

Florida State University Libraries

Electronic Theses, Treatises and Dissertations

The Graduate School

2007

Growth Management by Land Use Regimes and Development Permitting: Explaining Delay in Land Use Development in Florida

Edgar E. Ramirez de la Cruz



THE FLORIDA STATE UNIVERSITY

COLLEGE OF SOCIAL SCIENCE

GROWTH MANAGEMENT BY LAND USE REGIMES
AND DEVELOPMENT PERMITTING:
EXPLAINING DELAY IN LAND USE DEVELOPMENT IN FLORIDA

By

EDGAR E RAMIREZ DE LA CRUZ

A Dissertation submitted to the
Reubin O'D. Askew School of Public Administration and Policy
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy

Degree Awarded:
Spring Semester, 2007

The members of the Committee approve the dissertation of Edgar E Ramirez de la Cruz defended on December 12, 2006.

Richard C. Feiock
Professor Directing Dissertation

John T. Scholz
Outside Committee Member

Frances S. Berry
Committee Member

Ralph S. Brower
Committee Member

Approved:

Frances S. Berry, Chair, Reubin O'D. Askew School of Public Administration and Policy

The Office of Graduate Studies has verified and approved the above named committee members.

This work is dedicated to my parents: Rogelio and Cristina; to my wife and best friend Sasha; and to Emilia.

Este trabajo esta dedicado a mis padres: Rogelio y Cristina; a mi esposa y mejor amiga Sasha; y a Emilia.

ACKNOWLEDGEMENTS

This work is the result of the support and contributions of many People, who I want to acknowledge. First and most of all, I am grateful to Professor Richard C. Feiock, who introduced me to the study of institutions and local governments in America. The idea of this dissertation was the result of uncountable afternoons of discussion and fun. Rick provided detailed comments to every draft since the beginning of this project. Overall, I want to thank him for looking at me as a colleague more than as a student. Certainly this study would have never been completed without his help, encouragement, and support. I would also like to express my gratitude to Professor Frances Berry, for many hours of thoughtful advice and recommendations. She is a mentor and a great role model for me and many other doctoral students. Also I am grateful to Professor Ralph Brower for his extensive support since my early days in the program. He also provided extensive comments and recommendations several drafts of this project. I'm also thankful for all the intellectual support received from Professor John Scholz, who encouraged me to think critically about my project in all its stages. Finally, I would like to thank all the faculty members, staff, and students in the doctoral program of the Askew School of Public Administration and Policy who helped me in various stages of my project and provided comments on the various drafts. In particular, I owe a debt of gratitude to Simon and Elizabeth who offered suggestions in many occasions. All errors are, of course, my own responsibility.

TABLE OF CONTENTS

LIST OF TABLES	VI
LIST OF FIGURES	VII
ABSTRACT	VIII
INTRODUCTION	1
SIGNIFICANCE OF THE RESEARCH	2
THE ROLE OF FORMAL INSTITUTIONS	4
MEASUREMENT OF LAND USE POLICY	5
LAND USE REGIMES	5
OVERVIEW OF THE DISSERTATION	9
I. LAND USE REGIMES	10
POLICY ARENAS OF LAND-USE REGULATION	11
TYPES OF COSTS IMPOSED ON NEW DEVELOPMENTS	18
II. EXPLAINING THE FORMATION OF LAND-USE REGIMES	22
III. ANALYSIS OF LAND USE REGULATION FORMATION	34
A CROSS-SECTIONAL ANALYSIS	34
<i>The Dependent Variables: Protection of Services Provision</i>	34
<i>Explanatory Variables</i>	36
<i>Data collection</i>	37
<i>Outline of the Analysis</i>	41
RESULTS	43
DISCUSSION	50
IV. DELAY IN THE IMPLEMENTATION OF THE LUR: EXPLAINING DELAY IN THE LAND DEVELOPMENT PERMITTING PROCESS	53
THE PERMITTING PROCESS	54
NEGOTIATION IN THE PERMITTING PROCESS AND THE AGENCY PROBLEM	57
V. TESTING HYPOTHESES THROUGH ELITE INTERVIEWS	69
DEPENDENT VARIABLES	72
INDEPENDENT VARIABLES	74
VI. ANALYSIS OF DELAY IN THE PERMITTING PROCESS	85
PERMITS STUDIED	85
DATA COLLECTION	85
RESULTS	88
<i>Track A</i>	89
<i>Results</i>	94
<i>Track B</i>	96
<i>Results</i>	99
<i>Track C</i>	102
<i>Results</i>	104
<i>Discussion</i>	105
VII. CONCLUSION	109
REFERENCES	114
BIOGRAPHICAL SKETCH	120

LIST OF TABLES

1. Regulations that protect services provision variables.....	36
2. Property rights variables.....	36
3. Interest Groups Variables.....	37
4. Political Institutions Variables.....	37
5. Dependent Variables.....	38
6. Property Rights Measures.....	39
7. Interest Groups Measures.....	40
8. Political Institutions Measures.....	40
9. Control Variables.....	41
10. Multinomial Logistic Regression Output: Regime Comparison 1.....	44
11. Multinomial Logistic Regression Output: Regime Comparison 2.....	49
12. Stages of the Permitting Process.....	74
13. Equivalency of Land Uses.....	88
14. Type A and Limited Partitions Analysis.....	94
15. Type B and Preliminary Plats Analysis.....	100
16. Concurrency Review Analysis.....	104

LIST OF FIGURES

1. LUR in Policy Arena20
2. Number of Cities by LUR in the Arena of Provision of Public Goods 42

ABSTRACT

This research seeks to uncover why communities adopt and policies that influence growth by affecting the cost and timing of new development. It also seeks to account for variation across specific development decisions that result from differences in how land use policies are implemented. In order to provide a more integrative approach of land use policy, I advance the concept of Land-Use Regimes (LUR). LUR identifies multiple policies, ordinances and mandates chosen and implemented by local governments based on their impact on land development costs as well as their effect on uncertainty and delay in development process. I explain why different LUR configurations occur. Land Use Regimes are institutional arrangements formed by multiple individual policies, mandates and codes intended to shape individual's behavior.

The understanding of the particular institutional and social environment that lead to the adoption of such policies, can help public managers to understand the extent to which political institutions may lead to problems such as affordable housing, formation of exclusionary communities, decline of quality of life and degradation of the environment, among other urban issues associated with growth.

This research shows that existing theories on land use regulation, do not explain why communities adopt a LUR that imposes high levels of delay to new developments, as well as the extent to which such delays complement or substitute other policies that encourages developers to behave in a particular form. Despite the possible inefficiency of land use policy based on delay, its adoption may be an objective for some political actors. Antigrowth groups such as some environmentalist groups or homeowners associations seeking exclusion and urban containment may prefer a high level of delay because it functions de facto as a growth control.

In addition, local authorities, such as planning officials may prefer regulations that generate high levels of potential delay because they can use discretion to shorten or lengthen the timing of the review process. This research finds that by using their discretion to impose delay, local public officials can manage growth based on their own values and principles. In highly regulated regimes, planners increase their power to negotiate with developers in order to impose the values of the community or the set of values shared by their professional community. Therefore, a regulatory regime that

imposes high levels of delay to new developments creates conditions for reviewers or public officials to become the “de-facto” regulators, because by defining the delay of a regime they decide what kind of projects are viable depending upon the financial costs that delays have on new developments.

INTRODUCTION

What constitutes a community's land-use policy? How does land-use policy vary across local jurisdictions? What explains the particular regimes of policies that local governments employ to regulate land-use? These seemingly simple questions have defied simple answers. Unknown numbers of policies, ordinances, and mandates implemented by local governments have an impact on what citizens can do with their land. Local governments combine these regulations to achieve a wide variety of goals. Which policies local governments combine have important implication on goals such as protection of property's value, protection of environmental resources, construction of new housing for different needs including affordable housing for low income families, and the quality of public services in a community as well as public goods.

Land-use policy is formed by the set of policies, ordinances, standards, mandates, and administrative procedures adopted and implemented by local governments in order to influence citizens' behavior regarding the use of land – which is shaped by both economic and political forces. This research seeks to uncover why communities adopt and enact policies intended to influence growth by affecting the cost and timing of new development. It also seeks to account for variation across specific development decisions that result from differences in how land use policies are implemented.

The role of institutions, both formal and informal, is central to answering these questions. Inquiry into these questions is conducted at two levels of institutional analysis: policy and operational (Ostrom, 1990). At the policy level, the formal political institutions of local government are hypothesized to mediate economic and political demands in regard to land use. At the operational level, the social network of relationships in which specific permit approval decisions are imbedded provide an explanation for variation in approval times for new development.

Land use policies that impose delay on development approval as a mechanism to manage growth, or as an avoidable by product of regulatory processes, can only be understood in terms of the social, political, and bureaucratic processes in which they are

imbedded. In any enterprise, time is money, but for development of real estate time is particularly valuable because costs caused by delays during construction are usually not recovered. Delays are events that postpone, extend or in any other manner alter the schedule of completion of all or any part of a project (Rusteika, 1991). Delays during the implementation of land-use policies may include deferrals, stops, slow downs, and interruptions, which generate hindrance, rescheduling, disruption, interferences, inefficiency, and productivity and production losses.

The framework of Land Use Regimes proposes that communities choose some types of policies, at least in part, because they provide more discretion to local officials and planning staff to encourage certain development and discourage others. This begs the question of how this discretion is exercised. What explains variation in the duration of the review process for new developments? What factors speed up or slow down the review process to implement the LUR choices? After identifying the costs of uncertainty and delay in the development permitting process, this research suggests that in addition to size, complexity, and other technical considerations that affect delay, the duration of permit approvals is influenced by the social desirability of development and structures of relationships among developers, agents, and planners. Relationships that convey trust and commitment are expected to reduce delay and uncertainty.

Significance of the Research

Land use policies are mechanisms by which local governments influence preferences of real estate developers in order to pursue public goals. Land use regulations create incentives for developers to act in a given way; those incentives take the form of costs for their businesses. These costs can take two forms-- direct financial costs imposed on projects, and uncertainty and opportunity costs of delays of projects. Land use instruments can emphasize one or both of these costs. While early researchers did not identify any systematic price effects of various local zoning policies (Crecine, Davis, and Jackson 1967; Rueter 1973), most contemporary studies confirm the impact of specific regulations on land and housing prices. Policy instruments that limit population growth affect housing prices by improving the quality of life in a city (Brueckner, 1990). Drastic price increases have been linked to density controls (Dowall, 1984; Landis, 1986;

Malpezzi, 1998), growth controls (Zorn, Hansen et al. 1986), restrictions on developments in coastal areas (Frech & Lafferty, 1984), restricting the pace of development, and permit limits and outright moratoria (Katz & Rosen, 1987).

These impacts are sometimes (but not always) collateral effects from policies designed to pursue various goals. Since the 1960's, the intervention of governments in land-use policies has been adopted as alternative solutions to a variety of problems affecting local governments. According to Richmond (2000), in the 1960s, the issue of land use gradually moved from the exclusive domain of planners and zoning into the political sphere, influenced by the emergence of the environmental concerns. Discussions of land-use have incorporated subjects as diverse as urban infrastructure, biodiversity, and affordable housing. The discussion has been periodically relabeled with terms such as land-use and "carrying capacity" in the 70s, "growth management" during the 80s, "sustainable development" in the early 90s, and "smart growth" in the mid 90s and early 2000s (Richmond, 2000).

The extensive variety of regulatory and non-regulatory instruments that could affect land-use generates difficulties for its study (Mayer & Somerville, 2000). Policy instruments range from explicit legal restrictions to implicit policies and procedures all of which can be implemented with a wide range of enforcement intensity, and target a broad set of community's goals. Because of this diversity, omitted variables in explanatory models of land-use regulation can be a serious obstacle to identify the actual effect of single policies. For example, the effect that some regulations have on new construction or housing prices may be attributed to the use of a particular instrument without regard of the context in which the instrument is utilized; or growth boundaries may be blamed for increases in housing costs without taking into account other policies that at the same time may affect such prices.

Particularly, delays and long review processes are often ignored by public officials as possible causes of increasing housing prices, even though they frequently add explicit financial and time costs for new developments (Mayer & Somerville, 2000). In addition, since both the outcome and the length of the regulatory process can be uncertain, developers do not know the extent to which local authorities will demand costly changes in projected density, design or type before getting a final approval.

This research contributes to the current literature by making explicit the costs that each instrument may have on land development. In addition, it provides a more holistic approach to understanding land use regulation, as well as how communities combine policies as a supplement or substitution of each other. In addition, this research contributes to uncover the importance that political institutions have on the emergence of specific combinations of land use policies.

The Role of Formal Institutions

In general, the literature on growth management policy explains land use policies as mechanical responses to problems of rapid growth as well as environmental or to the mobilization of groups in the community opposing or supporting growth. The first explanation is essentially a property rights model and the second an interest group model. Extant explanations of regulation adoptions take into account either the political or economic forces; however, they typically do not account for both factors at the same time. These explanations can benefit from the identification of institutions that affect the interaction of political and economic forces.

Another important limitation of this work is neglect of institutions. In both property rights and interest group explanations, political institutions are largely transparent to the underlying economic or political forces driving land-use policy. This is a serious oversight; political institutions are crucial mediators of political and economic forces and will influence policy dynamics. To remedy this situation, Feiock, Lubell, and Ramirez (2005) offered a “political market” theory of policy change that combines political economy theories of property rights (Alston, 1996; Eggertsson, 1990; Libecap, 1989; Lubell et al., 2002) with the interest group framework by focusing on how the influences of these factors are conditional on the structure of local government institutions (Clingermeyer & Feiock, 2001; Ostrom, 1990, 1999). This dissertation will extend and elaborate this political market theory by investigating the role political institutions play in the willingness of communities to impose various regulatory costs on new developments and how local political institutions influences the configuration of land-use regulation in a community. For example, cities with manager council forms of government may be less likely to adopt configurations of policies emphasizing delay

costs because of their perceived inefficiency. This idea of the importance of formal institutions is fully developed in chapter III.

Measurement of Land Use Policy

An important limitation of existing work is the lack of an integrated framework for the analysis of land-use policy. Previous research has failed to capture the dimensions of land-use policy relevant to the construction of new development which has led to inconsistent and contradictory findings and confusion regarding the process by which regulation influences development. Part of the problem in understanding the adoption of land-use policy is that most studies explain the adoption of a single instrument such as growth controls, rather than in a more comprehensive set of programs and policies (Glickfeld & Levine, 1992).

Extant explanations of land use regulations do not differentiate types of costs imposed by each type of policy. This offers little guidance in understanding how prices are affected by land use policies. The bottom line is that increases in housing prices can be the result of a variety of dynamics. For instance they can be the result of better amenities in the community, a result of the scarcity of land for development, or the result of high sunk costs that developers have to pay even before construction starts.

When land use regulations are implemented, local government officials have some level of discretion to decide the strength with which a regulation is enforced or implemented. However, current studies on land use do not adequately account for the forms in which these policies are implemented. For instance, although two jurisdictions may decide to adopt impact fees as a mechanism to protect urban infrastructure, one can chose to impose waivers for long periods in order to foster new developments, economic growth, or even specific goals such as redevelopment or construction of affordable housing. This research overcomes these limitations on the measurement of land use policy by advancing the concept of land use regimes.

Land Use Regimes

In order to provide a more integrative approach of land use policy, I advance the concept of Land-Use Regimes (LUR). LUR identifies multiple policies, ordinances and mandates chosen and implemented by local governments based on their impact on land

development costs as well as their effect on uncertainty and delay in development process. I will explain why different LUR configurations occur. Land Use Regimes are institutional arrangements formed by multiple individual policies, mandates and codes intended to shape individual's behavior.

The concept of regime as I am using here should not be confused with Clarence Stone's notion of regime politics and governing regimes (Stone, 1989, 2001). Stone defines regime politics as "the informal arrangement by which public bodies and private interest function together in order to be able to make and carry out governing decisions" (Stone, 1989; p. 6). Regime politics focuses on the collective action problems of interest groups, and the bargaining environment in which those groups create coalitions. As the most important attribute, coalitions are considered regimes if they create a stable policy agenda and distinctive ideology.

By contrast, in my research, Land Use Regime is a structure formed by the combination of multiple individual regulations. A Regime can hardly be observed by the adoption of a single policy or regulation, but by its conjunction. The creation of a Land Use Regime could be the goal of a Stone's political regime. By creating a Land Use Regime, a political regime expresses its preferences and agenda on the growth of the community as well as the use of land, service provision or who should pay for new infrastructure.

The land-use regime of a city is the institutional arrangement that governs behavior and interaction between individuals in relation to the use of land. These arrangements are regimes because they reflect the particular preferences that a community has in regard to the goals that such regulations may pursue. They can prevent or encourage growth, or define who in the community is responsible for paying for growth and its effects. It reflects the particular values and beliefs that a community has related to social, environmental, and economic issues. It is formed by the aggregation of such values which are reflected in the preference for the use of some instruments over others or the way in which they are combined.

From a purely economic perspective, some regimes could be leveled as inefficient. Land-use regimes that impose long delays may create uncertainty in the land use market and an unstable development. Delay of development has been consistently

linked to housing prices and the construction of new housing. An increase in the length of the development delay may cause builders to keep a larger buffer stock. If future demand turns out to be very low the developer will have a large inventory of lots that are unused and will have lost the (sunk) costs required to get approval for those lots. Thus, the cost of completing a house is higher than it would be for a developer in an unregulated market (Mayer & Somerville, 2000). Also, according to Dowall (1984) this type of cost can slow competition among various housing types, particularly those affordable to low income households. Indirectly, developers' failure to respond to increases in housing demands may quickly cause an increase in price; and ultimately, these sources of friction in supply markets create barriers to entry for development firms and facilitate the setting of monopoly rents by existing providers.

Delay during the implementation of land use regulations is a practical dilemma for local governments. On the one hand, delay of new real estate developments is commonly seen as a burden to the growth of communities and its economic development exacerbates problems of affordable housing, neighborhood redevelopment and revitalization and deceleration of economic activity. On the other hand, delay is also seen as a mechanism that permits communities to ensure that new developments do not reduce the quality of life in a community by degrading public services supply. In addition, it is suggested that high costs of delay can also be intended to avoid undesirable land-uses as well as protect of environmental amenities and endangered species.

Delay may be caused by reviews needed for obtaining construction permits, rezoning existing parcels, filing environmental impact statements as well as assessments on the impact on the demand of public services. All these reviews are based on the evaluation of the extent to which new projects comply with standards that apply to environmental impact, public services provision, affordability, or intensity of the use of land, to mention a few. In some cases, such standards are subject to interpretation and negotiation. However, as a rule of thumb, the more stringent the standards to clear any review, the longer it may take to review compliance with codes. In general, at the urban fringe the longest delays occur at the time of subdivision and rezoning; nevertheless, delays at any stage of the process add explicit financial and time costs (Mayer & Somerville, 2000). In addition, since both the outcome and the length of the regulatory

process are uncertain, developers do not know the extent to which local authorities will demand costly changes in projected density, design, or type before getting a final approval, which generate uncertainty in the business community.

Other costs related to the review process can be onerous application procedures as conditions for subdivision approval. In summary, delays in the permitting process can cause developers to incur added interest cost, taxes, inflation and overhead expenses (Quigley & Rosenthal, 2004). The understanding of the particular institutional and social environment that lead to the adoption of such policies, can help public managers to understand the extent to which political institutions may lead to problems such as affordable housing, formation of exclusionary communities, decline of quality of life and degradation of the environment, among other urban issues associated with growth.

Existing theories on land use regulation, do not explain why communities adopt a LUR that imposes high levels of delay to new developments, as well as the extent to which such delays complement or substitute other policies that encourages developers to behave in a particular form. Despite the possible inefficiency of land use policy based on delay, its adoption may be an objective for some political actors. Antigrowth groups such as some environmentalist groups or homeowners associations seeking exclusion and urban containment may prefer a high level of delay because it functions de facto as a growth control. With high delay there are less development projects financially viable because of higher financial costs.

In addition, local authorities, such as planning officials may prefer regulations that generate high levels of potential delay because they can use discretion to shorten or lengthen the timing of the review process. By using their discretion to impose delay, local public officials can manage growth based on their own values and principles. In highly regulated regimes, planners increase their power to negotiate with developers in order to impose the values of the community or the set of values shared by their professional community. Therefore, a regulatory regime that imposes high levels of delay to new developments creates conditions for reviewers or public officials to become the “de-facto” regulators, because by defining the delay of a regime they decide what kind of projects are viable depending upon the financial costs that delays have on new developments.

Overview of the Dissertation

The next chapter reviews the literature on growth management policies and land user regulations. Also, it presents the concept of land use regimes and proposes a LUR typology. Chapter two focuses on land use decisions at the policy level. This chapter reviews the literature on the adoption of land use and growth management policy. This chapter also elaborates on the political market theory and emphasizes the role of formal local government institutions in mediating demands for different LUR. Chapter three present the empirical analysis on the formation of LUR in Florida, in addition, these results are discussed to provide some insights on the formation of these regimes. Chapter four discusses the importance of informal institutions in the implementation of land use policies. The importance of project characteristics as well as reputation and networking practices of applicants and public officials involved in reviewing development applications. An explanation of development approval and delay based on network theories is then presented. Chapter five presents a preliminary test of the hypothesis developed from previous empirical studies based on a case study of the development permitting process of a city in Florida. Chapter six presents the results of the analysis of delays of the implementation of the Land- Use Regime [LUR] in Tallahassee. Finally, chapter seven develops some concluding ideas from this research.

CHAPTER I

LAND USE REGIMES

The analytical framework used in this research benefits from previous efforts that classify the numerous instruments used to regulate land use. Recent studies have suggested various typologies to classify regulations that directly and indirectly affect the use of land (Deakin 1989; Glickfeld & Levine, 1992; Levine, 1999; Mayer & Somerville, 2000). These typologies simplify the complexity created by numerous regulations and other policies that affect land-use. My concept of Land-Use Regimes (LUR) builds on this foundation to study land-use regulations.

LUR is a concept introduced here in order to systematize the study of multiple policies, ordinances, and mandates that control land uses and development. This LUR has two visible levels of analysis, based on the policy and the enforcement processes (Ostrom, 1990). In other words, LUR's have implications for growth and development not only by the mere structure of incentives that it creates to direct development and construction, but also by the way in which it is implemented. At the policy level, the structure of incentives created by the LUR is based on additional costs or savings for new constructions. However, this structure of incentives may be modified during the implementation which takes place during the permitting process for land development.

Each stage of land development permitting is connected to institutions adopted for a specific goal of the community. At the same time, each goal can be connected to a specific policy arena. Variations in the number and complexity of the stages of permitting between jurisdictions are a reflection of the conflicting goals pursued by communities' growth. For instance, concurrency reviews in the permitting process are intended to ensure adequate service provision for new developments; or, the certificates of land use compliance as well as the environmental impact assessment attempt to guarantee the correct application of policies that define geographic preferences in the community.

At the policy level, LUR is formed by the combination of regulations in various policy arenas. I associate those arenas to three common goals of land-use policies. The

major goals of land-use regulation that I identify in this research are: a) definition and protection of geographic preferences in the community, b) protection of property values and other social policies, and c) maintenance of quality of services delivered. Similar to most policy arenas, the boundaries of those presented here are not clear cut. These arenas overlap in some areas because a particular regulation may contribute to objectives in more than one arena, or may help to achieve goals of one arena while hindering goals connected to other arenas. However, studying regulations in the context of the arena to which they contribute the most, allows a simplification of the analysis. In addition, by using policy arenas as a category to classify regulations, I identify regulations that have an impact on goals and objectives associated to that particular arena, regardless of their secondary impact on another arena.

Regulations adopted in each policy arena can be classified in two basic types: those that impose direct costs for developments and those that create potential delay for developments. Although, a single instrument may create both potential delay as well as direct costs for new development, each instrument can be classified in the category where its impact is higher. For instance, although the application for a concurrency review has a direct cost for new developments in the form of fees, their major impact for new developments is on the potential delay by holding the project if the services are not in place at the time construction begins as well as by the delay that takes to clear the compliance review. As observed in this research, LURs are the particular mix of these types of regulations in three policy arenas. In the next section, I explain in detail the two components of LUR: policies arenas and types of regulations.

