</td>
<td>All Local Governments</td>
<td>Total Population is positively associated with % Change in Developmental Expenditures</td>
<td>Not Supported</td>
</tr>
<tr>
<td>Hypothesis</td>
<td>Subject</td>
<td>Groups</td>
<td>Hypothesized Result</td>
<td>Result</td>
</tr>
<tr>
<td>------------</td>
<td>---------</td>
<td>--------</td>
<td>---------------------</td>
<td>--------</td>
</tr>
<tr>
<td>H11</td>
<td>% Change in Redistributive Expenditures as Predicted by Total Population</td>
<td>All Local Governments</td>
<td>Total Population is negatively associated with % Change in Redistributive Expenditures</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H12</td>
<td>% Change in Allocational Expenditures as Predicted by Population Density</td>
<td>All Local Governments</td>
<td>Population Density is positively associated with % Change in Allocational Expenditures</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H13</td>
<td>% Change in Redistributive Expenditures as Predicted by Population Density</td>
<td>All Local Governments</td>
<td>Population Density is negatively associated with % Change in Redistributive Expenditures</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H16</td>
<td>Change in % of Developmental Expenditures as Predicted by Existence of Home Rule Charter</td>
<td>All Local Governments in Home Rule Charter Counties</td>
<td>Home Rule Charter Counties are positively associated with % Change in Developmental Expenditures</td>
<td>Not Supported</td>
</tr>
</tbody>
</table>

The summary of hypothesis testing in Table 34 shows that only one of the hypotheses (H14) is supported. The remaining failed to reach statistical significance and displayed very weak $R^2$ results. The first six hypotheses (H8 – H13) tested the relationship between three control variables (median household income, population size, and population density) and one of the dependent variables.

Population density was the only control variable to be regressed in this portion of the research that resulted in a finding of statistical significance. This finding occurred as a result of testing H12 where the relationship of population density to the change in allocational expenditures resulted in a $p$-value of .001. The hypothesized direction in H12 is positive. The testing of H12 resulted in a statistically significant finding, but with a negative direction, meaning that population density has a negative effect on the change in allocational spending from T1 to T2. This finding conflicts with the prior research of
Raimondo (1992), who found a positive relationship between density and public safety spending, the major component of allocational expenditures. However, this finding is consistent with the spending patterns exhibited by cities between T1 and T2. Cities favored developmental expenditures over allocational expenditures, and cities have much higher levels of population densities than counties.

The last three hypotheses (H14-H16) tested the relationship between forms of government and dependent variables. The result for H14 confirms extensive prior research regarding the importance of economic development projects to Strong Mayors in municipal government.

Economic development projects are important to Strong Mayors that desire shorter-term success to retain their elected position (Frant, 1996). The importance to Strong Mayors is amplified when comparing the tenure of the elected Strong Mayor in the Council-Strong Mayor form of government to the longer policy horizon held by city managers (Hawkins, 2010). Longoria (1994) also observed that mayors in the U.S. prefer developmental expenditures to allocational and redistributive spending.

In a post-recession environment, where there is a high value placed on economic recovery, developmental expenditures will be favored by the Council-Strong Mayor form over other expenditure categories due to the political interests of the elected leadership. (Feiock et al., 2003; Fleischmann et al., 1992). Additional research has shown that the Council-Strong Mayor form of city government will adopt policies that favor developmental expenditures to be more responsive to pro-growth business and citizen interest groups (Basolo & Huang, 2001; Fleischmann et al., 1992).
The results of the testing of H15 offer insight into the Commission-Manager form of county government. H15 included two dependent variables – the percent change in developmental and redistributive expenditures. Only one of the two hypothesized relationships was confirmed, resulting in the overall finding of H15 being not confirmed. However, the testing of the relationship between the Commission-Manager form and developmental expenditures resulted in a statistically significant finding that was consistent with the hypothesized negative relationship. This finding confirms the work of Choi et al., (2010) who found that the Commission-Manager form of county government does not favor developmental policies as a result of a strong efficiency orientation, longer term policy horizon, and commitment to formal process instilled in the training of the professional county manager. This is contrasted against the Commission form of county government that is more responsive to the political demands for developmental and redistributive expenditures (Choi et al., 2010; Feiock, 2002, 2004; Lubell et al., 2005). This finding for H15 is also consistent with the overall treatment of developmental expenditures by counties from T1 to T2. Counties made the largest statistically significant shift in post-recession policy by increasing allocational and decreasing developmental expenditures as shown in Table 20 in the Descriptive Study in Chapter 5.

While a majority of the hypotheses tested in this Explanatory Study failed to reach statistical significance, there are statistically significant findings that provide confirmation and rebuttal of prior research in this field of study. Hypotheses H8 through H16 examined the effect of single variables on a dependent variable, providing insight into how and why local governments responded to the Great Recession of 2008. A more composite
understanding of the interrelationships of the variables is addressed in the multiple regression section below.
CHAPTER 7
RESULTS OF FINAL REGRESSION MODELS

The final component of the Explanatory Study is the construction of predictive models to understand why local governments reacted to the Great Recession of 2008 by shifting their expenditure pattern using the City Limits theoretical framework. Ordinary Least Squares (OLS) multiple regression is used to estimate the relative importance of the predictor variables and the variance of the hypothesized linear relationship with each of the three dependent variables.

Testing the Data for Compliance with Assumptions of OLS

OLS regression has assumptions about the data that must be met. Starting with the study sample (n = 262), the data is analyzed for compliance with the following assumptions:

**Multicollinearity**: A correlation matrix (Appendix B) shows that, with one exception, no two variables correlated above .8. The highest Pearson Correlation factor produced is -.788 between Education (Percent of Population > 25 years of age with HS or above) and Poverty (Percent of families living below the poverty line). Given the strength of this correlation, if both variables are included in the same explanatory model, then the weaker of the two will be eliminated. The exception is for the type of government variables (City and County). It is expected that these two would be highly correlated with their respective forms of government. They could not be eliminated from
the study. If a type of government variable is included in a final model with an associated form of government variable, the weaker of the two will be eliminated.

The results of the SPSS collinearity diagnostics for Tolerance and Variance Inflation Factor (VIF) indicated that all Tolerance values were above .10 and VIF values were less than 10 for all variables. Based on the findings from the correlation matrix and VIF analysis, there are no additional issues of multicollinearity that warrant the elimination of any other control or independent variables.

**Normality:** The normal distribution of residuals is required. Histograms of the residuals and normal P-P plots of the standardized residuals indicate issues of skewness and kurtosis outside acceptable ranges. Individual cases are removed when the casewise diagnostics indicate the presence of outliers beyond three standard deviations. This results in a distribution of the residuals that approached normality as indicated by the histogram and P-P plots.

**Linearity:** The residuals in the models should be aligned in a straight line with the predicted dependent variable scores. Normal P-P plots of the standardized residuals indicate some deviation to linearity. Upon removal of the offending cases to comply with the assumption of normality, satisfactory improvements to the P-P plots are achieved.

**Homoscedasticity:** Scatterplots of the actual versus predicted residual values are produced. After addressing the elimination of outliers, all results are found to comply with the required assumption.

**Outliers:** Standardized residuals are tested for their influence on the models. The results of the initial model runs produced diagnostic data indicating cases where the
standardized residuals exceed three standard deviations. Once removed, the models exhibited compliance with the assumptions of normality, linearity, and homoscedasticity.

Descriptive Statistics

Table 35 summarizes the central tendency characteristics of the independent variables used in all three final regression models. There is a wide range of scores for the five continuous independent variables, illustrating the heterogeneity of local governments across the state.

The range in unincorporated county population is explained by cities in Jacksonville-Duval County on the minimum end and Broward County at the maximum of the range. The least dense community in the study is Liberty County in Florida’s panhandle. The highest density local government is North Bay Village, a small island municipality in Miami-Dade County.

Multiple Regression Models

Three regression models, one for each of the three dependent variables, represent the third and final component of the Explanatory Study. Each model analysis includes the testing for the influence of control variables first, then testing the independent variables separately for statistical significance (p < 0.05). The results of these preliminary analyses will determine which variables are included in the final model to create the final model. By initially holding the control variables constant, the overall role
of the independent variables in explaining the variance in the three dependent variables can be evaluated when controlling for various factors (Pallant, 2007).

Table 35

**Independent Variables**

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>Min.</th>
<th>Max.</th>
<th>Mean</th>
<th>Median</th>
<th>SD.</th>
</tr>
</thead>
<tbody>
<tr>
<td>City</td>
<td>197</td>
<td>0</td>
<td>1</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>County</td>
<td>65</td>
<td>0</td>
<td>1</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Council-Manager Form City</td>
<td>175</td>
<td>0</td>
<td>1</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Council-Strong Mayor Form City</td>
<td>14</td>
<td>0</td>
<td>1</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Council-Weak Mayor Form City</td>
<td>6</td>
<td>0</td>
<td>1</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Commission-Manager Form County</td>
<td>54</td>
<td>0</td>
<td>1</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Commission Form County</td>
<td>10</td>
<td>0</td>
<td>1</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Home Rule Charter</td>
<td>262</td>
<td>0</td>
<td>1</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>% County Unincorporated</td>
<td>262</td>
<td>000</td>
<td>.969</td>
<td>.530</td>
<td>.534</td>
<td>.242</td>
</tr>
<tr>
<td>Total Population</td>
<td>262</td>
<td>5072</td>
<td>1,623,018</td>
<td>75,394</td>
<td>20,983</td>
<td>171,833</td>
</tr>
</tbody>
</table>
### Table 3