Policy Arenas of Land-Use Regulation

I facilitate the study of land use regulations by classifying them in term of their expected impact on the various goals of the community. In each arena, there are identifiable actors with clear preferences for specific goals and land use regulations. Dissecting land-use regulations based on their goals can facilitate the identification of political actors as well as their relationships because they are determined by the type of policy at stake (Lowi, 1964). Each policy arena constitutes a real arena of power that develops its own political structure, processes, elites and group relations.

However, to identify the arenas included in land-use regulation is not an easy task because it requires first to develop a comprehensive catalog of regulations that affect land use. Most researchers agree that there is no single defining form of land-use regulation. “Instead we observe multiple government interventions in land and real estate markets. These include explicit laws and implicit policies, all implemented with a wide range of enforcement and intensity” (Mayer and Somerville, 2000, P.642). Therefore, in the absence of a unified theoretical framework that clearly defines land-use regulations, there are several formal and informal institutions that can be observed as land-use regulations because in some ways they can influence the use of land. In order to identify the policy arenas around land-use regulation, first it is necessary to narrow down the definition of land-use regulation.

In order to concentrate my research on empirical practices, I will focus on the variety of land-use instruments that emerged from practices known as growth management, also described as sustainable development, or smart growth. Growth management is a relevant practice because it is intended to integrate the use of comprehensive plans with other regulatory practices of land-uses (Nelson 2000). Nelson defines growth management as the deliberate and integrated use of the planning, regulatory, and fiscal authority of local governments to influence the pattern of growth and development in order to meet projected needs. Included in this definition are such tools as comprehensive planning, zoning, subdivision regulations, property taxes and development fees, infrastructure investments and other policy instruments that significantly influence the development of land and construction. This definition, excludes other regulations that may affect land-use but that do not directly target growth management such as building codes, economic development policies, tax programs and general policies designed to improve social welfare, such as community service programs, public health services and other social services.

Growth management is more than growth control (Nelson and Duncan 1995), although growth controls can be included within growth management instruments they have a more limited scope. While growth controls limit or constrains development, growth management accommodates projected development in a manner that achieves broad public goals. In addition, Land-use regulations created in the context of growth

management are intended to address rising concerns about problems such as traffic congestion, loss of farmland, urban disinvestment, the costs of public infrastructure and housing prices.

The first goal of land-use regulations under growth management is to order development by separating uses physically, restricting obnoxious activities and providing public land for private developments. I identify this goal as the definition and protection of land uses. According to Boschken (1977), the comprehensive structures and methods used to manage land use stem from the Progressive era and the desire to eliminate corruption in government and promise orderly professional administration of the public interest. During the 1920's, states enabled legislation giving local governments authority over land use.

From a purely public choice perspective, this intervention of local governments on the land market can be seen as the result of market failures. Individuals have incentives to use their land for the most profitable use; however, by doing this, there is a risk of reducing the land that is socially desirable for other less profitable uses. In these conditions, reduction of land for some activities such as conservation, agricultural or recreational purposes, arises because they are less intensive in use and less profitable for developers and landowners.

The second problem that growth management addresses is the maintenance of urban infrastructure, public goods and level of services delivered. This goal has been widely studied in recent years because of the degradation of infrastructure in local governments and the limitations that those governments face to finance public services as well as infrastructure for new developments. In addition, this problem has become widely studied because of the impact of these policies on affordable housing and housing prices in general.

According to Nelson (2000), local governments in America are charged with the cost of growth and infrastructure for new developments. The costs are even more severe for rapidly growing communities because the cost for new infrastructure goes beyond most politically feasible methods. In order to pay for new infrastructure such as roads, sidewalks, sewage, parks, schools and public facilities, local governments rely on a mix of taxes, however, recently these taxes have been insufficient to pay for growth

(Altshuler and Gomez-Ibanez 1993). In such conditions, local governments have conditioned developments to the payment of exactions or one time fees commonly known as impact fees, which shift the burden of paying for new infrastructure to developers and new house owners.

In addition to the use of fees, some states have introduced additional mechanisms to protect the quality of services. For instance, Florida has implemented a mechanism to ensure the quality of services in a community known as concurrency review. Concurrency reviews, give some flexibility to communities, by allowing them to define their preferred standards for the quality of services provided in the community. Taking into account the standards for provision of services in a community, developers frequently argue in favor of the maximum use of current infrastructure before introducing impact fees and other exactions. Concurrency reviews, also produce delay or transaction costs for developers.

The third goal of growth management is the protection of property values and other social policies. However, while protecting property values, local governments can produce some unintended effects. Some regulations that protect property values have been linked to the rise of social problems, more specifically, to the lack of available affordable housing, excessive burdening of household by housing prices, and segregation of low income families in ghettos of poor. Although, these social problems were not a problem that land-use regulations attempted to directly address in first place, the proliferation of studies that connected these problems with land use regulations have influenced the adoption or rejection of some instruments. In this regard, the intervention of local governments in land-use regulation is justified by an assumption that there is some sort of public interest in the use of land beyond the mere protection of property values.

In addition, the ethics of land use regulation and the implementation of comprehensive views of growth management have made social problems of particular interest. In a pure market economy a good regulation will ensure that every consumer can have access to the market if they have resources to enter into the market. However, in a society where ownership represents an informal requisite for citizenship, obstacles to homeownership represent an ethical dilemma for regulators and justify the

implementation of policies that foster affordable housing regardless of its impact on housing prices. In the next section I introduce the three arenas formed by these goals.

Arena 1: Protection of geographic preferences. In accordance with (Fleischmann, 1989), the most common form of land use control is zoning, which is a mechanism that New York City started to use in 1916 to specify the permitted land use of properties within the jurisdiction. The purpose of zoning is to order land development and manage positive and negative externalities by physically separating land uses. At a minimum, these zones differentiate between land used for agriculture, residential, commercial and industrial uses. For analytical purposes, these uses are arranged in a hierarchy of intensity of use, with agriculture the less intense land use and industrial the most intense. In most communities, zoning is conducted and enforced by professional planners and a planning commission that is appointed by the elected officials. Commonly, a planning commission holds regular public hearings and makes recommendations to the city council.

Land-use regulations also define geographic preferences regarding limits to growing areas, a practice also known as urban containment. There are at least three types of urban containment regulations created to make developments more compact and preserve agriculturally and environmentally rich sources of open space (Nelson, 2000). These regulations are closed regions, open regions, and isolated containments. Closed regions define areas outside of which development is substantially restricted, shortened and within which it is encouraged. Open regions are containment regulations that do not prescribe development beyond them. Isolated containment regulations lack boundary incentives and lead to displaced construction beyond the region.

Via definition of geographic preferences, a community states how they want their city to grow by defining the ratios between the different land uses. For example, the community identifies the amount of acres set aside for the protection of the environment or farm land for every acre of single family housing. In the same way, it defines the proportion of open spaces, parks, industrial land, or commercial areas in relation to the amount of space for multifamily housing. In addition, a city defines how close commercial and industrial areas should be from residential and open space areas and whether or not they should be mixed together. The definition of geographic preferences

also accounts for the level of difficulty to change these ratios. Since these preferences are defined at a given point in time, the community can make it difficult or easy to change them in order to respond to changes in preferences of the future community.

Arena 2: Provision of public goods and maintenance of level of services. The third arena is created by the need to maintain an adequate level of services delivered by local governments to the community, such as roads, parks, libraries, water, sewage, etc. New developments can affect the quality of life in a community if the increase of the demand for those services cannot be covered adequately. In order to maintain an acceptable level of services, local governments may shift totally or partially the cost of maintaining a given level of services to developers. These regulations condition the use of land to the maintenance of the quality of services provided by local governments.

A community can decide if the creation of infrastructure to maintain the level of services is paid by buyers of new homes or the whole group of taxpayers. If a community decides that new homebuyers paid for the required new infrastructure, a local government can transfer to developers the cost of supplying new infrastructure and public goods to new developments. In the United States it is common practice for developers to make payments to local governments for the right to develop. Altshuler and Gomez-Ibanez (1993) surveyed a number of communities and found that by the mid-1980s, approximately 60% of U.S. localities imposed some type of development or impact fees. Fast growing states tend to make more use of these policies. For example, Florida appears to be one of the most active states imposing impact fees as a method to finance growth (Simmonds, 1993).

Additionally, in this arena I include instruments that require developers to directly maintain or provide a certain level of quality for public services, such as streets, parks, or parking spaces; studies of adequate service levels required as a condition for approval of a residential, commercial, or industrial development. Also, studies of adequate service levels required as a condition for approval of a residential, commercial, or industrial development also are included into this category.

Arena 3: Protection of property values and social policy. When the regulation of land-use is based on the assumption that land is abundant, growth can produce unintended social effects (Boschken, 1977). Where this assumption is not true, land use regimes may contribute to the generation of social problems such as lack of affordable housing and segregation of low income families. In the arena of land-use regulation, a land use ethic poses that competition for land uses does not only revolve around traditional property rights and economic incentives (Boschken, 1977). This new land-use ethic acknowledges that quality of life must account for livability of all the groups in the community. Quality of life in the community and attention to social problems can overrule the economic element of land-use regulation that frequently ponders the economic dimension of land-use regulation (Boschken, 1977).

A multidimensional perspective of land-use regulation acknowledges that the protection of property values has to be in balance with other social goals. Regulations that neglect other social goals may protect property values at the same time that it concentrates poor residents and minorities in the central part of a city (Brueckner and Fansler 1993; Nelson 2000; Anthony 2004). There are two goals competing with the protection of property value in this arena. First, increasing the possibility that citizens are able to become homeowners or at least not to be burdened in excess by housing costs; and second, a desire for preventing segregation of social groups into ghettos of minorities and low-income families.

According to Nelson et al. (2002), there are exclusionary policies limiting the supply and accessibility of affordable housing to protect property values which raise home prices and exclude low-income households. In general terms, exclusive large lot zoning and other land-use controls (Pendall, 2000), when adopted as the main instrument to manage growth, often tend to exclude low-income households from the community. Building permit caps and moratoria also have consistent exclusionary results.

Growth management programs can make housing affordable by reducing the share of public infrastructure paid by new homebuyers as well as by minimizing regulatory delays in the development process in exchange for quotas of affordable

housing in new developments. Regulations that facilitate redevelopment of old areas of the city are also a mechanism to increase the stock of affordable housing.

Subdivision regulations may require developers to provide costly infrastructure improvements and other neighborhood amenities before lots are divided and sold; such costs are transferred to those buying homes in the form of housing prices. Costs related to costly infrastructure can be reduced by density bonuses that permit more units of construction in exchange of revitalization of some sections of the city or construction of affordable housing

Types of Costs Imposed on New Developments

Instruments adopted within each policy arenas are classified in based to the type of potential costs they impose on new developments. A land use regime form by the particular combination of two types of costs: direct and delay costs. Direct costs are those that increase the costs of production of building by increasing the price of the inputs used to build the house, such as land, materials, labor, quality of construction, and services for new developments. Although land-use regulations almost never affect prices of labor and materials, they frequently have an impact on prices of land, services, and other capital investments. An important characteristic of these direct costs is that they can be easily transferred to home buyers, because commonly they are transformed into a higher quality of construction, services, and life styles in the community.

Direct costs, such as fees and limited supply of land for development, increase the cost of construction, acting as taxes for new developments (Mayer & Somerville, 2000). Consequently, the level of return that triggers development must be clearly higher in a city with fees. As a result of higher fees, development occurs later. Thus, fees act as a tax on new development, raising the price of new units relative to existing structures. In response to higher fees, homeowners will choose to live in existing units longer, which may result in fewer removals and less new construction.

Limited supply of land has a very similar effect of fees. Restrictions on the supply of land for development by instruments such as zoning limits on multifamily units, numerical caps on the number of units that can be built each year, urban containment and allocation of large developable land areas for agricultural use only, can

raise the cost of land development by reducing land available for development and increasing its price.

The second type of cost is delay costs, which are correlated to the length of the development process. Commonly, these types of costs cannot be easily transferred to home buyers because they are financial costs that are not directly observable on the quality of buildings, services or other public goods.

An increase in the length of the development process may cause builders to keep a larger buffer stock. If future demand turns out to be very low the developer will have a large inventory of lots that are unused and will have lost the (sunk) costs required to get approval for those lots. Thus, the cost of completing a house is higher than it would be for a developer in an unregulated market (Mayer & Somerville, 2000). According to Dowall (1984), this type of cost can slow competition among various housing types. Indirectly, developers' failure to respond to demand may quickly cause an increase in housing prices and ultimately these sources of friction in supply markets create barriers for entry into development firms and facilitate the setting of monopoly rents by existing providers.

As well as with direct costs, land-use regulations can perform two roles: reducing the delay or increasing it. Regulations may reduce delay by creating rules that add flexibility to current regulations in order to reduce delay of new developments. These regulations reduce the necessity for developers to keep large buffer stocks of land due to the creation of quasi-markets in the market of land and development. Instruments such as mixed use developments, wetland banks, density bonuses, performance zones and planned developments are sophisticated instruments used to make the development process less rigid and speed it up. For instance, mixed use developments and planned unit developments allow the combination of several land uses on one site in a coordinated way and facilitate the permitting process. Also, instruments such as performance zoning that specify the intensity of land use that is acceptable in a parcel or district, rather than just limit the uses that land can be put to within that parcel or district, allow more flexibility for the design of new development, which reduces transaction costs.

The combination of potential costs produced by regulations within each policy arena generates four types of configurations. Figure 1 shows how regulations in each

arena can be classified by combining these costs. In base to this combination, I identify four categories to classify land-use regimes. The four categories are the following: the Regime with emphasis on delay (low in direct costs and high in delay costs), the Antigrowth Regime (high in both direct and delay costs), the Growth Machine Regime (low in both direct and delay costs) and the Regime based on direct costs (high in direct costs but low in delay costs).

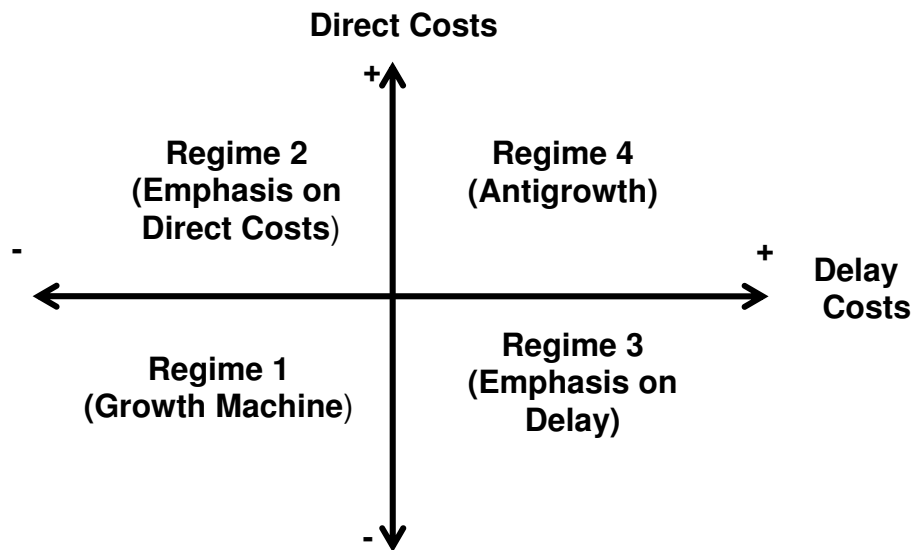


Figure 1. LUR in Policy Arena

For growth management all arenas are equally important, however, the study of the regimes formed in all arenas is beyond the scope of this dissertation. The rest of the analysis presented here focuses on the regime formed in one policy arena, the arena of provision of public good and maintenance of level of services. In this analysis, this arena is the laboratory in which competing explanatory frameworks will be tested in Florida. Florida is a pioneer in the implementation of the smart growth approach, but particularly on the use of regulations that protect the quality of services provision. One of the innovative instruments used for smart growth is the regulation on concurrency that will be explained on the analysis.

The analysis presented next explains the extent to which some economic, social, and political characteristics of cities are associated to the formation of a particular regime. In the next section, I present three competing theories that can be used to explain the formation of LUR. In addition, I present a set of hypotheses derived from each framework, which are later tested.

CHAPTER II

EXPLAINING THE FORMATION OF LAND-USE REGIMES

Existing literature provides limited guidance to the understanding of why a community develops certain configurations of land-use regulation. Part of the problem in understanding the adoption of land-use regulation is that most studies that explain the adoption of such a regulation focus only on growth controls (Glickfeld & Levine, 1992), not in how such controls are combined with other regulations that may pursue similar goals. According to Glickfeld and Levine (1992), three things explain the boom in the adoption of land-use regulations: a) sheer population growth; b) changing patterns of growth toward edge cities; and c) the popular identification of growth as the cause for traffic, congestion and declines in quality of life.

The notion that growth triggers regulation of land-use is also known as the property rights model, because it assumes that such regulations only attempt to protect property values from the harm of urban sprawl and fast growth. For instance, based on their 1988 survey findings on California land-use practice, Glickfeld and Levine (1992) argue that regulatory adoption occurs after increases on building permit activity. However, although the property rights model is the most common explanation for the adoption of land use regulations, there are other competing models. In addition to the property rights model, next I introduce hypotheses related to two other explanatory frameworks: the interest groups and the political institutions frameworks.

A. Property Rights.

The “property rights” framework is a popular explanation for the adoption of land use regulations as a rational response to the emergent issues related to growth. This framework argues that the structure of land-use regulation will emerge in the presence of scarcity and the over-consumption of urban public goods (Glickfeld & Levine, 1992). Existing research on local development and growth management typically refers to these as “need-based” explanations (Steinacker 1998; Lewis and Neiman 2002).

This perspective is linked to Tiebout’s (1956) model, which argues that local communities have an optimum size for delivery of local public goods. In general terms,

the property rights framework predicts that when a city starts to experience a deterioration of local public goods it will adopt regulations that promote the conservation of those goods. For instance, it can be expected that the configuration of land-use regulation will become high on imposing costs to new developments as open land becomes scarce, population increases, and public infrastructure becomes strained.

The idea of communities' willingness to impose regulatory burdens on their activities has been broadly studied using the concept of Common Pool Resources (CPR's) (Ostrom, 1990). CPRs are public goods in a city, like clean air, public roads, public parks, main pipes of water and sewage systems, storm water systems, open spaces for recreation and schools that any citizen in the community can use when he or she lives there. By observing public services and goods as common-pool resources for local communities, we can explain the adoption of regulations that protect them as the search for an institutional arrangement or regime that delivers a Pareto-superior outcome. Eggertsson (1990) calls these early approaches "naïve theories of property rights" because they only consider the economic demand for a definition of property rights, but do not address the distributional conflict between interest groups.

Growth management can be seen as the provision of institutions that define the property rights of those CPR's. For example, regulations such as moratoria on new developments define property rights in favor of homeowners because it reduces the social costs of problems such as sprawl and school crowding. However, while providing benefits for homeowners, these regulations may cause significant economic losses for landowners and developers. In the same way, development interest may be harmed if such regulations impose on them the price of paying for environmental conservation, housing for low income families or urban infrastructure.

Developers and landowners can also benefit from the adoption of some regulations when they increase the value of their properties. An excessive deterioration of the quality of life in a community can also harm pro-growth interest. For example, environmental degradation and reduction of the quality of life in a community can also affect the profits of landowners and developers, because these groups can improve their profits by selling constructions in communities with a higher quality of life, as the quality of life increases the value of their properties and developments also grows. In summary,

the property right frameworks predict that in the presence of an over-consumption of public goods, degradation of urban infrastructure, environmental resources and a decrease of property values, a community will adopt a high regulated land-use regime.

Demand for adoption of growth management instruments often increases when population density deteriorates livability. The property rights model predicts that cities where water supply or urban sprawl are problematic are more likely to impose delay costs or direct costs, or a mix of both, in order to protect the current level of services or even improve it. Next, I present some tested hypotheses that are derived from the property rights model.

Hypothesis 1: The higher the population density in a community the less likely such communities rely on a growth machine regime compared to any other regime type, and more likely to rely on an antigrowth regime compared to any other type.

Hypothesis 2: The higher the population change in recent years in a community, the less likely such communities rely on a growth machine regime compared to any other regime type, and more likely to rely on an antigrowth regime compared to any other type.

Hypothesis 3: Cities with school crowding are less likely to rely on a growth machine regime compared to any other regime type, and more likely to rely on an antigrowth regime compared to any other type.

Hypothesis 4: Cities where water supply is an issue are less likely to rely on a growth machine regime compared to any other regime type, and more likely to rely on an antigrowth regime compared to any other type.

Hypothesis 5: Cities where urban sprawl is an issue are less likely to rely on a growth machine regime compared to any other regime type, and more likely to rely on an antigrowth regime compared to any other type.

B. Interest Groups.

Since the property rights model does not integrate the distributional consequences of each regime type, it is helpful to predict mainly whether a city will avoid a growth machine regime, but does not predict other particular combinations of costs. Eggertsson (1990) uses the term “interest group theories of property rights” to describe institutional change as the result of groups that participate in political decision-making, because they

explicitly take into account the efforts of private interests to secure favorable outcomes in the political arena. Existing studies of local economic development and growth management conclude that pro-growth interests either dominate the local agenda or are able to build governing coalitions to overcome opposition to development (Molotch 1976; Stone, 1989; Lewis and Neiman 2002).

The “interest group” framework of local politics provides another popular explanation of land-use regulation adoption. The interest group model predicts that groups that are able to overcome collective action problems are more likely to receive their preferred policies. The interest group model provides the theoretical basis for “growth machines” ruled by political alliances between local government officials and development interests (Logan & Molotch, 1987; Molotch, 1976). Development interests have the upper hand in local politics because they receive concentrated benefits for pro-development policies and are better organized than other public interests. Of course, public entrepreneurs can often organize diffuse public interests to effectively participate in local political decisions, and local governments are certainly capable of adopting pro-environmental policies (Elkins, 1995; Feiock, 2002; Goetz, 1990, 1994). Regardless, interest group models have a modern pluralist perspective that views policy change as a result of interest group competition.

The interest groups explanation assumes that local agencies are more responsive to citizens’ demands from powerful interest groups, particularly to those groups that can contribute to a city’s economic growth (Mladenka, 1981). Since local governments compete to improve their economic well-being by attracting residents who pay higher taxes and firms that can promote their interests by moving to another city, local governments tend to neglect other social groups (Peterson 1981; Lyons and Lowery 1986). These assumptions of the public choice perspective are supported by a common belief that a system of local land management does not work well because politics and economic incentives triumphs over public interests (Fleischman, 1989).

Based on the interest groups model, I expect that the stronger the community of developers and businesses, the more likely that a growth machine configuration will be adopted. Economic and development interests have a substantial interest in land-use decisions, because land-use policy has consequences for the private risk and return on

their investments and production activities. Like other business interests, development interests are often organized and well financed, making them strong candidates to become powerful articulators of political demand. Development and construction interests would be particularly influential to develop a growth machine regime. Two measures of the strength of these groups are the size and value of the industry, which can be measured by the number of new units constructed per capita or the market value of such units.

If the property rights framework can predict the likelihood that a city adopts a growth machine regime, the interest groups framework can provide a richer prediction of the variety of regulatory regimes. Because beyond the dichotomy of low and high regulated markets, other types of the land-use regime have specific distributive effects for interest groups. Therefore, interest groups are not only interested in the adoption of land use regulations but on the particular regime that they form.

The idea for real estate interests championing a growth machine regime does not fully encompass the complexity of development interests. While real development interests are often outspoken opponents to regulations that increase their production costs, they may benefit from rules if they enhance the production of public goods such as open space or better service delivery that can be capitalized into housing prices and passed on to consumers. Therefore, I expect that if developers are willing to accept some regulations to protect quality of life they will prefer the adoption of regimes based on direct costs than on transaction costs and delay. In any case, the least preferred regime for this group will be the antigrowth regime.

Hypothesis 6: Cities where developers are more active will be more likely to rely on a growth machine regime. In addition, cities where developers are more active are less likely to rely on regimes with high delay.

Hypothesis 7: The higher the medium housing value in a city the more likely it will rely on a growth machine regime. In addition, cities with higher housing values are less likely to rely on regimes with high delay.

Hypothesis 8: The more units per capita are built in a city the more likely it will rely on a growth machine regime. In addition, cities with higher units built per capita are less likely to rely on regimes with high delay.