<table>
<thead>
<tr>
<th>Variable</th>
<th>( n )</th>
<th>Min.</th>
<th>Max.</th>
<th>Mean</th>
<th>Median</th>
<th>SD.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median Household Income ($)</td>
<td>262</td>
<td>14,923</td>
<td>107,507</td>
<td>39,021</td>
<td>36,069</td>
<td>13,386</td>
</tr>
<tr>
<td>Population Density</td>
<td>262</td>
<td>8.4</td>
<td>20,267.1</td>
<td>2,506.3</td>
<td>1,741.6</td>
<td>2,885.6</td>
</tr>
<tr>
<td>Financial Condition Ratio</td>
<td>262</td>
<td>-.246</td>
<td>.633</td>
<td>.103</td>
<td>.084</td>
<td>.091</td>
</tr>
</tbody>
</table>

#### Change in Developmental Expenditures

The first of three final regression models was conducted using all local governments that were retained after ensuring there were no violations of the assumptions of normality, linearity, multicollinearity and homoscedasticity. The final sample size is \( n = 256 \). All 65 counties remain in the model. The eliminated cases are all cities. Table 36 displays the results of the regression with the control variables and the dependent variable.

Table 36

**Change in Developmental Expenditures with Control Variables**

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized</th>
<th>Standardized</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beta</td>
<td>Std. Error</td>
</tr>
<tr>
<td>Constant</td>
<td>-.043</td>
<td>.047</td>
</tr>
<tr>
<td>Poverty</td>
<td>-.045</td>
<td>.086</td>
</tr>
<tr>
<td>Age</td>
<td>.036</td>
<td>.035</td>
</tr>
<tr>
<td>Education</td>
<td>.049</td>
<td>.050</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>-.006</td>
<td>.028</td>
</tr>
</tbody>
</table>

Note: \( F = 2.453; R^2 = .038; \alpha = .047 \)

* \( p < .05 \)
None of the four control variables reached a level of significance ($p < 0.05$) in Table 36. Therefore none will be included in the final model. Table 36 displays the analysis of the independent variables on the dependent variable change in developmental expenditures from T1 to T2. Since no control variables will be brought into the analysis of the independent variables, the results in Table 36 represent the final model for this dependent variable.

The final model in Table 37 has three predictor variables and an adjusted of $R^2$ (.072), indicating that the model explains 7.2% of the variance in the Change in Developmental Expenditures. The F statistic is 7.562 with a p-value approaching .000, indicating the overall model is a better model fit than the model with only control variables.

Table 37

*Change in Developmental Expenditures Regression Model*

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized</th>
<th>Standardized</th>
<th>$t$-test</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Constant</strong></td>
<td>-.009</td>
<td>-.086</td>
<td>-2.195</td>
<td>.029</td>
</tr>
<tr>
<td>Council – Strong Mayor Form</td>
<td>.019</td>
<td>-.086</td>
<td>-1.391</td>
<td>.166</td>
</tr>
<tr>
<td>Commission Form County</td>
<td>-.036</td>
<td>-.139</td>
<td>-2.275</td>
<td>.024</td>
</tr>
</tbody>
</table>

Note: $F = 7.562$; $R^2 = .083$; $\alpha = .000$

* $p < .05$
The model has two variables with positive Betas. The findings in Chapter 6 demonstrated that cities increased the proportional share of developmental expenditures from T1 to T2 when compared with counties. The inclusion of the Council-Strong Mayor Form and its positive influence on the dependent variable supports a long line of research identifying this form of government as strongly favoring developmental policies over other types of expenditures (Basolo & Huang, 2001; Clingermayer & Feiock, 2001; Fleischmann et al., 1992).

The Commission Form county variable is statistically significant and has a negative Beta (-.139). This is indicative of the data on counties overall, showing decreases in developmental spending. This finding that Commission Form counties have a negative correlation with developmental spending during times of fiscal stress is in contrast to prior research which showed a positive relationship between Commission Form counties and developmental expenditures (Choi et al., 2010; Feiock, 2002, 2004; Lubell et al., 2005).

The statistically significant variable Population Density has a Beta of .194, and has the strongest influence in the final model. This finding means that higher densities are correlated with an increase in the proportional share of developmental expenditures from pre to post-recession. This finding, along with the inclusion of the variable Council-Strong Mayor can be viewed that Peterson’s (1981) City Limits typology and its supporting theoretical framework is confirmed to exist during times of extreme fiscal stress. These variables, all with positive Betas, advance the notion that Florida’s denser cities spent proportionally more to improve the net benefit/tax ratio of the local economy.
through increasing developmental expenditures from pre to post-recession. The data shows that even in times of extreme fiscal stress, cities still prioritize their economic development roll when compared to counties. This finding means that the fiscal stress experienced by local governments during the Great Recession of 2008 did not cause cities to shift from their theorized role as described by Peterson (1981).