In addition to developers, other commercial interests like the tourism industry have a concern for balancing the regulatory regime. Commercial services for tourism are concerned about maintaining the quality of life in a community since degradation of services such as traffic and congestion of public parks and amusement areas may discourage visitors. However, these commercial services also understand that antigrowth regimes may impede the construction of new attractions, facilities, hotels, and services for visitors. Moreover, if some type of regulation is needed in the community, the tourism industry will prefer regulations based on high direct costs than those that delay developments, because high direct costs can make more attractive cities for tourism.

Hypotheses 8b: cities with higher proportion of establishments dedicated to alimentation and accommodation services are more likely to rely on a growth machine regime. In addition, the larger this industry is in the community, the less likely the city will adopt any regime with high delay.

Other interest groups commonly concerned about the formation of land-use regimes are environmentalists. Some local environmentalist groups are unorganized like in the case of citizens who worry about urban sprawl. However, other environmentalist groups such as the Sierra Club and 1,000 Friends of Florida that focus on the protection of environmentally sensitive areas such as wetlands are well organized to support growth management. These groups prefer both high direct and delay costs rather than regimes with either lower delay or direct costs. To these groups delay can be seen as the most effective mechanism to regulate land use, since it creates a burden on new developments that act as de facto urban containment.

Hypothesis 9: Cities where environmentalist groups are more active in supporting growth managements are less likely to rely on growth machine regimes than in any other type. In addition, the higher their activism is in a community, the more likely the community will have a regime with a high level of delay.

Other local environmental interests are called “territorial groups” because they are linked to specific geographic preferences for growth (Clarke and Gaile, 1989). These groups are supporters of “Not In My Backyard” (NIMBY) politics and are mainly

interested on preventing local unwanted uses. Among these groups, I identify homeowner and neighborhood associations, and exclusionary white communities.

Homeowner associations and neighborhood organizations have substantial differences with regard to their preferences (Sharp, 2003). To homeowner associations, the preferred land use regime is antigrowth, because it will notably increase the costs of any new development that competes for existing public goods. In addition, the antigrowth regime will be a stronger protector of environmental goods, at the same time it will protect housing prices. However, if for any reason, such as the need to foster economic growth, a community needs to adopt a regime with less cost than the antigrowth regime, homeowner associations and neighborhood associations will have different preferences. On the one hand, homeowners will advocate maintaining an emphasis on delay costs, because it will act as *de facto* growth control, preventing the over consumption of current public goods because a regime based on delay costs creates higher uncertainty in the market of land making development projects less attractive for developers. On the other hand, neighborhood associations will prefer a regime that reduces delay and maintains a high level of direct costs, since this combination can foster economic growth. The reason for this preference is, in general terms, neighborhood associations are more interested in revitalizing communities than in stopping growth alone.

Hypothesis 10: Cities with higher rates of ownership are more likely to rely on antigrowth regimes than any other type. In addition, the higher the ownership rate in a community, the more likely the community will have any of the regimes with a high level of delay.

Hypothesis 11: Cities where homeowner associations are more active in supporting growth managements are more likely to rely on antigrowth regimes than in any other type. In addition, the stronger the activism in a community the more likely the community will have any of the regimes with high level of delay.

Hypothesis 12: Cities where neighborhood associations are more active in supporting growth managements are more likely to rely on antigrowth regimes than in any other type. In addition, the higher the activism of these groups in a community, the less likely the community will have any of the regimes with high level of delay.

The fourth group playing NIMBY politics is formed by white communities. Wealthy white communities are homogeneous and well organized in preventing local unwanted land uses as well as the protection of the livability in the community (Sharp, 2003). These groups are expected to deter the adoption of growth machine regimes and champion the adoption of antigrowth regimes. These groups will have a preference for any type of regime that does not facilitate growth, regardless of its impact on housing affordability or any other social concern.

Hypotheses 13: Cities with a higher percentage of white population are more likely to rely on a regime with high delay and direct costs than in a growth machine regime. In addition, the higher the proportion of white citizens in a community, the more likely that the community will have any of the regimes with high level of delay.

C. Political Institutions.

In both the property rights and interest group models, political institutions are largely transparent to the underlying economic or political forces driving land-use policy. This is a serious oversight; political institutions are crucial mediators of political and economic forces and will influence policy dynamics that shapes LURs. To remedy this situation, Lubell, Feiock, and Ramirez (2005) offer a “political market” framework of policy change that combines political economy theories of property rights (Alston, 1996; Eggertsson, 1990; Libecap, 1989; Lubell et al., 2002) with the interest group framework. The political market framework focuses on how the influences of political and economic forces are conditioned by the structure of institutions of local governments (Clingermeyer & Feiock, 2001; Ostrom, 1990, 1999). The political market framework argues that the structure of political institutions interacts with the structure of interest groups, because they affect the ability of interest groups to articulate their demand in the political market, and the willingness of elected officials and bureaucrats to supply preferred policies.

Hence, the political market framework encompasses both traditional perspectives. The political market framework conceptualizes policy and institutional change as the result of a dynamic contracting process between the suppliers and demanders of regulation in a community (Alston, 1996; Libecap, 1989). Generally, the demanders are

private interests in the community, and the suppliers are the government authorities (Schneider, 1989). Interest group demands of land use regulations are driven by local economic changes, such as land scarcity. In return for political support elected officials will supply land-use policies that affect the utility of different social interests.

More importantly, the political market approach assigns a central role to the structure of local government institutions as the arena in which political contracting occurs. Political institutions combine with the structure of interest organizations and the economics of land-use to determine the outcome of political contracting. Different types of political institutions will favor different interests, either enhancing or reducing the ability of interests to influence land-use policy. In other words, the structure of local political institutions determines the winners and losers in the land-use regulation game by interacting with interest groups in each policy arena. In contrast to the property rights model, this perspective heavily emphasizes the distributive consequences of policy change. For instance, I will develop the idea that district-based elections in the community will favor NIMBY groups, organized to resist specific unwanted land-uses, which facilitates the adoption of their preferred regimes.

Political institutions can explain the willingness of communities to impose various regulatory costs on developers, explaining how local political institutions influence the configuration of land-use regulation in a community. The theoretical underpinning of this role is derived from the study of structural reforms introduced during the Progressive Era and builds upon several decades of institutional scholarship on local governments (Lineberry & Fowler, 1967; Ostrom, Bish, & Ostrom 1988; Ruhil, 2003; Schneider, 1989). Local political institutions determine the rules and procedures for making collective choices. These rules and procedures are embodied in the structure of local legislative and executive institutions, both of which exhibit substantial variances across local governments.

The structure of the executive branch can shape incentives to form some types of regimes. Form of government is generally defined in the city charter; they are typically classified as commission-manager, mayor-commission, and commission only forms. The commission form of government has been frequently depicted as corrupt or at least incompetent (Morgan and Kickam, 1999; DeSantis and Renner, 1994).

During the progressive reform movement, municipal reformers attempted to weaken mayoral power within city politics. The main thrust of the commission-manager form is that there is a centralized professional executive who is in charge of daily county administration. Professional norms or standards of administration underscore the significance of the role of planning in local land use (Renner 2001). Executive leadership can lower coordination costs among diverse interests. Strong local executives may function as growth management entrepreneurs (Schneider and Teske 1995; Feiock and Taveras. 2002; Feiock 2003).

Extant literature suggests two different hypotheses about the role of appointed managers in land use regulation. One is the “insulation hypothesis” and the other is the “planning hypothesis.” The insulation hypothesis states that city managers are insulated from interest demands and political pressures from the community (Lineberry and Fowler 1967; Marando and Thomas 1977). In addition, professional managers have been linked to successful promotion of efficiency in the administration of city affairs and economic development (Stein 1990; Teske and Schneider 1994; Ruhil et al., 1999). The insulation of city managers predicts that managers increase the costs of participation territorial interests because it is more costly for them to influence the formation of the regime. Professional managers will favor the adoption of more efficient regimes. For instance, they will favor the adoption of a regime with emphasis on direct costs than a regime with emphasis on delay costs.

The planning hypothesis argues that the professional training and socialization of city managers makes them responsive to needs for comprehensive planning as well as growth management. Almost 60% of city managers hold a Master’s Degree in fields like public and business administration or public policy (Renner, 2001), which grant them a certain degree of authority to execute their job. The planning hypothesis assumes that managers’ preferences are shaped by the norms of professional planning associations and public administration schools, which stress the importance of smart growth as a way to resolve conflicts among conflicting goals as well as interest groups (Nalbandian, 1989).

This hypothesis states that rather than being neutral, appointed managers have biases toward modern planning ideas. This hypothesis predicts that cities with appointed managers will favor the formation of an antigrowth regime over any other regime.

Public managers may prefer highly regulated markets that give them more discretion to decide on the characteristics of a project. A regulatory regime with a high level of potential delay can allow a manager to delay those projects that do not contribute to the achievement of city goals. In such a case, public officers will prefer a LUR that offers them more discretion to delay or speed up a project than a growth machine regime. Also, public officers would be in favor of the implementation of impact fees when they contribute to achieve the city's goals as well as other direct costs, but in no case will they favor the adoption of regimes with a low level of potential delay. Therefore, the configuration least wanted by appointed managers is the one that generates a low level of delay at the same time that it imposes low direct costs, because this LUR does not give them important discretion to decide on the convenience of a given development.

In addition to the form of government, other important institutions shape a land use regime, such as the form of representation: by district based or at-large elections. On the one hand, district elections reduce the costs for representation of territorial interests, particularly NIMBY interests, because a district representative is likely to depend upon support from geographical interest and constituencies (Clingermayer and Feiock, 1993). District based elections can make representatives responsive to environmental concerns about growth and development.

On the contrary, representatives elected at-large serve a citywide constituency and are more likely to think in aggregated terms. At-large elections force council members to respond to a broader set of political interests than those found in a single district. For this reason they are more likely to respond to well-organized interests, which can provide instrumental political resources over territorial-based interests. To summarize, while district based elections are more likely to amplify responsiveness to territorial interest that support regimes with a high level of potential delay; at-large based elections are more likely to amplify organized pro-growth interests which are more likely to support a regime with a low level of potential delay.

Recent work reveals that when local policies such as urban growth boundaries are made through direct democracy institutions, it advantages anti-growth interests (Gerber and Phillips 2004a; 2004b). The rationale is that dispersed interests such as environmentalists and territorial groups will be able to influence the protection of their

interests by the use of mechanisms of direct democracy. In Florida, one of the most common mechanisms used to encourage decision-making by direct democracy is the provision for citizens' initiative. A straight forward hypothesis that emerges from these findings is that in those cities where the initiative is used for direct participation, a growth machine regime is more likely to be formed than any other regime. Next, I summarize the arguments derived from the political markets framework in a series of hypotheses.

Hypothesis 15: Cities with a provision for initiative are less likely to rely on a growth machine regime than any other regime type.

Hypothesis 16: Cities where mayors have veto power are less likely to rely on an antigrowth than any other type of regime.

Hypothesis 17: The more seats in the city's council, the more likely that a city will adopt a growth machine regime.

Hypothesis 18: The more seats elected at large in the city's council, the more likely that a city will adopt a growth machine regime.

Hypothesis 19: Cities with a mayor–council form of government will be more likely to rely on a growth machine regime than any other regime type.

Hypothesis 20: Cities in which a mayor-council form of government interacts with strong activism of developers are more likely to rely on a growth machine regime than any other regime type.

Hypothesis 21: Cities in which a manager form of government interacts with urban sprawl as an issue in the community are more likely to rely on an antigrowth regime than any other type of regime.

The following Section introduces the analysis of land use regimes that test the hypotheses elaborated in this section. The Section introduces the instruments that are used in the State of Florida to protect quality of service provisions and public goods.

CHAPTER III

ANALYSIS OF LAND USE REGULATION FORMATION

The 1985 State Comprehensive Plan (Chapter 187, Fla. Stat.) and the Omnibus Growth Management Act placed Florida in a leading role among states to manage growth (DeGrove 1989). The 1985 Growth Management Act represents a major change in Florida's approach to growth management and land use regulation because the state assumed a stronger leadership to protect the public good through growth management. Consistent with smart growth practices, the GMA identified the desired outcome of the state growth and mandate standards for growth management practices. The Florida Growth Management Act requires all 410 municipalities to adopt Local Government Comprehensive Plans that guide future growth and development (Chapter 163, Part II of the Florida Statutes, The Local Government Comprehensive Planning and Land Development Regulation Act). These plans offer opportunities for local governments to achieve goals related to their revenue to pay for growth, develop public policies, and enhance their political control over urban expansion and growth. Therefore, the GMA offers an impressive potential for innovation on the use of land use regulations and the creation of land use regimes. The remainder of the Section presents the variables that test the hypotheses presented in the previous section, in the arena of protection of public services in the State of Florida.

A Cross-Sectional Analysis

The Dependent Variables: Protection of Services Provision

The dependent variable for the following analysis is the particular regulatory regime formed to govern land use in a community. The dependent variable includes four categories which correspond to the four regimes described in Section 2. I create these

categories by combining two indexes, an index of direct costs which incorporate the costs that impacts fees imposed on new developments, and an index of delay that is based on the stringency of the standards for service provision with which new developments need to comply during concurrency reviews.

In order to protect the quality of service provision, cities in Florida make use of two instruments: concurrency reviews and adoption of impact fees. The 1985 Act introduced the concept of concurrency. In other words, the concepts states that proposed developments are not supposed to be approved unless adequate public facilities are in place to meet the needs of the proposed development. The act required that new developments were approved as long as they did not affect public services below the adopted level of service. Chapter 163, Section 163.3180, mandates that six infrastructure systems must be included in the local concurrency system: transportation, potable water, sanitary sewer, parks, solid waste and storm water management. Therefore, concurrency conditions new developments to the availability of public facilities and is primarily intended to control the timing of development.

Stringent standards for concurrency review create delay for new developments. These regulations may delay construction of new developments by delaying development until adequate infrastructure is in place or until given quality standards are achieved. Higher standards are always related to longer reviews and additional steps and stages during the review process and they are expected to be correlated with a high delay during the construction process. In addition, high standards threaten new developments to wait when infrastructure is near the threshold that allows new developments. These standards are the base to create the delay costs index.

The second index is based on the amount new constructions pay for impact fees. The objective of impact fees is to ensure adequate capital facilities to support new development (Dresch and Sheffrin, 1997). Impact fees are monetary charges imposed by local governments on new developments to pay their share of public capital facilities required to accommodate such developments. However, these fees are mostly derived from land-use regulation and not from revenue or taxation programs. In the absence of impact fees, communities need to rely on general funds, federal dollars, and bonds to pay for infrastructure, which transfers the cost of new infrastructure on existing residents.

The index of impact fees use the per-capita amount of fees collected by a city for public safety, physical environment, human services, economic environment, and other concepts. Table 1 summarizes the variables included in each index.

Table 1 Regulations that protect services provision variables	
Delay Costs	Direct Costs
Level of Service (LOS) Standard for Potable Water	Per capita revenue from Impact Fees of Public Safety
Standard for Level of Service for Sewer Provision	Per capita revenue from Impact Fees of Physical Environment
Standard for Level of Service for Parks	Per capita revenue from Impact Fees of Human Services
Standard for Level of Service for Solid Waste	Per capita revenue from Impact Fees of Economic Environment
Standard for Level of Service for Storm Water	Per capita revenue from Impact Fees of other concepts

Explanatory Variables

Measures that capture the impact of property rights variables are expected to have particular impacts on each index. The following tables present the measures used for each variable. Each table presents variables and measures corresponding to the three explanatory frameworks tested in this analysis. Table 2 provides variables and measures used to test hypotheses developed from the property rights framework, table 3 presents interest groups variables and measures, and table 4 delivers variables and measures that operationizes the hypotheses from the framework of political institutions.

Table 2 Property Rights Variables	
Variable	Measure
Population Density	Inhabitants per sq mile
Population 2000	Population in 2000
Population Change 90-00	Population change from 1999 to 2000
School Crowding	Class size in school district
Water Supply	To what extent water supply is an issue in the community
Urban sprawl	To what extent urban sprawl is an issue in the community
Affordable housing	To what extent supply of affordable housing is an issue in the community

Table 3 Interest Groups Variables	
Variable	Measure
Percentage of White Citizens	Percentage of white population in the city
Median Income	Median income in the city
Proportion of establishments for tourism	Proportion of establishments dedicated to provide services of alimentation and accommodation of the total number of commercial establishments
Percentage of homeownership	Percentage of homeownership in the city
Neighborhood associations	Extent to which neighborhood associations are active in supporting growth management in the city
Environmental groups	Extent to which environmentalist groups are active in supporting growth management in the city
Developers	Extent to which developers are active in supporting economic development in the city
Homeowner Associations	Extent to which homeowner associations are active in supporting growth management in the city

Table 4 Political Institutions Variables	
Variable	Measure
Initiative Provision	Provision for initiative in the city
Mayor Veto	Mayor's veto power
Council seats	Number of seats in the council
At large seats	Number seats elected at large in the council
Mayor- Council Government	Mayor-council form of government
Mayor and Developers	Interaction term mayor-council form of government and active developers
Managers and Sprawl	Interaction term manager form of government and the extent to which urban sprawl is an issue in the community

Data collection

Data on land use regulations was collected from the database of the Municipal Code Corporation. The Municipal Code Corporation provides in its data set information on the Municipal Code of approximately 120 cities in Florida. Information for other cities was also collected directly from the cities websites. The information of the Municipal Codes was also complemented with the cities' comprehensive plans stored at

the Department of Community Affairs. Among the elements contained in these plans, the future land-use element will be valuable to identify some of the variables that will be used to create the four components of land-use regulation regimes.

A number of variables were also collected from the International City Management Association’s (ICMA) 2001 Municipal Form of Government Survey. This data was complemented with information from the cities’ websites for those who did not respond to the ICMA survey, as well as a telephone survey. Some control variables as well as others that test property right hypotheses were collected from the US Census Bureau – Census 2000 data for the state of Florida. Finally, data on land uses used to measure control variables was collected from the Florida Department of Environmental Protection’s website.

In addition, some measures on the level of activism of interest groups in the community were collected from a survey conducted by Richard C. Feiock and sponsored by the DeVoe L. Moore Center in 2002. This survey collected information on growth management practices in Florida and provided unique information not available in archival sources. Tables presented next offer information on the source that was used to collect each measure. The first table offers the sources for measures of direct costs and the second for delay costs. The following tables offer the sources of measure for measure of each explanatory framework.

Table 5 Dependent Variables	
Direct Costs Variables	Source
Per capita revenue from Impact Fees of Public Safety (2004)	Florida Department of Financial Services
Per capita revenue from Impact Fees of Physical Environment (2004)	
Per capita revenue from Impact Fees of Human Services (2004)	
Per capita revenue from Impact Fees of Economic Environment (2004)	
Per capita revenue from Impact Fees of Culture/Recreation (2004)	
Per capita revenue from Impact Fees of Other concepts (2004)	

Table 5-continued	
Delay Costs Variables	
Water LOS Standard	Municode Corporation and Comprehensive Plans
Sewer LOS Standard	
Parks LOS Standard	
Solid Waste LOS Standard	
Stormwater LOS Standard	

Table 6 Property Rights Measures	
Variable	Source
Inhabitants per sq mile	US Census Bureau – Census 2000 data for the state of Florida (www.census.gov/census2000/states/fl.html)
Population in 2000	US Census Bureau – Census 2000
Population change from 1999 to 2000	US Census Bureau – Census 1990 and 2000
To what extent school crowding is an issue in the community	2002 Survey
To what extent water supply is an issue in the community	2002 Survey
To what extent urban sprawl is an issue in the community	2002 Survey
To what extent supply of affordable housing is an issue in the community	2002 Survey

Table 7 Interest Groups Measures	
Variable	Source
Percentage of white population in the city	US Census Bureau – Census 2000
Median income in the city	US Census Bureau – Census 2000
Proportion of establishments dedicated to provide services of alimentation and accommodation of the total number of commercial establishments	US Census Bureau Zip Code Business Patterns –2002
Percentage of homeownership in the city	US Census Bureau – Census 2000
Extent to which neighborhood associations are active in supporting growth management in the city	2002 Survey
Extent to which environmentalist groups are active in supporting growth management in the city	2002 Survey
Extent to which developers are active in supporting economic development in the city	2002 Survey
Extent to which homeowner associations are active in supporting growth management in the city	2002 Survey

Table 8 Political Institutions Measures	
Variable	Source
Provision for initiative in the city	2002 Survey, Telephone survey, and websites
Mayor’s veto power	2002 Survey, Telephone survey, and websites
Number of seats in the council	2002 Survey, Telephone survey, and websites
Proportion of at large elected seats in the council	2002 Survey, Telephone survey, and websites
Mayor-council form of government	2002 Survey, Telephone survey, and websites
Interaction term mayor-council form of government and active developers	2002 Survey, Telephone survey, and websites
Interaction term manager form of government and the extent to which urban sprawl is an issue in the community	2002 Survey, Telephone survey, and websites

Variable	Source
Metro Area	US Census Bureau – Census 2000
Area covered by water	Florida Department of Environmental Protection (www.dep.state.fl.us/gis/gis/datadir.asp)
Area of medium density housing	Florida Department of Environmental Protection (www.dep.state.fl.us/gis/gis/datadir.asp)
Area of high density housing	Florida Department of Environmental Protection (www.dep.state.fl.us/gis/gis/datadir.asp)
Housing units built in 2000	US Census Bureau

Outline of the Analysis

The first part of the analysis consists of the creation of the dependent variables, which captures the concept of land-use regimes. First, using variables from Table 5, I created two additive indexes to measure the two dimensions from which the four regimes are identified. The first index captures the extent to which a land-use regime delays development by imposing high standards for new developments. The variables that were included to construct this index were the standards for service provision for the following services: potable water, sewer, solid waste, parks, storm water and timing for provision. In the first part of the construction of index, for each service I divided the cities in two groups, cities with standards below and above the mean for each service. Each service in which a city has standards for a service provision above the mean is coded with a 1. For example, for storm water, the mean value was a 30.9 years storm event; if a city had a standard higher than 30.9 years, it was coded 1, 0 otherwise.

Once all services standards were coded, they were added up for each city. A city could have a maximum score of 6 and minimum of 0. A city with a score of 6 is a city with a high level of standards for all services as well as timing for its provision, however, the maximum actual score for a city was 5. The mean score for all cities was 1.7. I used this score as the threshold that divides high delay from low delay cities. Each city with a score of 2 or higher was recoded as 1, a score lower than 2 was recoded as 0. This final score defines whether a city is imposing a low or high delay.

The second index was an additive index that included all impact fees collected by a city. The index aggregated the fees for physical environment, recreation, economic environment, human services, public safety, transportation, and other concepts. The total amount of fees collected by a city was divided by the number of permits issued in for construction. The mean amount of fees for a new unit was \$1,034 US Dollars. In base to this index, I use the mean amount collected by unit as a threshold between cities with high and low direct costs. I divide cities between those collecting more or less than the median sum collected. Those cities collecting more fees per unit were coded as 1 and those collecting less than the median were coded as 0.

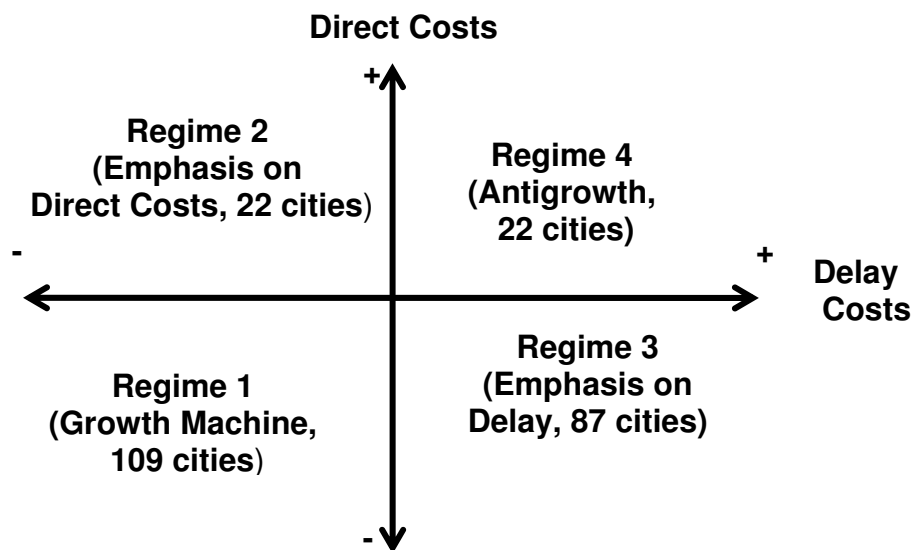


Figure 2. Number of Cities by LUR in the Arena of Provision of Public Goods

All regimes were recoded to identify the categories that correspond to the four regimes presented in the previous section and were the base for the creation of the independent variable land use regime. Once both indexes were created I created a new variable that differentiates between the four types of regimes. A new variable was created with the sum of the two indexes. A city whose score was 0 was coded as a growth machine, while a city that scored 2 was coded as an antigrowth machine. The

cities that scored 1 were recoded to identify their category, either based on delay or based on direct costs depending upon the index in which they were high. Figure 2 presents the frequencies of each regulatory regime. Once I created the nominal variable with the four categories, I performed a multinomial logistic regression using this variable as the regression and the set of independent variables presented above as regressors. Next, I present the results of the analysis.