Regression Model Results – Change in Allocational Expenditures

The second of three final regression models was conducted using all local governments that were retained after ensuring there were no violations of the assumptions of normality, linearity, multicollinearity and homoscedasticity. The final sample size is n = 256. All 65 counties remain in the model. The eliminated cases are all cities. Table 38 displays the results of the regression analysis of the control variables.

Table 38

*Change in Allocational Expenditures with Control Variables*

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized</th>
<th>Standardized</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beta</td>
<td>Std. Error</td>
</tr>
<tr>
<td>Constant</td>
<td>-.040</td>
<td>.046</td>
</tr>
<tr>
<td>Poverty</td>
<td>.057</td>
<td>.084</td>
</tr>
<tr>
<td>Age</td>
<td>-.034</td>
<td>.034</td>
</tr>
<tr>
<td>Education</td>
<td>-.045</td>
<td>.049</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>-.011</td>
<td>.028</td>
</tr>
</tbody>
</table>

Note: $F = 1.762$; $R^2 = .028$; Adjusted $R^2 = .012$; $\alpha = .137$.
* $p < .05$
None of the four control variables reached a level of significance ($p < 0.05$) in Table 38. Therefore, none will be included in the final model. Table 39 displays the analysis of the independent variables on the dependent variable Change in Allocational Expenditures from T1 to T2.

Table 39

*Change in Allocational Expenditures Regression Model*

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized</th>
<th>Standardized</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beta</td>
<td>Std. Error</td>
</tr>
<tr>
<td>Constant</td>
<td>-.009</td>
<td>.012</td>
</tr>
<tr>
<td>County</td>
<td>.014</td>
<td>.008</td>
</tr>
<tr>
<td>Population Density</td>
<td>-2.720E-6</td>
<td>.000</td>
</tr>
<tr>
<td>Median Household Income</td>
<td>-2.673E-7</td>
<td>.000</td>
</tr>
<tr>
<td>Financial Condition Ratio</td>
<td>.040</td>
<td>.035</td>
</tr>
</tbody>
</table>

Note: $F = 4.829$; $R^2 = .071$; Adjusted $R^2 = .057$; $\alpha = .001$.
* $p < .05$

The final model in Table 39 has an adjusted of $R^2 (0.057)$, indicating that the model explains only 5.7% of the variance in the Change in Allocational Expenditures. The F statistic is 4.829 with a p-value of .001, indicating the overall model is a better model fit than the model with only control variables.

Four independent variables remain in the final model. The variables County and Financial Condition Ratio have positive Betas, meaning they are positively associated with increases in allocational expenditures from pre to post-recession. The findings in Chapters 5 and 6 show that counties favor increasing allocational expenditures from T1 to T2, and the result of this regression analysis confirms that finding. The positive
relationship between Financial Condition Ratio and the dependent variable can be compared to the negative Beta for Median Household Income. Those local governments in stronger financial position tend to increase allocational expenditures while the financial condition of the residents tends to limit the change in these expenditures from pre to post-recession. This finding conflicts with the work of Raimondo (1992) who identified a positive association between personal income and general government, police and fire expenditures.

Population Density (p = .027) is the only statistically significant variable in final model. The Beta for Population Density is -.154; meaning lower density is correlated with higher proportional allocational spending from pre to post-recession. The inclusion of the variable County is expected given how counties increased their proportional funding in favor of allocational expenditures in the earlier findings in Chapters 5 and 6. This combination of a positive influencing County variable with the Population Density finding is consistent with the occurrence of lower population densities in counties. During this period of fiscal stress, lower density governments in Florida shifted their policy priorities away from developmental purposes toward allocational services, such as police, fire, EMS, and parks and recreation.

Regression Model Results – Change in Redistributive Expenditures

The third of three final regression models was conducted using all local governments that were retained after ensuring there were no violations of the assumptions of normality, linearity, multicollinearity and homoscedasticity. The final sample size is n
= 126. All of the eliminated cases were counties. Table 40 displays the results of the regression analysis for just the control variables.

Table 40

*Change in Redistributive Expenditures with Control Variables*

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized</th>
<th></th>
<th>Standardized</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beta</td>
<td>Std. Error</td>
<td>Beta</td>
<td>t-test</td>
<td>p</td>
</tr>
<tr>
<td>Constant</td>
<td>-.032</td>
<td>.010</td>
<td>-.322</td>
<td>.002</td>
<td>.002</td>
</tr>
<tr>
<td>Poverty</td>
<td>.052</td>
<td>.019</td>
<td>.401</td>
<td>2.716</td>
<td>.008</td>
</tr>
<tr>
<td>Age</td>
<td>-.005</td>
<td>.009</td>
<td>-.055</td>
<td>-.586</td>
<td>.559</td>
</tr>
<tr>
<td>Education</td>
<td>-.036</td>
<td>.011</td>
<td>.428</td>
<td>3.362</td>
<td>.001</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>-.002</td>
<td>.007</td>
<td>.030</td>
<td>.242</td>
<td>.809</td>
</tr>
</tbody>
</table>