Results

Table 10 presents the results provided by the multinomial logistic analysis. The pseudo R^2 of the model showed an adequate fit of the model, taking into account the cross-sectional nature of the data. In addition, the Chi^2 test also shows an adequate overall fit of the model. Table 10 provides in each column the comparison between two types of regimes. From regime X to regime Y, a significant positive sign denotes a tendency towards regime Y over regime X. Each column is divided in four sections, one for each set of hypotheses tested, including one for control variables.

Property rights variables. The results showed almost no support for Hypotheses 1 through 4 that tested the property rights framework. Only Hypotheses 2 obtained some support. Cities that experience faster population growth over the last decade are more likely to rely on an antigrowth machine regime compared to a regime based just on delay. The rest of the Hypotheses showed no support for the theoretical framework tested. In fact, Hypotheses 1 and 3 showed significant results opposed to the expected direction. Densely populated cities, as well as cities where school crowding is an issue, are more likely to rely on a growth machine regime compared to regimes with either high delay or high direct costs.

In general the results show that, holding the rest of the variables constant, population density areas are more likely to rely either on an antigrowth regime or a growth machine regime. The more densely distributed is the population in a city, the less likely that it will rely exclusively on only one type of costs, because it is more likely that it will either rely on growth machine or antigrowth regime than in regimes of only high delay or direct cost. The results shows that population changes are significantly

associated with cities that prefer growth machine regimes. Population change in the last decade encourages the formation of antigrowth regimes over any other type.

Table 10			
Multinomial Logistic Regression Output: Regime Comparison 1			
	Growth Machine (base) Vs High Direct Costs	Growth Machine (base) Vs High Delay Costs	Growth Machine (base) Vs Anti-Growth
Property Rights			
Density	-0.010	-0.006**	-0.001
Population Change 90-00	0.011	-0.006	0.021
School crowding	-0.767*	-0.220	-0.088
Water supply	0.538	0.342	-0.045
Urban sprawl	-1.670	-0.891	-15.446
Interest Groups			
Percentage of White Citizens	0.192***	0.043**	0.056
Percentage of homeownership	-0.253***	-0.067	0.044
Neighborhood associations	1.033	-0.305	0.308
Homeowner Associations	-1.506*	-0.330*	0.743
Environmental groups	-1.023	0.480	0.111
Proportion of establishments for tourism	-93.266***	-19.992*	11.158
Developers	-1.351**	-0.817*	-1.028
Median House Value	-0.036**	0.004	-0.034**
Housing units built in 2000	12.248	18.715	-31.921
Political Institutions			
Initiative Provision	1.883	1.417*	2.006
Mayor Veto	2.825*	0.142	1.174
Council seats	-1.605**	-0.233	-0.617
At large seats	-3.759*	-1.481	3.103*
Mayor– Council Government	5.443**	2.138	0.903
Mayor and Developers	1.850	0.630	-20.021
Managers and Sprawl	2.934	1.132*	16.153***
Control Variables			
Metro Area	0.770	-0.424	-1.617*
Population 2000	0.210***	0.130***	0.014
Area covered by water	0.260**	-0.050	0.123
Area of medium density housing	-2.012***	-0.776***	-0.065
Area of high density housing	-2.354***	-1.693***	-0.311
Constant	21.892	5.718	-6.192
* = p < 0.10		Number of obs =124 Prob > chi2 = 0.0001 Pseudo R2 = .423	
** = p < 0.05			
*** = p < 0.01			

One plausible explanation of why issues related to a public goods provision do not trigger land-use regulation response is that such issues may be addressed by other policies and programs that do not harm development interests. Problems related to issues such as school crowding can trigger other type of responses that do not necessarily affect the land market and under the control of school districts, such as higher property taxes.

Interest Groups. The results provided by the test of Hypotheses related to interest groups' framework offer more significant results. The first hypothesis is fully supported by the analysis is that the stronger the development community in a city, the more likely such a city is associated with a growth machine regime. The results strongly support Hypothesis 6, since the more active developers are in the community, the more likely the city relies in a growth machine regime than on any other regime. Hypothesis 7 is partially supported by the results. The higher the mean value of houses, the more likely the city relies in growth machine regimes than in regimes with high direct costs or in antigrowth regimes. In general the results showed that cities with higher median value tend to be less associated with regimes of high direct costs. Hypothesis 8 is only supported in part by the results. Holding the rest of the variables constant, the more housing units per-capita are build in a city, the less likely the city relies on a growth machine regime than on a regime with high direct costs.

In general these results suggest that the average house value measures the importance of the market for developers. The incentives for them to prevent delay during development are higher in those cities, which is why this measure evaluates the strength of developers. Since the pay-off is higher in these cities, the incentive to overcome collective action problems are also higher.

Hypothesis 8 is supported only in part by the results. The larger the proportion of commercial units for services related to tourism the more likely the city relies on a growth machine regime compared to regimes with either high delay or high direct costs. However, the results suggest that the larger the proportion of these establishments in a city the more likely it relies on growth machine regimes compared to regimes with only high delay or only high direct costs. In addition, the larger the proportion of these

establishments, the more likely the city relies on high delay compared to high direct costs.

These results suggest that development interests reject the use of only one type of high cost; they prefer highly regulated or low regulated regimes. These results suggest that their proportion is higher in two types of cities, cities that have a vocation for growth and a very active commercial industry, dominated by the growth machine; as well as in communities dominated by antigrowth exclusionary interests.

Interest groups, such as homeowner associations, and communities with a high percentage of white population, that are expected to champion antigrowth regimes resulted also statistically significant in its association with the land use regime in the city. Cities with a high percentage of white population or active homeowner associations are more likely to rely on an antigrowth regime than on a growth machine regime. However, when comparing all four regimes, there are some differences on the effect these groups may have. First, the higher the percentage of homeownership in the community, the more likely it will rely on a growth machine regime than on the use of a single type of high cost. In addition, the more supportive neighborhood associations are to growth management (or the higher the percentage of ownership) the more likely that a city will rely on an antigrowth regime than on a combination a single high cost. Second, cities with a higher percentage of white population tends to reject growth machine regimes, relying more on regimes that have at least one of the two types of high costs.

In regard to Hypothesis 9, the results only support in part its prediction. However, the results are very significant for the expectations of the land use regime model. Environmentalists seem to be more active in cities that rely more on delay costs, compared to cities that rely on high direct costs which have been suggested acts as de facto growth containment.

Hypotheses 10 and 11 are also supported in part. The higher the percentage of homeowners or the more active the homeowner associations are in the community in supporting growth management, the more likely those cities rely on antigrowth regimes, or at least in regimes with high levels of delay. These findings are supported by the results that suggest that homeowners' prefer antigrowth regime over high in direct costs, as well as a regime with high delay over a regime high in direct costs. However, the

results strongly reject the idea that these groups will avoid growth machine regimes. In fact these groups seem more active in growth machine regimes than in regimes with either only high direct costs, or only high delay. These contradictory findings suggest that these groups are more active in two clusters of cities: cities with anti-growth regimes as well as cities with growth machine regimes.

A similar situation occurs with Hypothesis 12. Cities with active neighborhood associations tend to rely more on growth machine regimes than in regimes with high levels of direct cost or high delay. The expectation that these groups prefer high direct costs over high level of delay is confirmed. The results suggest that these groups are more active in cities that rely on high direct costs than in those relying in high delay. One possible explanation of this situation is that homeowner associations are distinctively different from neighborhood associations. While homeowners tend to dislike any growth that jeopardizes their quality of life, some neighborhood associations are formed to welcome growth that contributes to either revitalize the area or preserve a vibrant economy.

Hypothesis 13 also receives support. The higher the percentage of white citizens in a community, the more likely it relies on at least one type of high cost than in growth machine regimes. In few words, the higher the percentage of white citizens in a community the more likely it avoids a growth machine regime.

However, the higher the percentage of white citizens, the more likely a community relies on high direct costs compared to a regime based only delay or on an antigrowth regime. These findings suggest that the higher the percentage of white citizens in a community, the more likely this community will pass the cost of growth to new residents.

Political institutions. Three political institutions are relevant to understand the land-use regime formed in a city. First, the existence of initiative appears to provide an instrument that fosters the adoption of high delay in communities. Cities that have a provision for referendum are more likely to rely on regimes with high delay than on growth machine regimes. This finding supports Hypothesis 15.

Hypothesis 16 suggests that veto power for mayors capture the extent to which mayors have strong political power in the council. This hypothesis receives some support

from results since the cities in which mayors have veto power are more likely to rely on direct costs than in delay. A result that somehow contradicts the expectations is that cities with veto power are more likely to rely on high direct costs than on a growth machine regime. However, these findings support the idea that mayors, as part of the growth machine coalition, will prefer to adopt any type of direct cost than delay, when some protection to the quality of public goods is needed.

The number of council seats that a city elects at-large elections also has a significant effect on the election of an antigrowth regime. This finding supports Hypothesis 17, the higher the proportion of at-large seats in a council, the more likely a city relies on a growth-machine regime compared to any other regime type. In addition, the more seats the council has, the less likely that the city relies in high delay compared to a regime with only high direct costs.

Hypothesis 18 based on the proportion of seats elected at-large, receives some contradictory results. The results suggest that contrary to the expectation of the model, the more seats elected at-large in a city council, the more likely the city relies on a growth machine regime compared to the regime high in direct costs. However, there is strong evidence that more at-large seats a city has, the more likely it relies on antigrowth regimes than in regimes with either high direct or high direct costs.

The form of government offered partially unexpected results. Hypothesis 19 predicted that a mayor form of government will foster the adoption of a growth machine regime. However, the results suggest that cities in which mayor-council is the form of government are more likely to rely on a regime with high direct costs than in a growth machine regime. Although this result is unexpected, it suggests that in cities in which some protection to public goods is needed; mayors prefer to adopt a regime with emphasis in direct costs avoiding regimes with high delay.

Interaction terms tested Hypotheses 20 and 21. Hypothesis 20 did not receive support from the results although the sign of the results occurred in the expected direction. Hypothesis 21 was fully supported by the results. The result suggest a strong association between the interaction of urban sprawl with manager-council forms of government and cities that are less likely to rely on a growth machine regime than on any

other type of regime. In addition, an antigrowth regime is preferred over any other type of regime.

Table 11			
Multinomial Logistic Regression Output: Regime Comparison 2			
	High Direct Costs (base) Vs High Delay Costs	High Direct Costs (base) Vs Anti-Growth	High Delay Costs (base) Vs Anti-Growth
Property Rights			
Density	0.004	0.009	0.005
Population Change 90-00	-0.018	0.010	0.027**
School crowding	0.547	0.678	0.131
Water supply	-0.196	-0.583	-0.387
Urban sprawl	0.779	-13.776	-14.555
Interest Groups			
Percentage of White Citizens	-0.148***	-0.136**	0.013
Percentage of homeownership	0.185**	0.296***	0.111
Neighborhood associations	-1.338**	-0.725	0.613
Homeowner Associations	1.176	2.249**	1.073
Environmental groups	1.503**	1.134	-0.369
Proportion of establishments for tourism	73.275**	104.425***	31.150*
Developers	0.535	0.323	-0.212
Median House Value	0.039**	0.002	-0.038***
Housing units built in 2000	6.467	-44.169*	-50.635
Political Institutions			
Initiative Provision	-0.467	0.122	0.589
Mayor Veto	-2.683*	-1.652	1.032
Council seats	1.372*	0.988	-0.384
At large seats	2.278	6.863***	4.585***
Mayor– Council Government	-3.305	-4.540	-1.235
Mayor and Developers	-1.220	-21.871	-28.651
Managers and Sprawl	-1.802	13.218***	15.021***
Control Variables			
Metro Area	-1.195	-2.388**	-1.193
Population 2000	-0.081	-0.196**	-0.116**
Area covered by water	-0.311***	-0.137	0.174
Area of medium density housing	1.236*	1.948**	0.712*
Area of high density housing	0.661	2.043**	1.382*
Constant	-16.174	-28.084	-11.909
* = p < 0.10		Number of obs =124 Prob > chi2 = 0.0001 Pseudo R2 = .423	
** = p < 0.05			
*** = p < 0.01			

Finally, control variables also proved to have strong association with the regime that a city adopts. Cities in metro-areas are more likely to rely on antigrowth regimes than on any other type of regime. This finding may be explained in part by the competition between local governments to attract residents. Cities in metro-areas may avoid antigrowth in part because of their need to compete with neighboring jurisdictions. Metropolitan areas may create markets in which developers and residents can effectively vote with their feet and move their businesses elsewhere.

The larger the proportion of a city's area that is covered by water the more likely a city will rely on a regime that imposes high direct costs to new developments. Wetlands are a valuable natural resource that must be protected, and the more water in the city the more likely it has a regime with direct costs.

In addition, the larger the area used to accommodate medium and high density housing in a city, the less likely it relies on a regime with only one type of high cost. Also, the larger they are used to accommodate medium density housing, the more likely that the city will rely on an antigrowth regime. A high proportion of medium and high density housing generates the adoption of either antigrowth or growth machine regimes. This situation suggests, as other variables, the idea of two clusters of cities in the two extremes of the regulatory dimension.

Discussion

The results support the idea that the model of land-use regimes is a useful concept that provides a more rich explanation of how cities combine instruments to manage land-use and growth. The results show that once we differentiate between types of costs imposed on new developments, we are able to identify how interest groups support some particular combination of regulatory regimes that do not necessarily fit in the common dichotomy of high and low regulated markets. In addition, the role played by some political institutions in mediating the interaction of such groups also offers important findings to understand how regulatory regimes are formed.

The findings suggest that problems generated by issues related to growth and the increase of population density in communities do not directly trigger the adoption of growth machine regimes. Cities are likely to rely on other regimes to deal with such

problems. Some communities respond with only the adoption of only one type of high cost rather than both types.

In addition, highly populated cities, as well as cities with problems of affordable housing, are more likely to rely on growth machine regimes than on regimes that impose high delay to new constructions. This finding suggests that although communities may have an optimal size for service delivery, they also can explore possibilities to keep growing before slowing down or stopping new developments. For instance, densely populated cities may prefer to impose direct costs rather than delay new developments in order to protect the quality of service provision; which transfers to developers and new homebuyers the responsibility of paying for growth.

The results confirmed most of the expectations on how interest groups may influence the regulatory regime on which the city relies in order to secure favorable outcomes. The activism of developers and NIMBY groups such as homeowner associations and environmentalists, have in general the expected association with the regime in which the city relies. However, environmentalist groups appear to be more active in those cities relying on high delays as the principal costs in its regime, and even rejecting the adoption of impact fees that can grant to developers the right to built.

However, the analysis also offered counterintuitive results, such as the association of the proportion of homeowners and their activism with a preference for growth machine regime compared to a regime that uses a single high instrument to regulate land use. In other words, these groups appear to favor a more comprehensive approach by combining both types of high costs.

In addition, the results offered by the impact of the wealth of the community do not correspond with my expectations. High median income is associated with growth machine regimes more than with any other type of regime. These results may suggest that the possible direction of a causal effect may occur in the opposite direction. In other words, a growth machine regime generates high economic activity that results in higher median income in the community, which does not support the idea that wealthy communities become exclusionary. The variable that supports the idea of exclusionary communities is the percentage of white population in the community, since the higher this percentage the less likely that a growth machine regime will be formed.

Results also showed some significance in the association of political institutions with the type of regime in a city. First, mechanisms for direct democracy such as the provision for initiative appear to facilitate the adoption of standards for new developments that create regimes with high delays. Also, the political structure created by the form of government and its interaction with urban sprawl is associated with the creation of antigrowth regimes, which suggests that professional managers are willing to make use of all instruments at hand in order to deal with such problems.

Although the results suggest that the association between some political institutions favors the growth machine regime like in the case of the number of seats in the council or the existence of a mayor-council form of government, they are not conclusive and significant in this analysis. In addition, council members elected at-large are associated with antigrowth regimes, which do not fulfill the expectations of the model, since it was expected that council members elected by this form were champions of the growth machine. This situation may be explained by the interest of council members elected at large on the general well being of the community, by providing planning officials with all the possible tools for them to manage growth.

Finally, the results show that interest groups are aware of the multidimensional shape of land-use regulation. The analysis shows that interest groups like environmentalists are more supportive to regimes that both protect sensitive areas and increase the delay of new development than any other type of regime. In other words, their understanding of a regulatory regime also goes beyond the basic dichotomy between low and high regulated markets.

CHAPTER IV

DELAY IN THE IMPLEMENTATION OF THE LUR: EXPLAINING DELAY IN THE LAND DEVELOPMENT PERMITTING PROCESS

Whether delay of developments' approval is a mechanism to manage growth or just an unavoidable by-product of the regulatory processes can only be understood in terms of the social, political, and bureaucratic processes in which land use policies are imbedded. In any enterprise, time is money. But for the development of real estate, time is particularly valuable because costs caused by delays during construction of land are usually not recovered. Delays are events that postpone, extended or in any manner alter the schedule of completion of all or any part of the work (Rusteika, 1991). Delays may include deferrals, stops, slow-downs and interruptions, which generate hindrance, rescheduling, disruption, interferences, inefficiency, and productivity and production losses. Such delays can be caused by a variety of reasons and occur at various stages of the project until the unit built is occupied or delivered (Rusteika, 1991).

The framework in the preceding Chapter advanced the proposition that communities choose these types of policies at least in part because they provide more discretion to local officials and planning staff to encourage certain development and discourage others. This begs the question of how this discretion is exercised. What explains variation in the duration of the review process for new developments? What factors speed up or slow-down the review process to implement the LUR choices discussed in the previous chapter? After identifying the costs of uncertainty and delay in the development permitting process, this Chapter suggests that in addition to size, complexity, environmental conditions and other technical considerations that affect delay, the duration of permit approvals is influenced by the social desirability of development and structures of relationships among the network of planners, developers, and other actors involved in land use decisions. Relationships that convey trust and commitment are expected to reduce delay and uncertainty.

Delay in permitting has been widely studied in cases of compliance with regulations (Durant, 1984; Bozeman and DeHart-Davis, 1999; DeHart-Davis and

Bozeman, 2001; and Langbein and Kerwin, 1985). However, there is an important difference between the approach that delay takes in those studies and the one observed in my research. In their perspective, delay during the permitting process is observed as the result of the red tape and as a cost of complying with regulations. The cost of complying with regulations is mainly the result of dealing with red tape in government (Godsell, 1985). From their perspective, delay as a synonym of red tape is dysfunctional. In their perspective, delay should be avoided and eliminated because it is pathologic. In addition, when observed as a cost of compliance, it is frequently seen as a fixed cost because every applicant confronts the same administrative review.

From the perspective of my research, delay is the result of red tape as well as a fixed cost, but only in part. An important variation of delay can be observed as the result of negotiations between developers and the agency in charge of enforcing the compliance. In this negotiation, the use of discretion and flexible interpretation of development codes also affects the length of the review process. Because of negotiations and the flexibility of public administrators to interpret codes, some applicants may face longer delays compared to others in base to their reputation in the community and the relationship they have with reviewers. In addition, for the particular case of land development, permitting the complexity of complying with regulations not only highlights the importance of the developer's reputation but also, and more importantly, the reputation of agents that interact directly with reviewers. In addition, delay is also affected by the relationship between a developer, also known as applicant, and the agent that handle their projects.

The Permitting Process

The regulatory agency, commonly a planning department, carries the public trust of ensuring that standards defined in the LUR are met, the use of carefully documented and monitored quality assurance procedures is intended to secure the correct application of LUR. In addition to the implementation of LURs, local governments often introduce other reviews that a developer must pass before completing a unit of development. Building permits can also cover many aspects of the building codes such as environment

such as structural, fire safety, sanitation, energy and handicapped access (Loesch and Hammerman, 1996) or even the labor used for construction. However, delays generated by other regulations are out of the scope of this research because they are not directly linked to the politics of land use regimes, which is the focus of my dissertation.

In order to implement the LUR in Florida, local governments frequently introduces the following reviews in the permitting process: Land Use Compliance, concurrency determination, environmental impact assessment, subdivision approval and side plan approval. Land Use Compliance is the first step in the permitting process. It assesses whether a project is an allowable use of the location proposed in terms of the Zoning Code. The Growth Management Department compares the proposed project with the land development standards for a given property and determines if it is allowable. When the project is allowable, the Department issues a Land Compliance Certificate.

The second stage of permitting is the submission of the application for a concurrency determination. The application shows the impact that the project will have on public facilities, such as water, sewer, solid waste, parks, storm water and streets. In this stage, the Growth Management Department ensures that the capacity of public utilities and facilities is adequate to serve the project in question and does not impact or reduce the level of services below the acceptable standards.

The inventory of environmental features is intended to preserve significant environmental features and preserve them prior to land development. This inventory identifies all significant existing environmental features such as wetlands, water courses, significant forests, endangered species, and sinkholes among other features. When a site does not contain environmental features, the applicant may request an inspection waiver. If a project consists of the subdivision of property so the applicant can later develop and sell individual lots, subdivision plans need to be approved. The approval process as well as the time required varies on the size of the subdivision and other factors.

The site plan approval is required for all projects except small projects such as single family houses, duplex, triplex, quadraplexes, and commercial projects of less than 1,000 square feet. After receiving the land use approval, in the form of a site plan or a subdivision, the applicant is able to secure approval of the final construction plans, in the form of the Environmental Management and Building permits. The developers must

present details of the storm water system and landscape plans in order to obtain the Environmental Management permit, which allows the developer to begin site work. Finally, if a project involves subdivision of property, the applicant needs to complete all public facilities and to submit a final plan of the subdivision prior to applying for any building permit. Such public facilities include the streets, storm water ponds, water, and sanitary sewer mains. Reviews are used by local governments to ensure that new developments will meet standards for land use, not over-consume public infrastructure, local public goods or the natural environment.

As the applicant progresses through these stages of the permitting process, it becomes more complex. Inexperienced applicants frequently fail to comply with the process or simply do not understand it. In order to navigate through the process, a developer can hire an attorney or representative who is familiar with the stages of the application in order to facilitate the process. The use of agents to help developers navigate the review process can be exemplified with the case of land development permitting in Florida. For example, according to Kaya and Stieffel (2005), Tallahassee has a land development review process very complex with multiple stages that can be lengthy. Process requirements may evolve as a proposal develops and the staff may not be in a position to fully advise applicants until the first stages of the process have passed. For that reason, many proposals are managed by experienced consultants who understand the stages of the process and are able to smoothly negotiate its turns. There are also cases of small developers who make uninformed choices during the application and may have more difficulties predicting outcomes of various stages. Kaya and Stieffel's findings suggest that applicants who are more familiar with the regulations implemented during the review process, as well as with whom they need to negotiate, are able to overcome longer delays for new developments.

If the permitting process is seen as merely a review of compliance by an administrative process, a process of learning through experience will continually improve the performance of applicants (Dutton, Thomas, and Butler, 1984; Lieberman, 1987, cited by Bozemann 2001). Organizations with more experience in the permitting process are expected to be less likely to take long reviews because of their prior knowledge of the stages, procedures, turns and codes relevant to the permitting process. However, the

relationship between agents and developers, as well as the relationship between agents and reviewers of the Growth Management Department can also be seen as a principal agent problem. This situation, known also as “the agency problem,” may have counterintuitive impacts on delay. How the agency problem may occur in the permitting process, as well as it may impact the length of the review process, is explained below.