Note: F = 3.378; R^2 = .100; Adjusted R^2 = .071; α = .012.
* p < .05

The Adjusted R^2 statistic for this model is .071, indicating that 7.1% of the variance in the Change in Redistributive Expenditures is explained by the control variables. Two control variables - Poverty (.008) and Education (.001) - are statistically significant at p < 0.05. Given that the Pearson Correlation coefficient for these two variables is -.788, Poverty is eliminated as the weaker of the two variables from further consideration in the final model to avoid issues of multicollinearity.
Table 41

*Change in Redistributive Expenditures with Control Variables*

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized</th>
<th>Standardized</th>
<th>t-test</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beta</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>3.347E-5</td>
<td>.003</td>
<td>.010</td>
<td>.992</td>
</tr>
<tr>
<td>Poverty</td>
<td>-5.891E-9</td>
<td>.000</td>
<td>-.152</td>
<td>-1.751</td>
</tr>
<tr>
<td>Age</td>
<td>1.289E-7</td>
<td>.000</td>
<td>-.136</td>
<td>1.551</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>-.026</td>
<td>.009</td>
<td>-.261</td>
<td>2.969</td>
</tr>
</tbody>
</table>

Note: $F = 3.378; R^2 = .71; \text{Adjusted } R^2 = .100; \alpha = .012.$
* $p < .05$

The independent variable model in Table 41 has four predictor variables with an adjusted of $R^2$ (.086), indicating that the model explains only 8.6% of the variance in the Change in Redistributive Expenditures from T1 to T2. The $F$ statistic is 3.968 with a $p$-value of .005, indicating a better model fit than the model with only control variables. Two variables, Commission Form County and Financial Condition Ratio, reached statistical significance and will be included in the final model.

The final model in Table 42 has three predictor variables with an adjusted $R^2$ of .065, indicating that the model explains 6.5% of the variance in the Change in Redistributive Expenditures from pre to post-recession. The $F$ statistic is 3.943 with a $p$-value of .010, indicating the overall model is a poorer fit when compared with the control variable and the independent variable models.
Table 42

Change in Redistributive Expenditures with Independent and Control Variables

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized</th>
<th>Standardized</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beta</td>
<td>Std. Error</td>
</tr>
<tr>
<td>Constant</td>
<td>3.347E-5</td>
<td>.003</td>
</tr>
<tr>
<td>Commission Manager Form County</td>
<td>.007</td>
<td>.003</td>
</tr>
<tr>
<td>Total Population</td>
<td>-5.891E-9</td>
<td>.000</td>
</tr>
<tr>
<td>Median Household Income Financial Condition Ratio</td>
<td>1.289E-7</td>
<td>.000</td>
</tr>
<tr>
<td>Financial Condition Ratio</td>
<td>-.026</td>
<td>.009</td>
</tr>
</tbody>
</table>

Note: $F = 3.968; R^2 = .115; \text{Adjusted } R^2 = .086; \alpha = .005$.

The independent variables, Commission Form County and Financial Condition Ratio, maintain their statistical significance from the independent variable model.

The inclusion of the Commission Manager Form as a positive predictor in the final model conflicts with the work of Choi et al. (2010) who found that the Commission-Manager form had a negative relationship with the redistributive policy arena. This has been further explained by others as the result of efficiency and commitment to formal process being the top priority of the appointed county manager, whereas the other forms of county government are more responsive to the political demands for redistributive expenditures (Choi et al., 2010; Feiock, 2002, 2004; Lubell et al., 2005). This finding means that during times of extreme fiscal stress, this form of County government responds differently to redistributive expenditures than it would during normal economic periods.

The variable Financial Condition Ratio is statistically significant at p = .008, and has a Beta of -.239, indicating that a lower rate of financial performance in FY 2006
leading up to the Great Recession is negatively correlated with the proportional change in redistributive expenditures from T1 to T2. The control variable Education failed to reach statistical significance in the final model.

Summary of Multiple Regression Findings

When evaluating the results of a regression analysis, the researcher looks for statistically significant variables and a high $R^2$ value for the model. The combination of these two elements indicates that changes in the predictor variables are related to the dependent variable, and that the model explains a large portion of the variance in the dependent variable. However, a low $R^2$ value doesn't mean that the model is not useful. The predictor variables can still identify important trends, even though the data points fall away from the regression line. High $R^2$ value models are important when precise predictions are necessary. In this research, the identification of the statistically significant variables that are predictors of local government expenditure behavior from pre to post-recession is most important.

The results for the three models indicated relatively low $R^2$ values. However, important information can be gleaned from these models and the resulting statistically significant variables. Table 43 displays a summary of these findings.
### Table 43

**Summary of Statistically Significant Variables in Regression Models**

<table>
<thead>
<tr>
<th>Model</th>
<th>Variable</th>
<th>Standardized Beta</th>
<th>Finding</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Change In Developmental Expenditures</td>
<td>Population Density</td>
<td>.194</td>
<td>Higher density correlated with increase in proportional spending from T1 to T2</td>
</tr>
<tr>
<td></td>
<td>Commission Form County</td>
<td>-.139</td>
<td>Form of Government correlated with decrease in proportional spending from T1 to T2</td>
</tr>
<tr>
<td>% Change in Allocational Expenditures</td>
<td>Population Density</td>
<td>-.154</td>
<td>Lower density correlated with increase in proportional spending from T1 to T2</td>
</tr>
<tr>
<td></td>
<td>Commission Manager County</td>
<td>.213</td>
<td>Form of Government correlated with decrease in proportional spending from T1 to T2</td>
</tr>
<tr>
<td>% Change in Redistributive Expenditures</td>
<td>Financial Condition Ratio</td>
<td>-.239</td>
<td>Poorer financial performance in FY06 correlated with increase in proportional spending from T1 to T2</td>
</tr>
</tbody>
</table>

The results of the multiple regression analysis align with the findings in Chapters 5 and 6, and begin to explain the reasons for the behavior of Florida’s cities and counties as they experienced extreme fiscal stress as a result of the Great Recession of 2008.

When controlling for the socioeconomic character of their resident populations, cities and counties responded very differently to the economic crisis. Cities favor developmental spending while counties favor allocational and redistributive spending.

The most important factors that explain local government expenditure behavior in response to the Great Recession of 2008 are identified in Table 43. Population Density...
emerges as an important predictor in two of the three models. This implies that the physical character and pattern of land development in Florida’s local governments directly impacts how spending priorities are established in times of fiscal stress. The variable exerts a positive influence on developmental spending, which is consistent with the actions of cities. It exerts a negative influence on allocational spending, indicating consistency with lower density county governments.

The form of government variable appears in two of the three final models, indicating the political and organizational structure of the local government matters when examining the response to periods of extreme fiscal stress. The Commission Form County has a negative influence on the change in developmental expenditures. The Commission-Manager Form County influences the redistributive expenditure model positively. This runs counter to prior research that found this form of government has a negative association with the redistributive policy arena.

These findings will be discussed further in Chapter 8 – Conclusions.
This research set out to address four questions about how and why Florida’s local governments responded to the Great Recession of 2008. Using Peterson’s (1981) City Limits Typology, expenditure data was analyzed to determine if significant shifts in the policy positions occurred as a result of the most significant economic downturn in the U.S. since the Great Depression. Data identifying the type, form, and socioeconomic attributes of each local government in Florida was collected to perform the study.

The existing literature has examined how local governments have responded to fiscal stress in the past. However, no literature found to date has used the City Limits model in examining the effects of the Great Recession of 2008 on local governments within the state of Florida. Using a study population of cities and counties, a series of analytical tests were run to document how the expenditure pattern of local governments has been affected by the economic downturn. Comparing the findings in this research to the existing literature, the findings reveal some consistencies and some anomalies with past studies.

### Expenditure Pattern of Local Governments from Pre to Post-Recession

The findings in Chapters 5 and 6 show that as a single population, the proportional change in expenditures from pre to post-recession for all local governments is very modest and not indicative of a significant shift. The percentage change in all policy expenditure groups is less than 0.5% between the two measurement periods. None
of these shifts in spending is statistically significant. This finding was supported by extensive literature describing budgetary incrementalism as the guiding fiscal and political model for local governments. This finding is a result of treating Florida’s local governments as a single study population.

**Differences or Similarities Between Cities and Counties**

Grouping cities and counties together as a single study population masks the difference between the two types of governments. Cities and counties begin in the first measurement period with a very different mix of proportional spending and do have significant changes in spending from pre to post-recession. County expenditures are more heavily weighted toward allocational and redistributive expenditures, while cities favor developmental expenditures during the pre-recession measurement period. During the post-recession measurement, both types of governments shift their proportional spending further in favor of their pre-recession allocation.

The nature of each type of government is important in understanding the differences that occurred in their proportional spending during this study. Counties are more homogenous in their function as constitutional extensions of state government. There are differences in form of government and home rule charter status. However, counties shift in proportional expenditures from pre to post-recession was statistically significant as a group for developmental (-2.16%) and allocational (1.74%) policy arenas.