Negotiation in the Permitting Process and the Agency Problem

The permitting process can also be approached as more than a simple inspection that guarantees the compliance of projects with applicable standards and policies defined by the LUR. The idea of taking the review process as a mechanical enforcement of compliance, assumes that building and measurements regulations is unambiguous and easily applicable in any situation and project. However, many provisions that come from codes that standardize practices with an approach of “one size fits all” for reviews of projects, require the use of discretion. Without it, contractors may learn to ignore inspector’s behavior and recommendations (Burby, May, and Paterson; 1998).

Discretion is needed during the review process for two reasons. First, some policies and standards used during the review process are frequently subject to interpretation, and the interpretation of those standards not only varies from the point of view of the reviewer and the developer, it also varies from the point of view of reviewers from different departments of the local government. Second, while reviewing a new project, reviewers deal with the impact of proposed developments on several competing policies, which many times can be difficult to reconcile.

The need for discretion during the review process offers the possibility of studying the review process as a negotiation (Kaya and Stiffel, 2005). Different perspectives about how a project may impact those goals can raise controversies that are resolved through iterative processes of negotiation between planners who represent the interest of the community as a whole and developers who represent private interests.

This negotiated process starts with a project submitted by a developer. Developers submit projects with the specifications that maximize their benefits. Since the project submitted maximizes their benefits, developers have permanent priorities along the review process. First, they want their proposed project to be approved with the

minimum number of changes or none at all. Second, developers want to minimize the length of the review project in order to reduce financial and opportunity costs.

In this negotiation process, the first priority of reviewers is to ensure code compliance and to pursue public goals. However, strict enforcement practices have been widely criticized for increasing the costs of building projects and slowdown growth, particularly in central cities (Burby, May, Malizia, and Levine; 2000). By a strict enforcement of codes, reviewers can justify making changes and delaying the project as long as it is required in order to ensure that the project will contribute to the public goals. Using their discretion, reviewers can delay the approval of a project by interpreting policies and standards in a way that creates controversy and bring attention of other interest groups to the project. In this regard, reviewers can act as political entrepreneurs interested in promoting the public interest. Although reviewers may have constraint on the time they can legally delay the decision on the compliance of a project after a project is submitted for review, most parts of the negotiation take place before a project is submitted for review.

If studied as a negotiation, variations on length of the review process can be studied as the result of a principal-agent problem. The relationship between agents and developers can be approached as an agency problem. The agency problem arises when cooperating parties in a division of labor have different goals, such as in a relationship between managers and stockholders (Jensen and Meckling, 1976). Specifically, agency theory is directed to the relationship in which one party (principal) delegates a work to another (agent). In that case, choices and behaviors of the agent affect the welfare of the principal (Arrow, 1985). Therefore, agency theory focuses on the metaphor of a contract to understand the institutional arrangements created to resolve the problems generated within this relationship (Eisenhardt, 1989).

The main components of the agency problem are: (1) the interests of principal and agent are typically divergent, (2) the principal cannot perfectly and costlessly monitor the actions of the agent, and (3) the principal cannot costlessly acquire the information possessed by the agent. The costs incurred by the principal to get the information about the agent are called agency costs, and they would be prohibitive from the principal in certain situations. In this relationship, agents and principals have many incentives to

reduce as much as possible the agency costs. On the one hand, principals have incentives to reduce every cost that can affect their benefits. On the other hand, agents have some incentives to reduce agency costs because they can receive part of the benefits of reducing these costs.

The growing literature in principal-agent models has focused on explaining inefficiencies in the relationships between the principal and the agent as a result of information asymmetries and delegation. This research has produced explanations to understand under which conditions it is possible to achieve more efficient outcomes overcoming the problems of information asymmetry. The most promising solutions have been based on the alignment of goals between principal and agents, improvement of communication between principal and agents, and generation of relationships that ensure credible commitment and trust between principals and agents.

The first solution to this dilemma is to eliminate the number one assumption of the model, minimizing the divergence of preference between principal and agent (Ouchi, 1979, Eisehnardt, 1989). One option is creating outcome-based contracts to suppress agent opportunism. In this situation, contracts align the preferences of the agent with those of the principal because rewards for both depend on the same result; thus these contracts create incentives that reduce the self-interests conflicts between agents and principals. The second option is producing reliable information systems that reduce the opportunistic behavior among agents. These systems allow the agent to realize that s/he cannot mislead the principal. These systems can be addressed to measure two aspects the agents' behavior, and his/her outcome. Ouchi (1979) argues that which aspect is monitored depends on the tasks' characteristics and the ability to measure outcomes. If goals can be clearly stated and outcomes can be measured, then the appropriate technique is performance evaluation of outcomes. If tasks can be programmed and the relationship between outcomes and tasks is clearly defined, the strategy could be based on monitoring the agents' behavior. In the particular case of the permitting process, the extent to which particular projects provide socially desirable outcomes will be the preference of agents with those of professional planning staffs and may allow reducing the length of the review process.

Other solutions to the problem are frequently based on repetition of the game, either because it enhances credibility and reputation or because it improves communication between principal and agents. For example, Crawford and Sobel (1981) show that information plays a major role to achieve efficient equilibrium. Moreover, the results of communication are even better when the preferences of principal and agent are closely related. Sobel (1985) uses this model to show that, under certain circumstances, individuals build their reputation based on reliable behavior. In addition, when reliability can only be communicated through actions and reputation is a valuable asset, efficient equilibriums can be achieved.

Models that include disclosure of reliable information at the end of the game offer incentives for agents to reveal their preferences in advance. Stoken (2000) focuses on the credibility of managers' disclosure and shows how in a repeated game the "sender" almost always truthfully reveals his private information to the "principal." In the Stoken model, the equilibrium is achieved because investors eventually have access to reliable information about the benefits of certain investments.

If the agent can somehow punish the agent for misbehavior, a more efficient relationship may be achieved. For example, Radner (1985) examined the repeated principal-agent game. Radner uses review strategies to support a Nash equilibrium that cannot exist in a one shot game. In this game, player's action in every repetition of the game can be based on the history of the game. The repetition of the game allows the principal to observe the result of the agent actions over the number of periods and provide him information on agent's behavior and the opportunity to punish him for apparent naughtiness.

Approaching the land development permitting as a principal-agent problem is an adequate form to developing theoretical proposition to explain the occurrence of delay. Based on the agency model, delay is the result of a more careful and systematic monitoring of agents during the review process. Therefore, the first expectation of the model is that in such situations in which the preferences of agents and redevelopers are aligned, the review process should be shorter. The second is that conveyance of information through direct communication may affect also the length of the review

process. The third is that reputation of agents about their commitment to contribute to the public good of the community may have an impact on the length of the review process.

The fourth factor that may affect the review process is the agency problem that may occur between developers and agents. If for some agents their preferences are not aligned with those of developers, a delay may occur during the review process. The fundamental premise here is that if developers and agents have interacted repeatedly over time the length of the review process may be shorter than for permits that are a result of one time interaction.

Taking the review process as a multiparty negotiation, in the remaining part of this Section, I provide some testable proposition based on existing literature and empirical studies. These propositions are the first stage in the creation of testable hypotheses that could explain variations of length and delays during the implementation of the land use regime. These propositions are adapted to the specific case of land development permitting in base to the study of a particular case: the City of Tallahassee.

Social desirability and economic development. When development projects contribute to achieve policies openly pursued by their local government, the length of their approval may be shorter than average. Reviewers may be willing to expedite the review process if the project contributes to achieve other goals pursued by the city because it aligns the goals of principal and agents. From the growth machine perspective, the focus of local governments is economic development, which is derived from the advantages and incentives of interest groups that integrate the coalition. In this perspective, a city government maximizes revenue by facilitating growth. Literature in local governments has been dominated by the assumption that the only incentive of these governments is to maximize local wealth.

This perspective has been very influential in defining the role of local government regarding land use regulation since the first part of the 19th Century. In accordance with (Boschken 1977), the comprehensive structures and methods used to manage land use, stem from the Progressive Era and the desire to eliminate corruption in government and

promise orderly professional administration of the public interest with the State enabling legislation giving local governments authority over land use during the 1920's.

To achieve these goals, the public interest perspective promotes the participation of professional planners and appointed planning commissioners to political influences based on their technical reasoning (Fleischmann and Piernunzi 1990). In accordance with DeHaven-Smith (1984), the administrative perspectives of land use regulation pose that the regulatory processes should be hierarchical and tied to elected officials. From this perspective the behavior of regulatory agencies is shaped by organizational factors like procedures for decision making and the extent to which they are accountable to elected officials, the composition of decision making bodies and the way officers are appointed.

The expertise vision assumes that there is some type of public interest embedded in land use issues. Public interest can be better achieved when “land resources are at their higher and best use when they are used in such a manner as to provide optimum return to their operators or the society” (Boschken, 1977). Consequently, land use regulation can be used to direct, alter, and even suppress the price mechanisms based on expert technical advice. In addition, the public interest can be captured by some types of performance such as economic growth or increases of tax revenues.

Some cities may support a more progressive agenda over economic growth needs (Goetz, 1994). However, most frequently, local agencies are more responsible to citizens' demands from some areas or groups than others (Mladenka, 1981). Mainly, it is assumed that when local governments compete to improve their economic well-being by attracting residents and firms who can promote their interests by moving to another city they neglect other social groups (Tiebout, 1956; Eisinger, 1989; Peterson 1981; Lyons and Lowery 1986). These assumptions of the public choice perspective are supported by a common belief that a system of local land management does not work well because politics triumphs over expertise and public interests (Feischman, 1989).

Empirical studies have confirmed that economic development policies can also have an impact on the length of reviews. For instance, according to Plante (1999) the city of Chandler, Arizona can exemplify how cities may speed the review process for developments that demonstrate a major benefit to the city through the generation of taxes,

creation of high quality jobs, or major capital investments. For these projects the city assigns to the review process a high profile review team that by closer attention to the project can speed up the approval. The case of Chandler also illustrates how in order to foster economic development policies, cities can explicitly offer fast review processes. In this case, the interest for attracting economic development can encourage the review team's work load and negotiate with a developer an acceptable plan review turnaround time.

Proposition 1: A project that contributes to foster economic development will face less delay on the review process.

Applicant's characteristics: networking practices, reputation, and trust. The review process is technically complex. It includes sophisticated measures and forecasts of the impacts of new developments on local public goods, city amenities and environmental resources. Reviewers are expected to ensure compliance of projects with a side variety of codes included in the LUR. The level of sophistication of these reviews requires of deep knowledge of the applicable codes and validity of estimates of impacts presented by the applicants.

In order to deal with this complexity and clarify the expectations the particular interpretation that reviewers give to these codes and regulations, applicants or agents may be involved in a strategy of communication with reviewers. The tendency of individuals to be involved in strategies of communications with other members of a policy network like the one in charge of the review of building permitting can be interpreted as a particular type of management. According to Meier and O'Toole (2003) the behavioral manifestation of network management is characterized by an intensive interaction with environmental actors whose activities can impact their own performance. In this sense, policy networks may reduce delay in the application process by facilitating communication between different interest groups. Developers with a tendency to engage in networking practices will interact more frequently with all actors than developers with less focus on networking.

The implementation of a land use regime is embedded in a network of interests. Stakeholders attempt to reach reviewers with information conveyed through the network

of in which the review process is embedded. Granovetter (1973) argued that economic transactions can not be studied in isolation because they are embedded in a network of social interactions. The importance of the structure in which those social interactions take place, can explain apparent irrational behavior of individuals occurring in those transactions. The position that a person has within a network of social interactions can explain those irrational decisions. In the same sense, bureaucratic decisions are more than decisions taken within rational bureaucratic processes. For instance, a decision that delays the review process needs to be understood as embedded in a network of agents interacting, a network that includes members beyond the boundaries imposed by the formal organization. Competing explanations regarding an individual's position in a network can explain its power to influence other actor's decisions (Borgatti, Everette, and Freeman, 1991).

Developers who interact with more individuals among those who can affect the review process are likely to convey information faster and easier to reviewers. In the same token, it is not only important with how many others a developer is connected, but also how influential and well connected are those other individuals in the network. Measures that capture this idea are known as “measures of degree.”

Proposition 2: Agents who interact frequently with reviewers will have shorter reviews.

However, this hypothesis is challenged by a perception that sometimes excessive information only generates confusion. Although high levels of communication offer a good opportunity to resolve ambiguity on how reviewers interpret policies and regulations, when information is confusing and ambiguous the excess of communication can lead to higher delays (Bozeman, 2001). According to Bozeman (2001), ambiguity that may be compounded in the information environment is equivocal. In such situations the more information agents obtain, the more confused they can be about how to expedite the process, since higher volumes of information may increase contradictions and ambiguity.

It is also expected that when the applicant is believed to be trustworthy, reviewers can be less rigorous in questioning the validity and accuracy of technical delays provided in the project. This trust can be developed after frequent interaction either in the review of previous projects or in the interaction in other settings. Based on the importance of trust during the review process, it is expected that:

Extant studies of construction permitting frequently state the importance of partnerships and trust to accelerate the review process. Although the permitting review process is frequently seen as an adversarial one, there are remarkable examples of partnership that can benefit developers and reviewers by creating conditions for self regulation. The partnership between the Applied Physics Laboratory of the Johns Hopkins University and the Howard County Authority allowed the Laboratory to benefit from permission to make frequent alterations, modifications and repairs under a built-in quality assurance process without the delay inherent in the traditional building permit review and approval process (Loesch and Hammerman, 1996). With this partnership, the County benefits from the assurance that renovations and construction work is done in compliance with applicable codes without paying the costs of policing them. The partnership is based on trust, dedication to common goals, and an understanding of each others individual expectations (Loesch and Hammerman, 1996). Other examples of self regulation have also appeared in New York City and the Santa Clara County in California (Loesch and Hammerman; 1996).

The notion that partnerships between regulators and firms or individuals can foster voluntary commitment to comply with regulations has been widely studied. For instance, efforts to improve communication between participants to make sure that firms or individuals understand the requirements has been presented as mechanisms that foster voluntary compliance (Scholz, 1994; Kagan and Scholz, 1984). Specifically, activities such as negotiations, persuasion and offering incentives to comply has also been studied for the case of compliance with planning regulations (Burby, May, Malizia, and Levine; 2000).

According to Calvert (1995), communication is central to explain how people can overcome problems of cooperation because it is a very common that communication permits actors to send “signs” of a disposition to cooperate. In this regard,

communication allows individuals to send signs that communicate credible commitments to others (Miller, 1992). According to Ostrom (1991), the frequency of interaction in a small community can facilitate monitoring individuals' behavior regarding whether or not they are contributing to a collective effort, in this regard, frequency of interaction acts as a magnifier of individuals' reputations.

A reputation of being trustworthy may reduce the length of the permitting process. In larger communities, a reputation of being trustworthy is valuable to achieving cooperative behavior. Trustworthiness is a characteristic that permits other people to see that the holder of this characteristic is reliable (Levi and stoker, 2000). Factors such as social norms and reputation can enhance the trustworthiness of an individual.

A reputation of being trustworthy is not only relevant at the individual level but also at the level of corporations or organizations. The theoretical frameworks presented by Miller (1992) and Kreps (1990) strongly support these propositions. Miller (1992) posed that in order to obtain cooperative behavior from others, individuals need to transmit signs of credible commitments. Kreps' argument on the importance of corporate culture to maintain cooperation is also supportive of Cavler's argument. Kreps (1990) posed that corporate cultures that can reflect certain attributes of an organization, such as fairness, allow it to reduce a high amount of transaction costs. Because corporate cultures act as pre-contractual information that put others in a position of power, it is costly to maintain that reputation of fairness and would be very costly to deviate from that direction. In other words, it is in the best interest of the organization to maintain that reputation. When developers do not have the reputation of contributing to achieving the policies defined by the LUR, reviewers can use delay as a de facto instrument to regulate land use, delaying the projects of developers with a bad reputation.

The reputation of willingness to comply may reduce the length of the review process. The more the reviewers and the community trust the applicants, the more likely reviewers will use their discretion to reduce unnecessary delay to new projects. Since reviews are intended to police the behavior of developers, reviewers can speed up the process of projects submitted by applicants who have consistently shown commitment to protect quality of life in the city as well as contribute to the achievement of other city's goals. If reviewers reduce delay on the application process in exchange for the

developers' contribution to the city's goals, their behavior can be interpreted as cooperative behavior.

Trust is also particularly relevant in the development industry. One of the main causes of delay can be originated by disruptions by activists who protest a construction (Rusteika, 1991). In order to prevent disruptions in the advanced stages of a development, developers must address the fears and anger of activists by gaining their confidence. In order to gain confidence, Resuteika (1991) recommends developers to attend any public meeting to explain the proposed construction, which although may not fully eliminate protests and picket lines, it can greatly diminish its intensity.

Proposition 3: Agents who are perceived as trustworthy by reviewers will have shorter reviews.

Proposition 4: Agents who have a reputation of contributing to the public good with their projects will have shorter reviews.

The agency problem in the permitting process. As was previously mentioned, due to the complexity of the permitting process for land development, developers need to hire agents who handle the permitting. These agents have the responsibility of converting the ideas of developers into projects suitable for development in compliance with the LUR of the city. The existence of such agents and the particular relationship they have with the developers that hire them and the reviewers that check the compliance of their proposals with the existence regulatory regime is basic in explaining the length of the review process.

In the permitting process, developers maximize two goals: the particular features that would accomplish the vision that the developer has for his property and the time it takes to complete the project. The goals maximized by the agent are the amount of money charged for a project and the expectations of starting or preserving a working relationship with the developer. There is no clear conflict between the first developer's goal and the interests of the agent. However, the second goal of the developer may conflicts with one of the agents, since developers want their projects to be approved as quickly as possible and the agent's profits are directly correlated to the length of the

review. In this situation, a repeated interaction between a developer and his/her agent may result in shorter reviews.

Proposition 5: If a project is submitted by an agent and a developer who have previously worked together the review process will be shorter.

In the next Section, I present the first of the set of propositions developed above. This test is intended to evaluate the extent to which the theories presented have substantial explanatory power to explain the particular characteristics of the length of the permitting process for land development in Tallahassee. In addition, the study of this case will allow the refining of these propositions to particular measures that capture the concepts integrated in the frameworks presented above.

CHAPTER V

TESTING HYPOTHESES THROUGH ELITE INTERVIEWS

I conducted a series of interviews with the members of a growth management committee. The purpose of these interviews was to collect information that could help to understand the permitting process in general, the various causes that may explain variations on the delay of projects during the review, and the extent to which the theoretical expectations predicted in the previous Chapter apply to the particular case. With this interview, I started a case study that allowed me to identify measures that adequately capture the concepts developed by the theoretical framework presented in the previous Section. This identification was the foundation to operationalize the propositions developed in the previous Section by the Hypothesis next presented.

In addition, these interviews also were intended to measure the frequency of interaction between the various actors involved in the review process; the frequency with which each actor is contacted by agents, the extent to which reviewers believe that agents submit projects that are in general intended to favor the general wellbeing of the city. In addition, they were also asked about the extent to which they are contacted by other interest groups such as homeowner associations and nonprofit organizations.

The set of interviews followed a snowball sampling. They started with a member of the Growth Management Department to whom at the end of the interview was asked to refer me to other members of the review committee as well as reviewers who could provide both a similar and a different perspective of the review process. Most interviewees who were at the higher levels of the chain were frequently willing to refer me to their subordinates and tell them that I will contact them for an interview.

Although, anonymity and confidentiality was offered to all interviewees, in many some cases they refused to answer some questions of the projects, mostly fewer than two arguments. One was the possible question of their impartiality regarding agents if the information could reach the hands of developers. Another was a more polite argument that they do not keep track of how developers and agents differ in terms of the type and

quality of projects submitted for review. This situation happened most frequently at the highest level of the chain of command. However, it also happened at the operational level. In some cases, it was not until a long explanation of how confidentiality would be guaranteed that they were willing to talk.

In some cases, the information on their perception of developers took only a positive form. For instance, in some cases, interviewees never rated a developer in a negative section of the scale offered. However, they offered a more positive feedback for some agents in comparison with others.

When allowed by the interviewee, interviews were audio taped for further analysis. In addition, the questionnaires included a series of questions in which the perception of the interviewee was captured in a scale. In many, interviewees filled out the questionnaire on their own. The open questions were intended to collect general information about the process. Open questions in many cases confirmed what the literature has provided. However, in many cases various interviewees offer alternative explanations for delays as well as counterarguments to what other reviewers think may be causes of the delay.

My first finding was support for both perspectives of how to approach the review process. To some reviewers the review process is more a review of compliance of the projects with the codes. For instance, to some even the meetings follow a series of fairly standard comments. In part, this multiple understanding of the review process is explained by the particular role that a person plays in the review process. For instance, a person reviewing technical aspects of the Type A site plan offered a very mechanical and technical perspective to the permitting process.

“We can talk but if an applicant has a type “A” meeting and he comes in there and sits down there but we just basically go around the table and he’ll get comments from every department. There will be a representative from the fire department. His comments are usually pretty standard. “You’ve got to have a fire hydrant at least five hundred feet from the farthest corner of your building.” Things like that like their trucks have to have room to turn around. If it’s going to be a three story building than it has to be sprinkler system.” (NA).

Nevertheless, to some, the review process is mostly a review that encompasses important negotiations due to the many interpretations that a policy may have. This opposite perspective was presented by reviewers in higher positions of the administrative structure, with a broader perspective of the political, economical, and social repercussions of land development.

“You can take a policy, one policy and give it to five different people you’re going to get five different opinions on what the policy said. And the reason the permitting process is so important, you know the comp. plans real general it’s got the goal and the policies and it sounds great. And they all pretty much say the same darn thing, right. But the planners via the permitting process and via the zoning code, we take those policies and we turn them into hard numbers and we turn them into projects. And so if I read something one way whatever I review its going to be affected by the way I interpret that policy.” (RM)

These divergent views of the review process are a result not only of individual positions in the organization, but also of observations about types of permits as well as stages within a permit. For instance, comparatively speaking, reviewers have more discretion to approve projects that follow track B than A, because, in track A there are less items in the review subject to interpretation. By the same token, concurrency reviews are more technical of all reviews, and for that reason are less subject to the interpretation of reviewers.

Also of importance in understanding the level of negotiation in the permitting process is the variation in discretion among the three main stages of the project. In the first stage of all the review processes, from the submission of the project to the meeting, reviewers have almost no discretion to define the completeness of a submission. Reviewers are highly constrained by the code, because it clearly assesses the items required for each application as well as the level of detail that each item may have.

In the second stage reviewers have more discretion to interpret ambiguous policies; therefore, a negotiation process is more likely to rise in this stage. In the third stage, the compliance also has less discretion on the side of reviewers. The reason is that it is mostly a developer’s decision regarding the timing to pay fees and get the final signature on the plans. However, there is a little room for variation here, related to the extent to which reviewers make an exhaustive review of each file. The reason is that in

some cases, some applicants attempt to include maps or other characteristics of the project that are not exactly what was previously approved. There are plenty of anecdotal cases where applicants attempted to introduce in the final file for signature plans and documents that were not those previously approved. Some reviewers mention that that happened when they were trying to be “nice guys” with applicants, but ones that happens with one agent, it will never happen again because they will look more closely at the final plans submitted. Particularly relevant characteristics of each stage of the process are described in the description of variables.

Dependent Variables

In the particular case of Tallahassee, studying the variations of time it takes to review a project is of high relevance, not only because of the costs that each day of review implies on new developments, but also because long reviews may be the only way to control growth when it is seldom an option to deny permits. In the review process in Tallahassee, most of the reviewers understand that the review process has embedded a tradeoff for developers. According to a reviewer:

“And sometimes frankly they’re hoping that we can be more flexible so they’ll bring something in and say “what do you think? Does this do it does this meet it?” And sometimes we say “yes” and sometimes we have to say “no.” So, it’s very much a give and take process. I think probably all developers come in and they want them to go through on their first shot and within the rules that we have we try to have that happen. Because it is a tough process. But sometimes they have to take it back and try again. And that’s it. I think they try to do as much as they can on the sight as quickly as they can and sometimes we try to bend the rules but sometimes they can’t make that work. And that’s why they have to do the iterations.” (RM)

”They are trying to put too much on too small a lot and the lot may be too small for various reasons. It might have environmental constraints. In acreage it could be fairly large but it may have wet lands or flood plains or native forests that prevent them from being able to use a large percentage of the property. It could create significant slopes or severe slopes, that sort of thing. And it reduces the amount of buildable area on that lot. And when a developer buys property a lot of them don’t buy with the condition of it being able to be permitted. They just buy a lot and then come in and try to make it work. Well, that creates huge problems for them and excessive delays.” (DA)

In this condition, the tradeoff is between timing and features. In other words, sometimes agents and developers are willing to invest all the time needed in order to obtain the approval of the project with as few changes as possible to the original submission. In many cases, the decision is with the developer, who must decide how long s/he is willing to wait. Developers know how much they are willing to delay a development. This is basically the result of a cost-benefit analysis between how much they can win if they are able to win the maximum that a project can include.

“They’re paying interests on their land, they’re paying their agent to do. But sometimes the amount of profit to be made is so much larger than the carrying cost that they don’t care. And also the other thing that we see happening and this is less often but it happens. It happens two or three times, four or five times a year where the owner, not the agent will say I want this and they’ll try to work it through the city commission or the county commission and say “I don’t care what the staff say I’m going directly to the commissioner and so when I get to the commission I know it will be approved.” Now once in a rare time that works but it’s very, very rare, very rare. And it’s got to be you know something huge for the commission to go “oh, okay.” They don’t really do that very often but they have.” (RM)

“So it depends on the developer what he wants to go about doing. So he’s got the control over how long that delay is going to take, about how he decides he wants to go forward on his project.” (DA)

To some reviewers, delay is the only way in which developers may be given an incentive to cooperate with the various policies rooted in the review process. The threat of delay becomes a more important mechanism with which these public administrators actually achieve better projects for the city and to preserve the quality of life and the ultimate goals pursued by the city. In fact, some reviewers acknowledge that there are very few projects rejected in the city.

“There are no projects rejected, or at least almost none, because they (the DRC) do not attempt to stop development. What they actually have instead of rejections are projects that come back and forth until it pleases the criteria and policies established by the City. In many cases, the results of these negotiations are long delays. Part of what explains these delays are that developers have a clear idea of how to maximize its projects.” (OS)

“Rather than deny a permit we extend the review process (...) the reason is that if we deny the project, applicants would need to pay all the fees again. We do not want that, although recently we started to do it (charge fees again).” (OS)

Because of the importance of timing, the dependent variables of the project will be the number of days it takes for a project to pass each stage mentioned above. These stages will be measured separately for each type of review, since the implications for the importance of some variables are higher for some projects than for others. Table 5-0 presents the dependent variables to be used in the analysis.

Table 12. Stages of the Permitting Process

	Stage		
	From submission to Meeting	From Meeting to Approval	From Approval to Signature
Track A	✓	✓	✓
Track B	✓	✓	✓
	From submission to Pre-Approval	From Pre-Approval to Final Approval	From Submission to Final Approval
Concurrency Review	✓	✓	✓

Independent Variables

Technical complexity of the project. The importance of the technical complexity of a project to explain the time of the review in the particular case of the city of Tallahassee found supporters and detractors. To some reviewers the size of the project itself may explain how long it takes to review a project and that could be a measure of complexity. If this assertion is correct, the total amount of fees paid by a project will measure the complexity of the project, the larger and the more features a project has, the more fees it pays. However, the complexity is not exclusively explained by the number

of units or square feet of the project. Such complexity also depends on factors related to the area in which the project will be built.

“(it does take longer to review some projects because) some projects are more complex than others. They may be bigger, they may be different. Zoning limitations may be different from one parcel zone to another. The environmental code is written so that certain things may apply in one zone that may not apply in others.” (SA)

In the case of Tallahassee, one of the main factors that increases the complexity of a project is the storm water system. Because of the weather in Florida as well as the specificities of the soil, the review of the design of storm water takes an important part of the review time.

“Storm water is really the big variable in the site plan review and there are so many factors and I’m not a storm water engineer but I’ve been listening to so many storm water engineers and there are so many factors that go into doing a sound storm water analysis and understanding the soils conditions on the sight and the off sight contribution to it and really designing the storm water facility is probably the biggest variable to the sight plan review application and takes longer than others.” (GO).

Most reviewers agree that the complexity of reviewing does not just depend on the number of dwellings or square footage. The complexity depends on many other factors, specifically to the extent to which it is deferent from the projects commonly received for review. In accordance with these interviewees, projects that are less conventional or common require more studies and deeper analysis in order to ensure that policies meet with the current standards presented by the development.

“A lot of it is non-standard design. I mean the reason we established these other drawings is these are proven methods, combining infrastructure. It’s very hard for us to quickly jump through the hoop. There are a lot of questions with issues. How well does it perform? What is the background? What performance history does it have? Do we have any experience with it? Am I going to have to retrain my personnel in order to accommodate it? I mean, run run run. We tend to standardize things so that we can obey and meet our standards. So if it’s approved by our standards it moves a lot quicker. But that’s not to say that we’re

not going to review something if it's different, but it's going to take longer.”
(GM)

In this sense, some interviewees argue that the size of the construction does not necessarily predict the difficulty in the review process. In addition, some interviewees suggest that projects intended to develop vacant lots may be less complex to review. Redevelopments can require a more complex review because they must meet and maintain the characteristics of the area in terms of its impact on traffic and other services. Of even greater importance, it must update several features to meet new regulations of the codes that were not in place at the time the land was first developed.

“The complexity of the review usually depends on how unusual they are. People think that big projects would take longer to review than small projects. Big box sticking in the middle of nowhere with a bunch of exists that's easy but if someone's trying to squeeze a little thing in the corner and they don't have the right parking and they don't know what their doing and they haven't hired engineers and they're trying to do it themselves, those can be very cumbersome projects.” (Mr. Ned)

Hypothesis 1: The more square feet a construction a project has, the longer it will take to review.

Hypothesis 2: Projects that include additions to an existing building or redevelopments are likely to take more time in the review process than projects developing new sites.

Hypothesis 3: The more fees a project has to pay, the longer its review will take.

Economic development (city goals). Most interviewees agree on the importance of expediting the review for social purposes like the construction of affordable housing. However, none of the interviewees explicitly provide arguments that either dispute or support the idea that economic development is pursued during the permitting process. The first variables are by the zone district in which the development takes place. Among zoning districts, the city of Tallahassee has approximately 33 different zoning districts. In order to identify those projects that may contribute to economic development, I identify those that were constructed in either industrial zones, commercial and services

zones and urban zones since construction in these zones is more likely to create employment and promote economic development.

The second variable in measuring economic development is identified by the area in the city in which these projects take place. The city is divided in three general areas. Each area has particular characteristics. Although the three areas include almost all zones, the northeast area of the city has a stronger inclination for industrial and commercial development. The northwest area of the city has a stronger inclination for medium and high income housing and commercial development. The third major area, in the south, is more inclined for commercial and housing for families of moderate income.

Hypothesis 4: Building projects that can generate employment by developing commercial, industrial, and urban zonings will take shorter review processes than those that develop housing units.

Hypothesis 5: Building projects intended to develop areas where the city plans to accommodate industry and commerce are likely to have shorter review processes.

Applicant's characteristics: Networking Practices, Reputation, and Trust.

Since the permitting process in Tallahassee requires technical and professional skills, to most reviewers, the agents who handle the permitting process may be the single most important factor that affects the length of the review. During my interviews, I was able to corroborate the support for the importance of some characteristics predicted by the theory in Chapter 4. Nevertheless, I did not find support for the importance of all variables, mainly because of the specific characteristics of the various types of permits and their stages. These agents, first identified by Kaya and Stifel (2005), are the experts who can advise the owner of a project the extent to which it is convenient to invest more time during the review process in order to increase the margin of profit of the project, or to take what is offered by the Growth Management Department before a long delay. Therefore, from the point of view of some reviewers, agents are the ones who actually handle the dilemma between delay and the ideal project.

“The agents responsibility is towards his client, to prepare the materials and turn them in a manner that reduces the delay as much as possible but, has to maintain

the desires of his clients at the same time so that's where the conflict comes in. Because sometimes they can't make their clients' desires work. Now, they'll try and when they try and it doesn't match the codes that's what ends up causing delays." (DA)

From the point of view of some reviewers, sometimes delays may be explained by the asymmetry of information between the agent and the developer. To some extent these delays can be attributed to the lack of planning on the part of the developer. For instance, in some cases, developers do not know or disregard the allowable uses in given property when they purchase it. They just see the option of buying it because it may be a good investment or a good location for a new business, and later, they learn about the limitations of the type of developments that the area can accommodate.

"When a developer buys property a lot of them don't buy with the condition of it being able to be permitted. They just buy a lot and then come in and try to make it work. Well, that creates huge problems for them and excessive delays." (DA)

"The developers are not aware of what they realistically can do and their engineering consultants accept the premise that the developers give that they are going to do "X" number of square feet on a given site that's probably not realistic. So they make assumptions that they can make their storm water work." (GO)

Therefore, some reviewers believe that these agents maximize their benefit by playing a game with their principals. Some reviewers expressed their concern about how, in some cases, agents maximize their benefit by making the principal think that the project requires more effort to be approved. Or, by approving, making reviewers approve projects on the edge of the regulation where it is subject to interpretation. In this regard, reviewers appear to be very cautious about where the regulation is subject to interpretation and where it is not. Some reviewers describe it as a mystery to what extent delay is the result of developers who want certain characteristics of the development regardless the reviewers' opinion, or are agents who want to take advantage of developers in order to get more money.

"The applicant a lot of times they're working for their client and the client is going to try to get as much on their sight as they can get. That's money, that's the bottom line is the dollar. You're not making any money; your establishment is

not making any money on that landscape that you're setting out there. You're not making any money on that green space. You're making your money on getting people in the door and buying your product, parking in your parking lot. That's how you make your money. The applicants, the developers they're working for the client. So a lot of times, and this is my opinion, a lot of times the agent which will be an engineering firm, they may come in here knowing that what they are submitting might not get them an approved sight plan. But they're submitting it because that's what their applicant wants. And they may have gone around with their client "this isn't going to work" and "I don't care this is what I want" and so it's "okay it's your time, it's your money. If you want me to submit these drawings I'll get them in." And we get them and we say "you can't do this." (SA)

"The agent is really easiest to deal with. Sometimes an agent, I'm not sure if he is representing his client. Not really sure we go back and forth on some plans. Either the owner is being very obstinate or the agent isn't giving information to the client that he should have. ... I don't know, cause some agents aren't sure or 'Y'all do what you want, I get my hours. It takes longer, it's more money for me.' I don't know if anyone does that but you just wonder sometimes if the agents aren't making the clock so it takes longer, adding time onto the process. My suspicion is that some do it a least some of the time. ... maybe it's agent/engineer competence, maybe it's owners obstinate or agent/engineer milking the client." (Nelg)

If agents indeed take advantage of asymmetric information with developers and delay the process in order to gain an economic benefit, this situation is less likely to happen between agents and developers who have a repeated interaction. From these observations the hypothesis derived is the following.

Hypothesis 6: Development Projects submitted by developers who have previously worked with the developer of the project have a faster review than projects submitted by agents who work for the first time together.

To some reviewers only the mere existence of an agent will considerably reduce the time it takes to approve a project. The main reason for this is the agent's knowledge of the Land Use Development Code as well as how reviewers interpret the code. Reviewers generally believe that they do not need to dedicate too much time to explain to these agents, since they already know the process. Generally, this idea of investing time is believed to increase the iterative process of review.

“The agent because he understands the process we don’t have to explain as much to him. But what we’re explaining is what the requirements are and why we’re looking at it the way we are. We’re not explaining to him the process or “this is why we need this from you.” They already know the process and already know why I need the survey or this or that. I don’t have to explain it whereas the owner or the applicant themselves aren’t familiar, and we spend more time.” (Nelg)

“We ask ourselves the same questions. The best answer I can give you and it’s true everywhere, it’s a matter of expertise. The designer just can’t quite make it work or perhaps they’re not reading or interpreting the language in the same way we are. Some of it is a little bit ah, general or nebulous some of it is very specific I mean down to the 6 ft. set back. But they may have other goals that they may be trying to meet like a certain level of profitability or expediency in building and I think the designer has to balance all of that out.” (RM)

“You know, the rules have gotten to be so complex that if you do not work in that process frequently it’s very hard to figure out what the process is and what the rules are and get through it. So if you’re only going to do this once you can not do this by yourself. And I feel bad about that. It shouldn’t be that way but it is that way. And a lot of it comes from the state requirements and all that. So, it’s actually better for the land owner, better for the project, and certainly better for the planners to hire a professional who knows what the rules are and knows how to follow them and can get this thing through the process.” (RM)

Hypothesis 7: Review projects in which the applicant is represented by an agent are more likely to delay less than those where the applicant is not represented by a consultant.

However, most reviewers agree that just to have an agent is not enough to get the review expedited. Reviewers agree that there are some agents who are more professional, better prepared, more honest with their clients, or even more committed to bring good projects for the city. Since some reviewers consider the review mostly a technical check of its compliance with current regulations, to them the timing of the review depends upon the quality of the proposal, which depends on the agent.

“The length of the review process is going to be dependent on the quality of this remittal. It’s that simple. We get some remittals that are incomplete, we get some remittals that are a total violation of what our establish standards are.”(GM)

“A lot of times the product/application coming in is not as complete as some. To me that’s the big thing. That’s the main thing. They submit an application for us to review and it meets the code then we can issue a permit. Rarely do we see that

happen. There are things that won't be in compliance or leave things of the drawings." (SA)

The learning process that is supposed to take place after an agent has submitted various projects, simply does not happen. Some reviewers argue that some agents with whom they have been working for many years, keep repeating the same mistakes. This situation, increases even more the suspicion that some agents are either incompetent or willing to follow the process until the characteristics desired by the owners are accepted.

"The agent is really easiest to deal with. (However), sometimes an agent (submits permits where) there are parts missing from the plan that the agent should know about. Tons of plans come into the permit office, where the plans aren't right, "why don't you have a sidewalk abating into the street?" "You know and it's required." I've been doing this for 40 years, it's required and I've commented every time that it's not there. It's like "you know, why isn't it there?" I don't know if he left it off or the owner said "no, I don't want one." (Nelg).

"Because I one agent that turns in excellent plans, very few issues and others who turn in tons and tons of problems. Are they doing it on purpose or are they incompetent? It takes time in the process because of that ping pong game. Sometimes that I give initial comments sitting at these meeting giving conditions, so they should call me and say "is this what you want?" and we should be done with it, but we're not.... It's something because I'm more than happy to answer questions, explain what you need to do or say "here's the problem." Sometimes it's complicated and not easy to fix so it takes longer. But it's most simple and straight forward, so the big problem here is, why don't these guys get it right the first time, the second time, third time. And we have guys who have been in the process for over six years." (Nelg).

Frequently, this incompetence on the part of agents generates frustration among reviewers. The agents that are seen as professionals by reviewers have the knowledge, most of the time, to know in advance what will and what will not pass a review. When agents are incompetent, reviewers may know in advance that they will have to spend more time with them in order to have the project approved. Some reviewers feel it is their obligation to help developers and agents get projects corrected, but others feel that they are doing the job of the agents after so many iterations of the process. With this profiling of agents, reviewers acknowledge that some of the agents do a better job than

others either because they are more professional, better trained or not willing to negotiate beyond what may be acceptable with developers.

“If I know I don’t have to turn in a good project. If I know that I can design a project and turn it in and that you’re going to tell me everything that’s wrong with it. And I’m going to get it back and fix it then you’ve done the work for me. That’s the way we’re looked at a lot of times. “Does this work? No, do this and this. Does this work? No.” Where does it stop? Sometimes I get to the point where I’m like, “we’re not here to design your sight.” “You design your sight and I’ll tell you if it meets our code.” “Now, here are some guidelines to help you meet our code.” It’s all on line. You’ve hired someone who is familiar with our codes. Everyday familiar with our codes. You’ve hired someone who is competent. Tell them what you want. And they can pretty much tell you if it can pass codes or not. They might try to stretch it a little bit. That’s their job, their working for somebody else. There the middle man between us and the guy that’s trying to develop his lot and make some money. It’s not uncommon to get a submittal that is so poor that we end up doing some redesigning on it. It’s like reimbursing. This guy needs some more hours. He needs some landscaping parcels. He needs to take one out here and put one over here. But why didn’t he see that? He’s been looking at a hundred of them a day. I don’t know...there are (agents) some that I hate seeing. I see their little engineering logo and I jut know that their not going to be right.” (SA)

From this finding, the hypothesis to test is the following

Hypothesis 8: The more applications an agent has submitted of a particular type, the less time it will take for the review process.

Interviewees confirm the idea that differences among interviewees matter to the time it takes to review a process. In a way, these agents develop a reputation of willingness to comply with the codes.

“The biggest problem that we have is that a lot of the consultants get a project that has a long delay to it because they get a project that doesn’t fit what the code requirements are there for.” (DA)

“The problem is some engineers who act like prostitutes and take measures where they do not reflect the real situation of the site. If a planer wants he can just let it pass.” (MM)

“When projects are approved, they have to be signed and sealed by the design engineer. Once we approve the project, we sign and stamp the final plans. I trust

the engineers, but sometimes they try to take advantage. Like one time, I trusted the engineer and I did not slow for sign up. After finish to sign up I saw a page on the back of the plans that I never had seen before and I trusted him and I pay for being a nice guy. And I'll never be a nice guy with them again.” (MM)

From this quote, we can infer that agents develop a reputation among reviewers on their willingness to comply with standard engineering procedures and city codes.

Hypothesis 9: Projects submitted by agents who are seen as trustworthy by reviewers are likely to delay less than projects submitted by applicants that reviewers do not trust.

Hypothesis 10: Development Projects submitted by agents who have a reputation to be committed to contributing to the general well being and growth policies of the city will have a faster review process.

In some cases, reviewers claim that frequency of interaction may have an impact on the review process because it helps to clarify how reviewers interpret the code. Frequency of interaction may be important for the case of expediting a review and may be more for purpose of clarification than as a form of developing some sort of trust. Willingness and the ability to speak with the reviewers is common networking practice.

“It’s about the codes and the process and the willingness and the ability to communicate with us. A lot of times we spin our wheels because people misunderstand what we want. Or maybe we don’t do a good job communicating or they don’t do a good job listening or both. But those people who have dealt with us a lot and know what we want, they’re good to work with.” (MR)

In other cases, there is an expectation that those agents who interact more frequently with the staff can get their permits reviewed in less time. Some interviewees argue that the frequency of interaction does not play an important role. One of the reasons is that if reviewers talk about a specific project outside the meeting, it can be considered illegal under Florida’s law. One of the reviewers was very emphatic with the point that Sunshine laws prevent them from talking about projects outside the scheduled meeting, not only with developers, but also between themselves because it may constitute a violation of the status if seen as an unscheduled meeting.

“I mean and we have to do a formal action because you know Florida has the Sunshine laws. I can’t, although I interact with the other people sitting up there, on non development issues when it comes to development issues that will force us to talk to each other. That’s why we talk together all the time to get the facts and to send that information upstairs. But we cannot talk to each other because if we sit down and talk to each other then that’s what you’d get an unnoticed meeting.” (GM)

In addition, frequency of interaction does not generate trust by itself and may not represent a mechanism to expedite a review, since those are informal meetings. For these interviewees, the interaction with agents is strictly limited to the clarification of projects but never about the convenience of a project.

“Some (agents) use some others from outside the state of Florida and then we tell you. And it’s a lot easier to processes some permitting in those other communities because there’s a lot of interaction and we have very strict guidelines as to how we can interact when it comes to dealing with (the review committee). So, a lot of these questions you saw that I said, “I don’t know,” and the primary reason that I said, “I don’t know,” is primarily because as a sitting board member of (the review committee) I can’t have that interaction, specific interaction because of the Florida Sunshine laws. I rely on staff very heavily for that.” (GM)

“The agents we talk to more frequently are not the agents we trust the most. I can name you many agents that I see walking around daily, and they are the agents that have more problems with their projects. That’s why they want to talk to us, not because we trust them.” (Nickole)

Hypothesis 11: Development projects submitted by agents who more frequently interact with reviewers will have an expedited review process compared to projects submitted by developers who contact reviewers less frequently.

Hypothesis 12: Development projects submitted by agents who more frequently interact with reviewers will have a slow review process compared to those projects submitted by developers who contact reviewers less frequently.

CHAPTER VI

ANALYSIS OF DELAY IN THE PERMITTING PROCESS

Permits Studied

The permitting process for land use development is complicated in two ways. First, in order to develop a unit, a development has to pass various reviews. The number of reviews and the sequence in which they are ordered depends upon the characteristics of the area to be developed as well as the type of unit that will be constructed. The second source of complication comes from technical specifications that describe the current situation of the land to be developed, the unit to be constructed and the impacts of that development on various policies implemented by the jurisdiction.

In other words, it is complicated by the many possible paths that a permit process can take and also by the specific information required in each stage of the process. In this research I am not interested in the study of the complexity of the various paths that a development could take. What we will explore is the variation of timing that permits have in a particular stage of the process.

The permits and the stages to be studied here vary on their technical and political complexity. I use the term technical complexity to express complexity due to specific knowledge of the information managed in the process. For instance, calculation of measures, analyses of impacts on public goods such as storm water and transportation systems. Political complexity deals with the various interests affected by a new development, economic development, environment, low income housing, property values, etc. Political complexity refers to the various interest groups affected during the review process.

Data collection

The Growth Management Department in Tallahassee provides access to the files of submissions since late 1997 up to the date. The files of site plans A and B submissions, as well as concurrency reviews are available since October 1997. The files of limited partitions and preliminary plats are available since February 1998.

Each file contains information on various features of the project. In most cases the files contain all the information described above. However, in many cases, files are incomplete due to one of the following reasons. The first reason is that reviewers may not include all the information available for a project. For instance, reviewers may forget to include information on the proposed use of a project, the total number of dwellings in a new project, or whether a project is proposing to redevelop an existing site. Also, for a given process, some points in time are missing. For instance, for some, one or more dates were not recorded. However, for most projects all information was recorded.

The second reason is that the particular information that has been recorded for projects has changed over the years. For example, the GMD did not collect information on the existence of floodplains and natural features inventories for site plans until after 1998.

A total of 2,160 files were reviewed to collect information about each project. For each type of permit different variables were collected depending upon the availability of information for each type. In general, projects offered information on characteristics of the project and its size, the purposed use, characteristic of the parcel such as the land use, and the people involved in the submission: the applicant, the owner, and the agent. In most cases all three were mentioned in the file but in others some were missing.

Independent variables related to an agent's reputation was measured by a survey done by personal interviews with reviewers of the Growth Management Department, Concurrency Management Division, Concurrency Review Commission and Development Review Commission. Reviewers were asked about their opinion on the role played by the agents and to what extent agents may influence the outcome and speed of the review project. A total of 22 agents account for approximately 66 of the projects submitted between 1998 and July of 2006.

I asked reviewers the following questions about each of the agents. The first question is how often were they contacted by each agent when he or she had a project under review? For each agent, a respondent can choose an answer in a six point scale from daily to never. The second question is the perception of the reviewer about the extent to which a project submitted by a particular agent is technically in compliance with Tallahassee's development regulations as submitted to the GMD. To answer this

variable, a reviewer can choose an answer in a five point scale from fully in compliance to not in compliance, with an option to respond that he or she does not know the answer to that question. The third question inquires to the extent in which a project submitted by a particular agent contributes to the public wellbeing of the city of Tallahassee in general as submitted to the GMD. The options that the respondent had to answer this question are somewhat similar to the options described for the previous question.

These questions will help to identify the extent to which frequency of interaction between developers and officials correlates with the perception that public officials have of them. The questions described above will be used to test if frequency of interaction, belief of sufficient technical capacities of an agent and expectations that an agent is committed with the wellbeing of the community may influence the timing of the review process.

Based on the information we collected about the permitting process in Tallahassee, technical complexity is measured by the size of the project and the characteristics of the site to be developed. The size of the project is measured by two variables, the number of dwellings and the amount of fees paid by the project. To measure the characteristics of the project I will use the extent to which the project is a new construction or redevelopment, the zoning district in which it will be constructed, the storm category and the extent to which there are flood plains in the site to be developed.

The first measure of size will need to be constructed to equate the size of residential and non-residential projects. The size of residential projects is measured by the number of dwelling units while non-residential projects are measured in square footage. The equivalence of these projects will be calculated based on the thresholds for site plans type defined by the Tallahassee's LDC (Land Development Code). It is important to notice that such equivalency varies depending upon the zoning district defined by the LDC. This equivalency is presented in table 13.