Cities are more heterogeneous in form of government and mix of services provided. Most cities in Florida do not provide redistributive services. When compared
with counties, cities showed less movement in their proportional spending from pre to post-recession. However, the shift away from allocational and toward developmental spending is an important finding. This is one of Peterson’s (1981) underlying principles of benefit/tax ratio – cities will act in their economic best interest. This research shows that even during times of extreme fiscal stress, cities as a group still prioritized the ‘economic best interest’ principle and increased spending in this policy group.

**Differences or Similarities Between Forms of Local Government**

Within and amongst the two types of government, differences in proportional spending occurred from pre to post-recession. For cities, the Council-Strong Mayor Form exhibited the largest shift in spending away from allocational activities to developmental functions. The Council-Strong Mayor Form City was found to be positively associated with the change in developmental expenditures. Council-Manager and Council-Weak Mayor Form cities had shifts in expenditures of less than 0.5% from pre to post-recession.

There was similarity in the shifting spending between policy groups by the different forms of County government. The Commission Form county displayed the most extreme shift in proportional spending of all forms of local government in the study by moving away from developmental spending and favoring allocational expenditures. Commission-Manager counties displayed a similar pattern but the size of the shift was proportionally smaller than Commission Form counties. The Commission-Manager Form County was found to be statistically significant in its positive association with the
change in redistributive expenditures. This is a change in policy direction that is likely influenced by the extreme fiscal conditions experienced during the Great Recession of 2008.

Relationships Between Type, Form and Socio-Economic Characteristics of Local Governments

The last component of the research examines the factors that contribute to the conclusions discussed above. The results in Chapters 6 and 7 identify statistically significant variables that help explain the pattern of local government policy change as defined by the change in proportional expenditures that occurred from pre to post-recession.

Developmental Expenditures

The form of government and the characteristics of the community influence the shift in developmental expenditures. The Commission Form County is negatively associated with a change in developmental expenditures from pre to post-recession, whereas the presence of the Council-Strong Mayor City has a positive influence on developmental spending. These findings are consistent with prior research that explored the nature of these forms of government. The manner in which these two forms influence developmental spending in normal fiscal times is maintained during this period of extreme fiscal stress.
The socio-economic variable Population Density is a statistically significant predictor of the change in developmental spending. Density is most closely associated with highly urbanized areas, further supporting the notion that cities, not counties, favored developmental spending from pre to post-recession. Peterson (1981) acknowledged that part of the ‘economic best interest’ principle employed by cities is to create an environment conducive for entrepreneurial investment by existing businesses and investors. The influence of these variables in the change in the developmental spending from pre to post-recession affirms that characteristically higher density cities increase spending to advance their economic best interest, when compared to the other two policy arenas even during a significant downturn in the macro economy.

Allocational Expenditures

The presence of a county government is a positive influence on the shift toward the allocational policy arena. Within the group of county governments, there is a significant difference in the percentage of spending for the allocational policy arena. While Commission Form Counties show an increase their proportional spending more than twice that of Commission-Manager Counties from pre to post-recession (3.49% to 1.46%), Commission-Manager Counties spend approximately 10% more on allocational when compared to the developmental arena. This is likely due to the more rural nature of the Commission Form County, where there is a lesser demand for urban services such as public safety and parks and recreation.
A similar relationship in proportional spending occurs between the Council-Strong Mayor Form Cities and the other forms of city government. The larger, more populous cities where the Strong Mayor Form resides have a higher proportion of total expenditures for allocational services before and after the Great Recession. Unlike counties, the Council-Strong Mayor Form City displayed a reduction in the proportional of allocational expenditures from pre to post-recession. The variable Total Population was found to be statistically significant on the change in Allocational expenditures. Larger population size is a characteristic of both Commission-Manager Form Counties and Council-Strong Mayor Cities.

Household income and population density are negatively associated with the change in allocational spending. This is the inverse of the developmental model and reinforces the difference between cities and counties in their shift to different proportional spending patterns post-recession. Population density emerges as an important variable for the developmental and allocational dependent variable models. Density influences shifts in developmental spending positively and allocational spending negatively. Within Peterson’s (1981) typology, allocational services (police, fire, solid waste, and parks and recreation) are distributed equally across the population. The influence of the Population Density may imply that the physical distribution of the service population could possibly be a factor contributing to these findings. More compact areas are typically within cities, and may be more efficient to serve. This is a long-standing principle held by many urban planners who theorize that there is significant relationship between urban form and the cost of delivering public services.
Redistributive Expenditures

County governments are positively associated with the change in redistributive spending. In prior research, the Commission-Manager form county has been found to be negatively associated with the redistributive policy group. However, this research indicates that this form of county government shifts its normally held negative policy position to one that favored an increase in proportional spending from pre to post-recession.

The financial condition of the local government just prior to the Great Recession is identified as a contributing factor to the change in redistributive expenditures. It is shown to have a negative impact on the change in spending from pre to post-recession. The population size of the local government is a factor in the change in redistributive expenditures. The association is negative meaning the smaller the local government, the larger the shift in proportional redistributive spending. Smaller local governments, especially counties, have more rural populations and lower household incomes. The demand for redistributive services is likely higher for these communities during periods of significant fiscal stress.

Consideration for Further Research

There is a divergence between cities and counties when comparing the shift in proportional spending from pre to post-recession. This difference in spending pattern can be masked when all local governments are considered as a single group in the final regression analyses. During this investigation, it became clear that further examination of
the data by type of government, and perhaps form of government, might yield important findings of significance. Future research design should begin with two separate study populations – city and county - or develop sources of data that will allow for a comparison of counties to cities based on comparable service populations.

Limitations

When analyzing local governments as a single study population, the data is robust. Expenditure data from the State of Florida is readily available and has been collected for over ten years. Local and state officials have extensive experience in reporting and collecting the data. Data for counties that provide urban services through mechanisms like Municipal Service Taxing Units (MSTU) or Municipal Service Benefit Units (MSBU), and other similar structures is not reported to the state. Collecting the data would require the examination of financial records for every county, without the benefit of state law governing the form and method of data reporting. The availability of this level of data would have made the comparison of cities and that portion of counties that perform municipal service delivery much more meaningful. This researcher will continue to explore methods for improving the source of data for future research endeavors.

Public Affairs Perspective

This research is conducted as partial fulfillment for the degree of Doctor of Philosophy of Public Affairs. The analysis is undertaken through the Governance and
Policy Research track within the university’s Public Affairs program.

As a field of study, Public Affairs is inherently multidisciplinary, and not based on any one discipline. The field of study is so broad that it encompasses a vast array of academic disciplines. Dror (1984) established a list of ‘desiderata,’ or desires, for the field of study. Included in the list of desired attributes of policy scientists as they approach their research is a complete understanding of an area’s history and culture, the structure of its society, the use of an array of different analytical methodologies, and an ethical approach to the profession (Dror, 1984). Public Affairs is not a discipline unto itself, but an amalgam of inter-related-disciplines forming the interdisciplinary nature of the field of study. Agiro (2006) identified the three main theoretical roots of Public Affairs: Community Science, Organizational Science, and Administrative Science.

Community Sciences

The study of communities in the U.S. is a central concept in American sociology that was described by Robert E. Park and his colleagues at the University of Chicago in the 1930s. At its core, the study of community focuses on people associated with a particular place, and the nature of their interactions (Lyon, 1989). Community science has been defined as a field of study committed to improving quality of life (Wandersman, 2003).

Each local government in Florida is its own unique community and its values are shaped by the unique characteristics and background of its residents. In this study, the research considered how governments of a similar type and form were influenced by
socio-economic factors in their response to extreme fiscal stress. The unique character of each community is likely a factor in the low model fit results. The study of people and the analysis of public problems in the context of their community is an important theme in community science. Understanding their culture, history and economic means form the basis of ‘contextualism’ in the area of community sciences (Luke, 2005). Future research on how local government’s respond to fiscal stress would consider additional contextual variables that might improve model performance and results.

Organizational Science

Complex organizations like local governments have characteristics and goals that are separate and apart from their internal processes that provide the means to perform tasks. The study of organizational science focuses on the nature of the organization, how it is managed and led, and the role it plays in its external environment (Bolman & Deal, 2008). This component science of Public Affairs also considers local governments as organisms that can and do adapt to their external environment (Bolman & Deal, 2008; Smircich, 1983).

The consideration of form of government in this research acknowledges the organizational science aspect of Public Affairs. Each form of government considered in the study has a different approach to leadership and policy development. The results indicated that the form of government is a statistically significant explanatory variable in two of the three final explanatory models. These results acknowledge the role of organizational science in this research and its importance to the field of Public Affairs.
Administrative Science

The study of administrative functions in organizations focuses on issues internal
to that organization independent of the community environment within which it sits
(Agiro, 2010). The use of the scientific method in studying administrative processes,
including internal communication systems, leadership styles, and the structure of
authority has been generally accepted for quite some time (Thompson, 1956). The
administrative function of an organization does not select goals, but is responsible for
their implementation.

The model specification and research design in this study did not focus on the
internal effectiveness of local governments in their response to the fiscal crisis of the
Great Recession. This work attempts to understand the effect of the economic downturn
on local government policy formation. However, this work can set the foundation for
further examination into the administrative science aspect of the research questions.
Performance measures can be used as independent variables in future research to quantify
how efficiency and effectiveness were impacted from pre to post-recession in a similar
manner as data was analyzed in this research.
APPENDIX A
EXPENDITURE ACCOUNT CODES
<table>
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<th>City Limits Typology</th>
<th>Account Code</th>
<th>Description</th>
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Correlation Matrix Part 3.

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REFERENCES


*State of Local Government Review, 44*(2), 17S-28S.