Table 13 Equivalency of Land Uses

Zoning District	Equivalency	
	Residential Site Plans	Non-Residential Site Plans
RP-1, RP-2, RP-R, RP-UF, RP-MH, LP, OS, RA, R-1, R-2, R-3, R-4, R-5	10 dwelling units	5,000 building square feet
UF, LT/UF, R, OR-1, OR-2, C-1	20 dwelling units	10,000 building square feet
OR-3, OA-1, CM, MR-1, C-2, CP(undeveloped sites), UP-1, UP-2, M-1, PUD, DRI, IC	200 dwelling	40,000 building square feet
UT, CU, SCD	300 dwelling units	60,000 building square feet
AC, I	400 dwelling units	100,000 building square feet

The second variable that measures size is the total amount of fees that each permit pays to the city. In accordance with the fee schedule of the City of Tallahassee, the more features and reviews a project has, the more fees it has to pay to be approved. This variable can be partially related to the size of the project; however, two projects of the same size may pay different fees because of various features of the specific features of the project.

Results

This research analyses five types of permits that are part of the land development permitting in Tallahassee. These five types follow three different paths after they are submitted to the Growth Management Department. The path followed by Permits of Site Plan Subtype A, as well as Limited Partition Subdivision, will be referred as Type A, in this study. The path followed by Site Plan Subtype B and Preliminary Plats is called Type B. The third path corresponds to submissions of Concurrency Reviews and will be called Type CC.

Site plan approval ensures that a development is in compliance with standards and policies of the LDC and in accordance with good engineering practices. Site plan approval is required for almost all development projects. However, residential projects for single family houses, duplexes, triplexes and quadraplexes as well as commercial

projects of less than 1,000 square feet are exempt from site plan approval. Projects subject to site plan approval can have two types of reviews depending upon the size of the project and the zoning district in which the development will take place. The LDC establishes specific thresholds for residential and non-residential site plans in each zoning district. Site plan B projects are those that surpass the threshold. These thresholds are presented in table 5-1.

Limited Partition and Preliminary Plats are two types of reviews that evaluate the suitability and compliance of such subdivisions with the city LDC. Limited Partitions are subdivisions of a residential lot or parcel on an existing street into not more than ten single-family detached units or some equivalents on other type of housing units. The preliminary plat is a general layout of a larger subdivision of land into multiple parcels or lots with streets and utilities easements to serve the area.

In most cases, proposed new construction, additions to existing buildings or development of new land are required to go through concurrency review as a part of the development approval process. The purpose of the concurrency review is to determine whether there is enough capacity on the roadway network, in storm water ponds and in other public facilities to handle the impacts of a proposed project. In addition, through the concurrency review, a portion of the available capacity in the public facilities is reserved for the proposed project.

Track A

Track A is done inside the GMD with input from other departments, however, the leading role in the review is played by the GMD. Since this track is followed by small projects there are a small number of standards revised for compliance that are subject to controversy. Since small projects do not have broader impacts on the community's big goals, most of the time they are based on technical specifications, and less subject to negotiations. Track A is followed by a Type A site plan review as well as Limited Partitions. Type A site plan reviews are required for the construction or modification of single-family dwellings, two-family dwelling units, mobile homes or construction of an accessory building to such dwellings when 40% or more of the parcel acreage is located in a preservation or conservation overlay district. Also, a Type A review applies to those

changes of tenancy involving substantial modification to the exterior of the building or modification to the associated parking area as determined by the land use administrator.

Limited partitions are considered small subdivisions, which are subdivisions of residential lots or parcels on an existing public or private street into which no more than ten single-family detached, five single-family attached or five duplex lots can be built. These subdivisions shall not create new streets to provide access to any subdivided residential lot; in addition, they shall not require the extension of water and sewer mains to the site or any resulting lots therein. The path A may start with a no-cost pre-application conference. There is no requirement to attend to this conference: however, applicants who attend to such conferences are provided with information prior to the preparation of limited partition and subtype A permits.

The track has been broken in three stages for its analysis. The reason for this separation is that some stages are more technical than others, particularly the first one. The second stage is where some sort of negotiation and iteration of the project may occur. The third stage of the process is also based on a technical compliance, but with some level of discretion for reviewers to use and expedite reviews. In addition, in the first and third stages there are maximum lengths to complete some procedures, which reduces the flexibility of the review. In the second stage, this flexibility is relatively larger. Next I present the most relevant aspects of each stage before introducing the results.

.First stage: from submission to the Meeting. An application for a permit that follows this path needs to have been cleared already other permits. The complete submission of these permits must include the Land Use Compliance Cert. (LUCC), the second is the Natural Features Inventory Exemption or Approval Letter (NFI), and the Preliminary Concurrency Certificate (if required).

The first stage is very similar for type A reviews and Limited Partitions. Within five working days after receipt of an application for site plan approval, the public official shall determine whether the application contains all required information at the required level of detail. If the official determines that the application is not complete, s/he shall advise the applicant of the areas of insufficiency and specify the additional information and level of detail required in order to declare the application complete. If the applicant

fails to submit the required additional information within 30 calendar days of notification of insufficiency, the appropriate official shall consider the application to be withdrawn. However, the official may grant extensions at the request of the applicant. Upon determination of completeness, the appropriate official may refer the application to the development review committee.

Under determination of completeness, these permits are turned in to the review committee, which meets once a week. The Committee is comprised of representatives from the following City departments: Growth Management Department, Public Works Department, Solid Waste Department, Fire Department, Police Department, Water and Sewer Department. The Director of the GMD shall conduct a meeting to review the application.

The main difference between type A site plans and limited partitions is public notice. For limited partitions, a public notice of the limited partition meeting shall be given at least five calendar days in advance of the meeting in a newspaper. In addition, written notice shall be mailed at least five calendar days in advance of meeting with property owners within 500 feet of the project as well as to registered neighborhood associations and business associations.

Second stage: From Meeting to Approval. The Director of the GMD shall review the site plan and, if necessary, receive input from appropriate agencies and conduct a meeting for the purpose of reviewing the application. To decide whether to approve, approve with conditions, or deny a site plan, the Growth Management Department must take a decision based upon the following criteria: whether the applicable zoning standards and requirements have been met; whether the applicable criteria of the Land Development Code have been met; and whether the requirements of other applicable regulations or ordinances which impose specific requirements on site plans and development have been met.

In some cases, the submissions are approved at the review meeting. However, in many cases, these permits are approved with conditions or the review is set to continue to a certain time and date. The director, or his designee, shall notify the applicant, in writing, of the decision within ten working days of receipt of the completed application.

Also, if a permit is not approved at the meeting, the applicant or agent receives a list of Conditions of Approval which must be addressed before the Type A Site Plan or the Limited Partition can be approved by the Growth Management Director.

Some examples of conditions may be the following: Compliance with general comprehensive plan provisions; adequacy of the site and open space provisions; access and traffic, both pedestrian and vehicular; dedication and development of streets; landscaping and screening provisions; noise, light, and other pollutants in light and heavy industrial designated areas; proposed siting of structures and their relationship to surrounding neighborhoods; as well as any conditions imposed by the final review body.

Once the applicant has incorporated all needed changes to the project, a revised site plan or limited partition should be submitted to the review team in the GMD within 90 days of approval; however, a 90 day extension for submittal of the revised plans may be granted by the Land Use Administrator. If the revised plans are not submitted within the time frames specified, the approval shall be considered void. Upon receipt, the Site Plan is reviewed for compliance with Conditions of Approval. Once it is determined all Conditions of Approval have been satisfactorily addressed, the Site Plan is approved by the Growth Management Director, or his designee.

After the meeting, the negotiation takes the most important role. It is there where there is a real back and forth of papers, and it is there where reviewers really exercise more discretion in deciding whether the conditions are addressed. Reviewers have discretion within the time frame defined by law. In other words, it can not take longer than 90 days for them to respond, but it also may take less than that.

“There are a number of issues. Most of it depends on the applicant. I’d say its 80% applicant and 20% us. ...I might get to busy to get to it. If I don’t get to it I’ve got these issues and I’ve got to contact them, so part of it is how long it takes for me to get back to them but a lot of it is how long it takes them to get back to me. I sometimes get things back in two weeks. They have 90 days to get it sent back to me. I’ve had them back on the 89th day, I’ve had them ask for more time, for another 90 days to give them more time. Sometimes we will go back and forth, they need to do this and they need to contact back. They wait a couple of weeks, send it back “no, no you still haven’t addressed it,” it goes back. It’s like a ping pong. Conditions to issue it are really a couple of months, six to eight weeks. I guess mostly because of the applicant. We usually try to get back to

them in seven days, five working days.” (Nelg)

Third stage: From Approval to Signature. The decision of the development review committee shall become final 30 calendar days after it is rendered unless a person who qualifies as a party pays the filing fee and files the petition for formal proceedings. Failure to pay the filing fees or to file the petition as required is jurisdictional and shall result in the waiver of the right to petition for formal proceedings. Also, upon approval, the applicant shall provide a copy of the plan in a form suitable for recording in the official records of the county, with appropriate signatures and which depicts any revisions which have been made during the course of the review. The applicant shall record the plan in the public records of the county within 30 calendar days of the approval and provide evidence of such recording to the director within 30 calendar days of the recording. If the applicant fails to either record the plan or submit proof of the recording to the director, the approval shall be deemed void.

Table 14 provides the result of the OLS analysis of track A with robust standard errors. Each column presents the analysis of each stage. This first stage provides the analysis that starts with the submission and ends with the meeting. The second column delivers the results of the analysis of the stage that starts with the end of the meeting and finishes with the approval or denial of the project. The last column presents the results of the stage that starts with the approval of the project and ends with the final signature and stamping of the plans.

In the analysis of the first stage of the review for type A and limited partition permits, predictions based on the search for economic development came out significant and in the predicted direction. Also, the impact of the complexity of the project additions to new houses takes significantly less time to complete compared to developments of new sites, which is consistent with the idea that additions may be the easiest projects to be reviewed, since many times they do not require important modifications of the original site plan. In addition, limited partitions take longer than Type A reviews. This situation is explained in part by the nature of the permit, as it was noticed before, limited partitions require notice letters to neighbors of those projects before the meeting takes place, which according to the model, may delay a week (on average) to clear this stage.

The variable that provides a more interesting result in this stage is the total number of permits submitted by an agent. According to the results presented on the table, for each permit of this type an agent integrates, the length of the review may be reduced, on average, in less than a day. This finding is important, taking into account that some agents have integrated more than 100 permits in the period. These results provide evidence that agents with more experience tend to do better, at least in this stage of the process.

Results

Table 14. Type A and Limited Partitions Analysis

		Type A and Limited Partitions (With Robust Standard Errors)		
		From submission to Meeting	From Meeting to Approval	From Approval to Signature
Agents Characteristics	Agent	-.3369	17.965	2.654
	Total number of Applications	-.0215*	.0877	-.299
	Repeated interaction agent-developer	.522	14.315	1.767
	Frequency of contact	.03856	-.641	.6429
	Trustworthiness	-.0417	.6114	-2.390
	Contribution of general wellbeing	.0492	-6.576*	6.817
Economic Development	Industrial Zone	-2.533***	-20.14**	-6.299
	Commercial and Service Zone	-1.708***	5.4328	8.938
	Urban Zone	-1.864***	2.2101	12.48
	PUD Zone	.2392	-11.202	13.18
	Commercial Construction	1.276	-8.4590	7.843
	South Region	.3998	-31.9***	36.596
	Northeast Region	-.933	25.942*	1.893
Complexity of the Project	Total Fees Paid by the Project	.00009	.00291	.00024
	Size	.00162	.07365	-.0165
	Addition	-1.014**	-9.2806	5.0742
	New Use (redevelopment)	-.8518	12.8179	10.285
	Limited Partition	7.027***	15.4344	5.3008
	Constant	9.919	73.6214	19.07
	N	727	552	504
R	0.2180	0.0898	0.1388	
* = $\alpha < 0.10$, ** = $\alpha < 0.05$, *** = $\alpha < 0.01$				

During the second stage, which includes more negotiation between agents, developers and reviewers we can observe that projects that develop industrial zones take an average of 20 days less than projects that develop areas for residential use. This result suggests that economic developments plays an important role during the negotiation stage of permits Type A. Projects in the southern region take an average 30 of days less than projects that develop the northwest area. However, projects in the northwest area are reviewed an average of 25 days faster than projects in the northeast.

In this stage, very interesting results are provided by the variable that measures the reputation of agents for their willingness to contribute to the general well being of the city. The results show that one unit of the perception that reviewers have of developers reduces the duration of this stage by an average of six days.

During the third stage, the experience gained by agents by the total number of applications appears to have a significant impact on the length of the review and on the predicted direction. However, it looks like the reputation of contributing to the general well being of the city has a counterintuitive effect on the length of the stage. An average one-unit move in the scale of one reviewer is associated with an increase of six days of the duration of the stage. This finding could be the result of the type of requirements that good projects may have to deliver before being finally approved. Another option is that agents may slow down during this stage of the review process after having a quicker review during the second stage.

The third stage, also appears to have an important impact to the extent in which an agent is seen as trustworthy. One of the reasons for this impact can be the fact that for trustworthy agents, it takes less time for reviewers to make sure that their final projects submitted for signature are the same that where approved during the previous stage.

Finally, in this stage, projects in the southern area take an average of 36 days more to obtain the final signature, compared to projects in the northwest area. The first thing to notice here is that this delay almost equals the number of days in which these projects gained in terms of days during the previous stage.

Track B

Although track B has similar stages than track A, track B is not done entirely in-house. The final approval is granted by the development review committee with representatives from other departments, over whom the Growth Management Director does not have command. Projects required to approve track B can be much more controversial than projects on track A just because of their size and impact on city policies, but also because they are reviewed by a committee of peers with different backgrounds who frequently champion divergent goals for the city. In this track, reviewers may have more discretion to interpret fussy policies and goals, which increases the room for negotiation and delaying or expediting reviews. Therefore, technical consideration may be less relevant in this track compared to track A. At the same time, economic consideration and other policies related to economic growth may play a more important role in explaining the length of the review.

Track B is followed by Preliminary plats and Type B reviews, which differ slightly from the process described above. Preliminary plats are required for all parcels or lots proposed for subdivision with the exception of those divisions that qualify as limited partitions. Preliminary plats may be required for a residential or nonresidential subdivision which has location characteristics arising from proximity to existing or platted low density residential development, as determined by the land use administrator.

Type B reviews apply to the types of site plans that exceed the size of those that qualify for reviews type A. These reviews also include projects of nonresidential site plans including commercial, office, institutional and industrial developments.

The track B is also eligible to start a Formal Pre-Application Conference designed to provide the applicant with information prior to the preparation of a formal application. Also, a complete application includes the LUCC, NFI Exemption or Approval Letter, and Preliminary CC.

Track B submissions are reviewed by the Development Review Committee (DRC). The DRC consists of the directors (or their designees) of the following City departments: Growth Management, Public Works, Planning and Utilities. Also, applicants and their representatives should attend DRC meetings that take place

approximately twice a month in the City Hall. To some reviewers, this track is technically as easy as any other type

“We have some subdivisions that have sent us that they want to split a lot and record a subdivision, it’s a re-permit of the PLAT he can handle the surveyors and turn in everything for you. It’s a pretty straight forward process, it’s not that complex. Just that if you’re not that familiar with it you could have a tough time. That’s why you don’t need to get an engineer just get a surveyor and ask him if he knows his process.” (Nelg)

In general terms the stages of track B are the same than track A, however, there are some differences in terms of how the participants take part and the level of citizen participation that is used for the analysis and approval of these projects. Next, I present the most distinctive characteristics of each stage before introducing the results of the analysis.

First stage: From submission to the Meeting. In general terms, this stage is similar to the one followed by track A. However, there is one main difference, the post-application meeting. At the time the application is submitted to the city, the applicant may schedule an appointment to meet with the technical assistance staff to discuss the site plan application and address remaining technical issues related to the plan or application. The meeting shall be held after distribution of DRC staff reports on the plan or application and before the development review committee meeting on the site plan. The requests for this meeting shall be submitted to the growth management department.

Second Stage: From Meeting to Approval. Meetings of the development review committee are administrative in nature and not subject to the quasi-judicial provisions of state statutes. In these meetings, no testimony may be received from any applicant or member of the public during the course of the meeting. Nevertheless, a DRC member may question the applicant or a representative present at the meeting on technical issues related to the application. Such questions shall be limited to inquiries seeking clarification of material in the application. Any member of the public present at the meeting shall have an opportunity to speak on the same technical issues. All

comments by either the applicant or members of the public shall be limited to the question asked by the development review committee member. For these meetings, all members are responsible for providing their findings on whether the project meets applicable criteria and standards imposed by codes, policies and regulations of the City. The proposed written findings shall be transmitted to other members of the development review committee and the applicant and made available for public inspection at least one working day prior to consideration by the development review committee. The proposed written findings are the basis for a recommendation by each development review committee member to the other development review committee members to approve, approve with conditions, deny or continue consideration of an application to a date and time certain.

The DRC prepares and submits to the land use administrator an itemized list of findings of fact which supports approval, approval with conditions or denial of the application; or requests additional material and data determined to be necessary to undertake the required review and continue its review to a certain date and time. The land use administrator shall notify the applicant of the Development Review Committee decision within five working days of the decision.

The applicant has 90 days from the date of the committee meeting, when final action is taken, to include any conditions of approval by the committee. Any such changes shall be reviewed for acceptance by the committee members or their designees within ten days of receipt and shall bear the signature of the committee members or their designees before the preliminary plat can be accepted as the approved preliminary plat. Upon written request from the applicant, one 90 day extension may be granted to the applicant by the land use administrator for submittal of the revised preliminary plat. Failure by the applicant to submit a revised preliminary plat within the time frame specified in this subsection shall deem the preliminary plat null and void.

In this stage Track B differs substantially from Track A in the level of discretion that reviewers have to interpret broad policies for land development and growth management. Reviewers at this track see their work less as a technical one and more as the one of an expert who predicts the implications of characteristics beyond technical standards.

“I mean they (at the type A reviews) look at to make sure you really can hold your run off and that the slope is correct. We (at type B) may look at... for example, we had a case recently where it was just in a really bad place but you know from a design perspective it put a 12 foot concrete wall against a residential neighborhood and we said, “you can’t, that’s bad you’ve got to do this differently.” So they look at in a quantitative way we look at in a qualitative way. You know we don’t want a 12 foot wall or any wall up against a neighborhood and they’re going, “well, you have to make it 2,000 sq. ft. bigger so it can hold all the water.” So it’s two different ways of looking at it. And then we look at it and they don’t look at we look at the comp. plan requirements. We look at the comp. plan for a certain area say it’s a mixed use zoning and it would say well the comp. plan would say that you need to have a mix of use here with enough small scale commercial here to serve the immediate residential population. We look and that and go, “hmm, you know you really need to add this or not do this or maybe add a few more houses here.” They (at the type A reviews) don’t look at that. They don’t care about that. So we look at the broad qualitative issues and they look at the very specific quantitative measurements.” (RM)

Third Stage: from Approval to Signature. This stage does not vary significantly from the limited partition. The decision of the Development Review Committee shall become final 30 calendar days after it is rendered unless a person who qualifies as a party pays the filing fee and files the petition for formal proceedings. Failure to pay the filing fee, or to file the petition as required is jurisdictional and shall result in the waiver of the right to petition for formal proceedings. Also, at this stage, upon approval, the applicant shall provide a copy of the plan, with appropriate signatures and which depicts any revisions which have been made during the course of the review.

Results

Table 15 provides the results of the OLS analysis of track B with robust standard errors. Each column presents the analysis of each stage. The first stage provides the analysis that starts with the submission and ends with the meeting. The second column delivers the results of the analysis of the stage that starts with the end of the meeting and finishes with the approval or denial of the project. The last column presents the results of the stage that starts with the approval of the project and ends with the final signature and stamping of the plans.

Table 15. Type B and Preliminary Plats Analysis

		Type B and Preliminary Plats (With Robust Standard Errors)		
		From submission to Meeting	From Meeting to Approval	From Approval to Signature
Agents Characteristics	Agent	-2.138	19.588	-16.201
	Total number of Applications	-.307**	.300	1.184
	Repeated interaction agent-developer	-4.798**	3.084	-19.51**
	Frequency of contact	.641***	-.095	-1.0105
	Trustworthiness	.606**	-.756	-4.745**
	Contribution of general wellbeing	-1.131**	-6.627	8.897**
Economic Development	Industrial Zone	14.262	-33.87	76.557
	Commercial and Service Zone	5.0064	18.140	10.167
	Urban Zone	4.0084	3.1928	24.736
	PUD Zone	5.5107***	4.9722	-2.095
	Commercial Construction	1.738***	-14.550	-14.82
	South Region	1.574	-59.209	57.576***
	Northeast Region	-.191	-49.405	24.203**
	Total Fees Paid by the Project	-.0004**	.00318	-.0015**
Complexity of the Project	Size	.0029	.01009	.01405
	Acreage	-.0043*	-.122	-.1017
	Addition	-.1833	6.0789	-.6126
	New Use (redevelopment)	4.4330	22.775	-46.005**
	Type B	-.0936	-22.22	-4.627
	Constant	26.809***	129.31***	82.929**
	N	279	220	177
	R	0.1645	0.17	0.2753
* = $\alpha < 0.10$, ** = $\alpha < 0.05$, *** = $\alpha < 0.01$				

During the first stage of the review of type B permits and Preliminary Plats, more variables related to the agent have a significant effect on the length of the review; however, not all of them in the expected direction. First of all, the frequency with which agents contact reviewers and the extent to which they are trustworthy appears to increase the number of days that this stage takes. The positive relationship between the frequency of contact and the length of the review can be explained by the opinion of some reviewers who believe they are more frequently contacted by agents who have more problems. Nevertheless, the only plausible explanation for the positive relationship between length

and trustworthiness is that for this particular type of project, it does take longer to professional agents to integrate their files.

The variable that measures the experience of the agent with the number of this type of submissions, resulted significantly and with the expected sign for this stage. Also the reputation for contributing to the well being of the city also appears to reduce the length of the review for agents an average of almost one day for a move of one unit in the personal scale of reviewers. Also, the extent to which agents have a repeated interaction with developers has a significant effect in reducing the number of applications benefiting developers.

In this stage, almost all variables that measure the impact of a project's economic development appear to increase the number of days of this stage compared to projects that develop areas for housing. Large city projects and projects in zones with planned unit developments take an average of more than five days to pass this stage compared to projects in residential areas. In addition, projects that build commercial constructions take an average of almost two more days compared to projects that develop housing areas.

Also, two variables regarding the complexity of the project show that the more complex a project appears to be, the less time it will take to clear this stage. One of the plausible explanations for this outcome is that larger projects are better prepared for submission.

In the second stage, the reputation of contributing to general well being may contribute to reducing the time for agents by an average of more than 6 days for each point they move in the personal scale of a reviewer. In terms of complexity, type B permits may take an average of less than 22 days to clear the negotiation process of the second stage, which suggests that preliminary plats are, in general, more complex projects to be reviewed. For all projects fees also show that the more complex the project, the longer it takes to review. For every thousand dollars paid in fees, a project may be delayed an average of more than 3 days. Finally, projects in this stage in both the south and northeast area take less time to be approved than projects in the northwest area.

In the third stage, repeated interaction between agents and developers has an important effect in reducing the length of the stage. On average, if the project is

submitted by agents and reviewers who have worked together before, the project takes an average of more than 19 days less. It pays for an agent to have a trustworthy reputation since they have their projects reviewed almost five days earlier for one point gained in the personal scale of a reviewer. However, reputation for contributing to the public well being has the opposite effect to that which was predicted. The process takes an average of nine days more for each point below in the personal scale of a reviewer.

In this stage, larger projects in terms of the fees they pay are likely to be reviewed faster. For instance, a project is reviewed an average of one day faster for each thousand dollars of fees. In addition, projects that redevelop existing sites, by changing the use of an existing construction, are reviewed an average of 46 days faster than projects that develop new sites.

Finally, review of projects in the south and north region on average take longer than projects in the northwest area. To obtain the final project signed for a project in the south area takes an average of 57 days more than in the northwest section. For the northeast region the process takes an average of 24 days more than for the northwest area.

Track C

Concurrency review is the most technical of the three tracks studied and in which reviewers have less discretion to expedite or delay the review. Also, the possibilities to negotiate at this review are very limited, since standards to be met are less subject to interpretation. Therefore, this is a review in which it is expected that the variation on timing for review is not significant, and if some exists, it is mostly explained by the technical complexity of projects.

Track C is the path followed by concurrency reviews. The timing for requesting a concurrency review varies depending upon the type of review. For type A Site Plan or Limited Partition reviews, the concurrency review shall be submitted at the same time as the submittal of the site plan application or limited partition. For type B or Preliminary Plat, the concurrency review shall be submitted after the pre-application conference and not later than the submittal of the Type B or Preliminary Plat.

The Applicant shall submit an application for a concurrency review as required and shall receive a "Preliminary Certificate of Concurrency" for the development project

from the CM. The application for a concurrency review shall be filed with the Concurrency Management Division of the GMD.

Within eight days after the acceptance of a complete application and application fee, CM will make a preliminary concurrency determination, assuming that all submitted data and analyses are correct. If the preliminary concurrency determination reveals a deficiency in one or more concurrency facilities, the Applicant, in consultation with CM, will withdraw the application, revise or correct the data or analysis or agree to negotiate a Development Agreement to address the deficiencies.

If the preliminary concurrency determination of the original or a resubmitted application reveals that concurrency appears to be satisfied, or if the Applicant files a "Notice of Intent to Negotiate a Development Agreement," CM will issue a "Preliminary Certificate of Concurrency."

Upon notification that a complete application for a development order has been received, CM will conduct a sufficiency review of the application to verify that all data and analyses are correct. When it is determined by the Chairperson of the Concurrency Review Committee (CRC) that a pending development project will cause a deficiency in one or more concurrency facilities, the Chairperson will call a meeting with the members of the CRC which have jurisdiction over the facilities which will be affected by the pending developments.

The CRC is made up of technical staff from departments or agencies responsible for the various concurrency facilities. The CRC consists of representatives from the following departments or agencies: Growth Management Department (Concurrency Management Division, chair person), Public Works Department (Traffic Engineering Division), TLCPD (Transportation Planning Division), Water and Sewer Department (Systems Planning Division), Parks and Recreation Department, Growth Management Department (Environmental Management Division), Taltran and Leon County Public Works Department.

The first stage of this review is very similar to the first stage of track A described above. The second stage of the process is similar to the third stage of track A, which also was presented in the previous section.

Results

Table 16. Concurrency Review Analysis

		Concurrency Review (With Robust Standard Errors)		
		From submission to Preliminary	From Preliminary to Final Signature	From Submission to Final Signature
Agents Characteristics	Agent	-1.149	17.232**	7.576
	Total number of Applications	-.0727	.0407	.0586
	Repeated interaction agent-developer	4.4721	-8.261	-2.902
	Frequency of Contact	.24601	-.4673	-.1803
	Trustworthiness	.72002	.1867	.4160
	Contribution of general wellbeing	-3.072**	-2.615	-4.82
Economic Development	Commercial Construction	-8.842***	-10.65*	-17.303***
Complexity of the Project	Acres	.00003	-.00007*	-.000042
	Multiple land-use categories	5.865*	8.873	15.031**
	Total Fees Paid by the Project	.00641***	.0023***	.0156***
	Size	-.0059	-.0051	-.0255**
	Storm Category Level	6.1494***	-4.236	1.277
	Low Transportation	-3.202	-21.08***	-12.705
	Constant	14.529	113.102	119.27
	N	621	622	614
R	0.2530	0.0568	0.1175	
* = $\alpha < 0.10$, ** = $\alpha < 0.05$, *** = $\alpha < 0.01$				

Table 16 provides the result of the OLS analysis of track CC with robust standard errors. Each column presents the analysis of each stage. This first stage provides the analysis that starts with the submission and ends with the preliminary approval. The second column delivers the results of the analysis of the stage that starts with the preliminary approval and finishes with the final approval or denial of the project. The last column presents a bundle of the two stages and provides the results of the length of the entire process from submission to the final approval.

In the first stage of the concurrency review, the reputation of contributing to the general well being is associated with shorter reviews. On average, for each point that an agent moves on the personal scale of reviewers there is a reduction in three days on the duration of the review. Projects that build units for commercial purposes have reviews

an average of nine days shorter than projects that develop housing units. Three of the measures of the complexity of the project have a significant effect in the expected direction. First, projects that are developed in areas that cover more than one land-use category take an average of almost six days more to be reviewed compared to projects developed in only one land-use category. Second, the more fees a project pays, the longer it takes to be reviewed. For every thousand dollars a project pays for fees to the city, the project delays an average of six days. Third, the higher the project is rated in the scale of storm category the longer it takes to clear the first stage. For each unit a project moves up in the scale of storm category, the review of the project delays an average of about six days.

In the second stage the presence of an agent is positively associated with the time it takes to clear a review. On average, the projects handled by an agent take an additional 17 days to receive the final signature, compared to those projects that are handled by the owner of the project or the developer. Whether the projects develop units for commercial purposes also affects the length of the review in this stage. Projects that submit construction for commercial purposes are reviewed an average of more than ten days less than projects that develop housing units. Three variables that measure the complexity of the project also significantly affect the length of the review in the expected direction. First, projects that develop sites that include more than one land-use category take an average of almost nine days more to be reviewed than projects that include only one land-use category. For every thousand dollars that a project pays in fees, its review takes an average of two more days. Finally, those projects situated in areas considered low traffic take an average of 21 days less to be reviewed compared to projects placed in areas of high traffic.

Discussion

In repeated cases, reviewers mention the difficulty to predict the length of the review process because of the differences between each project. In their own words, “each project is a completely different animal.” However, the analysis shows that once we differentiate between stages and types of permits some variables show a significant relationship with the length of the review process.

First, as was previously mentioned, to characterize them in a simple form, concurrency reviews are the most technical review in the sense that there is very little room for interpretation of the codes and standards. In this review, the results confirmed the expectation that the reputation of agents does not matter in predicting the length of the review. However, due to the complexity of the process, the mere existence of an agent handling the project is very helpful in expediting the review. Therefore, in a process technically complex, it is likely that reviewers do not have enough discretion to expedite a review even if they wanted to.

On the other hand, in a review where enough discretion is needed and used by public administrators, the reputation of agents to be contributing with their projects to the public good, plays an important role in expediting the review process. However, some results are puzzling. For example, it is hard to explain why agents, who have reputations for contributing to the general well being of the community, have their projects delayed from approval to signature. In part, the only plausible explanation is that agents that contribute to the public good are not always the most skilled in handling the bureaucratic process of filing the final plan for signature.

In a review where more discretion is needed and more controversy may exist on the interpretation of standards, the agent's characteristics are important as well as the interaction between the agents and the developers. In addition, since these reviews are done for the largest developments, they are the mechanism in which the most controversial trade-offs between policies in the LUR occur. These reviews are what actually shape the growth of the city because small developments will only follow the trends of these large developments.

Reviews for larger projects, in general, did not fulfill the expectation that these reviews were going to be where their economic impact was going to have a major effect, compared to small projects. The results showed that in reviewing smaller developments, this contribution may reduce the timing for review. Particularly, when it is related to developments associated with industrial and commercial zones.

It also an interesting fact that in some cases, the effects of variables cancel out each other, which suggests that either reviewers or agents may try to make up for the time lost in a previous stage. Also, it may suggest that agents may slow down the process

after obtaining faster reviews in previous stages. Although this can not be proven by the current analysis, these findings support the claim made by some reviewers.

If during the formation of the land-use regime, interest groups can participate directly on its formation because for most policies there is a clear stake which does not happen during the implementation of such LUR. During the review process for land development, the technical complexity requires developers to influence the final outcome through agents. These agents become, to some extent, the enforcers of the LUR. The analysis showed that their experience appears to have more impact in those stages where their knowledge of the process is important, but not in those stages where negotiation is the basis of the review. The experience of the agent appears, in general, to be positive in reducing delay during the review process where the most important part is the adequate integration of the files to continue with the review.

The analysis also showed that when the reputation of agents reflects the image of having their preferences aligned with those of the city, their capacity to expedite the review process during the stage of negotiation is better. For instance, that is shown by the findings that the reputation of agents to contribute to the well being has a significant impact in the stages in which reviewers can make use of their discretion to manage growth in the city.

The research also found support for the idea that frequency of interaction between agents and reviewers is more the result of problems with projects and agents asking for clarification on interpretation of policies than the result of networking practices intended to affect the judgment of reviewers. This strongly supports the idea that delays can be the result of a particular interpretation of policies during the implementation of the land-use regime. Not only is familiarity with the process helpful in reducing the length of the review, but familiarity with the way in which these reviewers interpret policies of the LUR.

The implementation of the LUR also appears to provide the opportunity for the public officials to pursue policies not directly linked to the review process. First, it is interesting that those projects that develop industrial zones take shorter reviews. This finding strongly supports the idea of how economic development is compatible with growth management policies. Redevelopment of existing sites is of the interest of city

officials as a result of theories of new urbanism and the battle against urban sprawl. According to most reviewers, redevelopment is of high priority for the city according to most of the reviewers interviewed. In the particular case study here, redevelopment is important because when most developable land is already occupied, it becomes imperative to keep new developments in the city area that could move to the unincorporated area. This situation is evident in the impact that projects that redevelop existing sites have on the length of the reviews.

Finally, it can be noticed that in the most technical track, which is the concurrency review, all the variables that measure the complexity of projects came out in the expected direction. These results suggest that, the leverage of reviewers to delay a project is mostly based on the particular complexity of the project. However, even taking into account the complexity of the project, there is a significant shorter review for those projects that will contribute to the construction of buildings that create employments in the city.

CHAPTER VII

CONCLUSION

Regardless of whether it is the result of regulations that impose delays or of administrative processes that implement those regulations, delays during the land development process is commonly seen as unwanted and the result of inefficient practices. However, this research has shown that the origins of such delays are not only caused by inefficient practices, but the result of regulations and practices that pursue other goals that compete with fast urban growth. Citizens and public administrators with interests different than those of the growth machine make use of them some times because it is the most effective way to protect other goals, if not the only one.

It is a common belief that regulations of industries are an automatic result of the awareness of citizens of the externalities produced by the industry. The case of the land development industry does not seem to trigger an immediate response of regulations that either protects or at least defines the property rights of those affected by the industry. I have suggested here that part of the cause is that externalities caused by land development is many times not in the arena of land development, but in the arena in which the externality happens, such as the case of housing education, potable water and other problems of urban sprawl.

Also, the belief that the political power of interest groups defines who gets what from regulations, is true only in part. The political power of interest groups not only comes from their economic resources or their capacity to overcome classic problems of collective action. The institutional environment in which they interact plays an important role by amplifying or diminishing their capacity to influence public officials who supply regulations.

Despite the fact that growth and economic interests tend to dominate the political arena of land-development, some political institutions seem to temper such overwhelming power. This research has shown that the provision for citizen's initiative facilitates the introduction of antigrowth goals in the agenda of local government because it facilitates commonly unorganized groups to introduce their values in regulations. The

research presented here also offers strong support to the idea that manager-forms of government generate more professional and integral responses to the problems of growth such as urban sprawl even as it goes in opposition to the growth machine.

These findings are relevant to citizens and interests groups who want to introduce more integral responses to the problems of growth. In order to deal with the growth machine and its unintended outcomes, it is neither enough nor the only way to champion antigrowth regulations or regulations that directly protect public goods; it is important to create the institutional environment in which such integral responses are the automatic response of the political system and not the exception.

In the same tone, the framework of land use-regulation regimes, offers, by itself, some important implications. By differentiating between the two types of costs, we can observe that the various regulations that pursue the same goals may be more popular than others among certain groups. By identifying the type of cost of various regulations, public officials or political entrepreneurs can create coalitions around those policies to facilitate a response to a problem of growth. These coalitions can be formed not only in base to the direct impact of the problem but in base to the indirect impact on the interest of the growth machine.

Although it is a common belief that growth management is irreconcilable with economic development, the land-use regime framework suggests this belief may be inaccurate. By creating coalitions to adopt regulations that effectively combine regulations that impose direct and delay costs on new developments, it is possible to make compatible growth management with economic development. Primarily because regulations based on direct costs are seen as more friendly to pro-growth interests than regulations based purely on delay.

This differentiation between direct and delay costs complements the common dichotomy between low and high regulated markets of land development. The concept of land-use regulation offers a richer categorization of land-use regimes in which low and high regulated markets are only the extremes. However, other categories in the middle may be preferred over those extremes. But even more important is the fact that all these categories do not form part of a continuous line that follows the principle of transitivity for all members of the community. In particular, professional city administrators and

public officials seem to encourage high regulated markets for land development, but the reason does not seem to be related to the pursuit of big bureaucracies but the pursuit of more discretion in the implementation of these regimes in order to introduce their professional values on the land development agenda.

Highly regulated regimes create the conditions for a more adaptive growth management process that creates loopholes that require of discretion for later adjustments. These regimes seem to be preferred by public managers because they increase their leverage to negotiate and influence the growth of the city by stable decisions that influence the behavior of developers. An integral response to the problems of urban growth does not end with the adoption of regulations and the formation of regimes, it requires administrators to be imbedded in a professional community that shares values of sustainable development and an integral approach to manage land development. In other words, the creation of highly regulated markets for land development is an adequate way to foster good development and make it compatible with economic development, as long as such regulatory framework goes in hand with professionalizing the bodies that implement such regulations.

These professional administrators show the implementation of these regimes in two ways. Public officials in charge of the implementation of regulations of technical standards and professional practices have little or no room to negotiate with citizens. However, they are likely to encourage the behavior of citizens by penalizing those who do not show willingness to comply with regulations and standards easily. Public officials in positions that give them the faculty to interpret more ambiguous regulations and standards do not see the process as mechanical. In fact, to them, complexity is not the result of technical matters but the result of the difficulty in negotiating and generating consensus between the various values and ambiguous goals introduced in the growth management agenda.

It is known that ambiguity in goals facilitates the formation of coalitions to pass legislation and mandates. Land development is no exception. During its implementation managers seem to make use of such ambiguity to enhance their discretion and negotiation powers to introduce their professional values and beliefs of public goods to the agenda. This influence is exercised by clarifying their position on the interpretation of such

regulations in a steady form, and communicating that to citizens. Therefore, frequency of interaction and trustworthiness play an important role in this influence. What the empirical findings in this research suggest is that the causal link between frequency of interaction and expediting reviews is not a cooptation of public officials, but a communication of reviewers' expectations as well as their professional interpretation of land use regulations.

However, since communication plays an important role in conveying expectations, the fact that agents play an intermediary role between citizens and public officials must be understood. Agents can or cannot validate to citizens (developers) the interpretation of public officials. By doing this, agents actually shape the expectations of citizens about how flexible, how expensive and how long it can take the process to change the decision or perspective of reviewers. Agents can become regulators and introduce their values into the growth-management agenda. In this regard, managers should pursue socialization and frequency of interaction with agents to let them know about the stability of their interpretation of regulation and their commitment with certain patterns of growth. If agents transmit this stability to developers they would be less willing to engage in strategies that challenge managers' interpretations and delay the review.

There are several areas in which this research will continue over the coming years. First, future research will complement that formation of the land-use regime in the arena of public goods and services with the identification of regimes formed in the arena of geographic preferences and social policies. The intention of this future research will be to have a comprehensive understanding of the dynamic that takes place in the other arenas, and compare them with the findings on the arena of public goods and services.

The second line in which future research will continue is in measuring the impact that these regimes have on housing prices and policy problems such as housing affordability, the dynamic of housing prices, economic growth and redevelopment. The research presented here, assumes that some regimes may be more compatible with economic development and the creation of affordable housing than others, this future research will test the validity of those assumptions. But more importantly, it will provide

public officials with information that will help them decide the particular configuration that is more adequate for the policies intended by a city.

The third way in which this research will continue, is by studying the mechanisms by which some political institutions can affect the formation of land use regime. A finding that strongly contradicts the expectation of the political markets model, is that representation by at-large elections may enhance the possibility of the formation of antigrowth regimes. If these findings are confirmed by future research, they will suggest that the dynamic of politics in local governments is not easily dominated by the growth machine, and that, in fact, the city as a growth machine is currently being limited by political institutions that were supposed to contribute to its formation.

REFERENCES

Alston, L., T. Eggertsson, et al. (1996). *Empirical Studies in Institutional Change*. New York, NY, Oxford University Press.

Altshuler, A. and J. Gomez-Ibanez (1993). *Regulation for Revenue: The Political Economy of Land Use Exactions*. Washington, D.C., The Brookings Institute.

Anthony, J. (2004). "Do state growth management regulations reduce sprawl?" *Urban Affairs Review* 39(3).

Borgatti, S. P., M. G. Everett, et al. (1992). *UCINET IV version 1.00 user's guide*. Columbia, Analytic Technologies.

Boschken, H. (1977). "Public Control of Land Use: Are Existing Administrative Structures Appropriate?" *Public Administration Review* 37(5): 495-504.

Brueckner, J. (1990). "Growth Controls and Land Values in an Open City." *Land Economics* 66: 237-248.

Burby, R. J., P. J. May, et al. (1998). "Improving Compliance with Regulations: Choices and Outcomes for Local Government." *Journal of the American Planning Association* 64(3): 324-334.

Calvert, R. (1995). *The Rational Choice Theory of Social Institutions: Cooperation, Coordination, and Communication*. Modern Political Economy. J. S. Banks and E. A. Hanushek. Cambridge, Cambridge University Press.

Clarke, S. E. and G. L. Gaile (1989). "Moving Toward Entrepreneurial Development Policies: Opportunities and Barriers." *Policy Studies Journal* 17(2): 574-98.

Clingermayer, J. and R. Feiock (2001). *Institutional Constraints and Local Policy Choice: An Exploration of Local Governance*, SUNY Press.

Crecine, J. and O. Davis (1967). "Urban Property Markets: Some Empirical Results and Their Implications for Municipal Zoning." *Journal of Law and Economics* 10(2): 79-100.

Deakin, E. (1989). *Growth Controls and Growth Management: A Summary of Review of Empirical Research*. Understanding Growth Management; Critical Issues and Research Agenda. D. Brower, D. Godschalk and D. Porter. Washington, DC, Urban Land Institute: 3-21.

DeGrove, John M. and Robyn S. Turner. 1998. "Local Government: Coping with Massive and Sustained Growth." In Robert J. Huckshorn. Government and Politics in Florida. 2nd Ed. Gainesville, FL: University Press of Florida.

DeSantis, V. and T. Renner (1994). "The Impact of Political Structures on Public Policies in American Counties." *Public Administration Review* 54(3): 291-295.

Dowall, D. (1984). *The Suburban Squeeze: Land Conversion and Regulation in the San Francisco Bay Area*. Berkeley, California, University of California Press.

Dresch, Maria and Steven M. Sheffrin. 1997. Who Pays for Development Impact Fees and Exactions? San Francisco, CA: Public Policy Institute of California.

Eggertsson, T. (1990). *Economic Behavior and Institutions*. Cambridge, Cambridge University Press.

Elkins, D. (1995). "Testing Competing Explanations for the Adoption of Type II Polices." *Urban Affairs Quarterly* 30: 809-839.

Feiock, R. (2002). "A Quasi-Market Framework for Local Economic Development Competition,." *Journal of Urban Affairs* 24: 123-42.

Feiock, R. and A. Taveras (2002). *County Government Institutions and Local Land Regulation. Analysis of local land markets and the impact of market regulations*. P. Cheshire and S. Sheppard. Cambridge, Lincoln Land Institute.

Fleischmann, A. (1986). "The Goals and Strategies of Local Boundary Changes: Government Organization or Private Gain." *Journal of Urban Affairs* 4: 63-75.

Fleischmann, A. (1989). "Politics, Administration, and Local Land-Use Regulation: Analyzing Zoning as a Policy Process." *Public Administration Review* 49(4): 337-344.

Fleischmann, A. and C. Piernunzi (1990). "Citizens, Development Interests, and Local Land-Use Regulation." *The Journal of Politics* 52(3): 838-853.

Frech, H. and R. Lafferty (1984). "The Effect of California Costal Commission on Housing Prices." *Journal of Urban Economics* 16: 105-123.

Gerber, E. and J. Phillips (2004). "Direct Democracy and Land Use Policy: Exchanging Public Goods for Development Rights." *Urban Studies* 41(2): 463-79.

Gerber, E. and J. Phillips (2004). *Evaluating the Effects of Direct Democracy on Public Policy: California's Urban Growth Boundaries*. Paper presented at the Midwest Political Science Association meeting. Chicago.

Glickfeld, M. and N. Levine (1992). *Regional Growth... Local Reaction: The Enactment and Effects of Local Growth Control and Management Measures in California*. Cambridge, MA, Lincoln Institute of Land Policy.

Goetz, E. (1990). "Type II Policy and Mandated Benefits in Economic Development." *Urban Affairs Quarterly* 26(2): 170-190.

Goetz, E. (1994). "Expanding Possibilities in Local Development Policy: An Examination of U.S. Cities." *Political Research Quarterly* 47(1): 85-110.

Granovetter, M. (1985). "Economic Action and Social Structure: The Problem of Embeddedness." *American Journal of Sociology* 3: 481-510.

Katz, L. and K. Rosen (1987). "The Interjurisdictional Effects of Growth Controls on Housing Prices." *Journal of Law and Economics* 30(1): 149-160.

Kreps, D. (1990). *Corporate culture and economic theory. Perspectives on Positive Political Economy*. J. Alt and K. Shepsle, Cambridge University Press.

Landis, J. (1986). "Land Regulation and the Price of New Housing: Lessons from Three California Cities." *Journal of the American Planning Association* 59: 9-1.

Levi, M. and L. Stoker (2000). "Political Trust and Trustworthiness." *Annual Review of Political Science* 3: 475-508.

Levine, N. (1999). "The Effects of Local Growth Controls on Regional Housing Production and Population Redistribution in California." *Urban Studies* 36(12): 2047-2068.

Lewis, P. and M. Neiman (2002). *Cities Under Pressure: Local Growth Controls and Residential Development Policy*. San Francisco, Public Policy Institute of California.

Libecap, G. (1989). *Contracting for Property Rights*. New York, Cambridge University Press.

Lineberry, R. and E. Fowler (1967). "Reformism and Public Policy in American Cities." *American Political Science Review* 61: 791-716.

Loesch, J. and D. Hammerman (1998). "Private/public partnerships to ensure building code compliance." *Facilities* 16(7/8): 180-189.

Logan, J. and H. Molotch (1987). *Urban Fortunes: The Political Economy of Place*. Berkeley, CA, University of California Press.

Lowi, D. (1964). "American Business, Public Policy, Case Studies and Political Theory." *World Politics*(July): 677-715.

- Lubell, M., R. Feiock, et al. (2005). "Political Institutions and Conservation by Local Governments." *Urban Affairs Review*.
- Lubell, M., M. Schneider, et al. (2002). "Watershed Partnerships and the Emergence of Collective Action Institutions." *American Journal of Political Science* 46(1): 148-163.
- Lyons, W. and D. Lowery (1986). "The organization of political space and citizen response to dissatisfaction in urban communities." *Journal of Politics* 48: 321-46.
- Malpezzi, S. (1998). "Housing Prices, Externalities, and Regulation in U.S. Metropolitan Areas." *Journal of Housing Research* 7(2): 209-242.
- Marando, V. and R. Thomas (1977). *The Forgotten Governments: County Commissioners as Policy Makers*. Gainesville, University of Florida Press.
- Mayer, C. and T. Somerville (2000). "Land use regulation and new construction." *Regional Science and Urban Economics* 30: 639-662.
- Meier, K. and L. O'Toole (2003). "Public Management and Educational Performance: The Impact of Managerial Networking." *Public Administration Review* 63: 689-699.
- Miller, G. (1992). *Managerial Dilemmas: The Political Economy of Hierarchy*. New York, NY, Cambridge University Press.
- Mladenka, K. (1981). "Citizen Demands and Urban Services: The distribution of bureaucratic responses in Chicago and Houston." *American Journal of Political Science* 25: 693-714.
- Molotch, H. (1976). "The City as a Growth Machine: Toward a Political Economy of Place." *American Journal of Sociology* 86: 1387-400.
- Morgan, D. and K. Kickham (1999). "Changing the Form of County Government: Effects on Revenue and Expenditure Policy." *Public Administration Review* 59(4): 315-324.
- Nalbandian, J. (1989). "The Contemporary Role of City Managers." *American Review of Public Administration* 19(261-77).
- Nelson, A. C. (2000). "Smart growth: Urban containment and housing prices." *Journal of Housing and Community Development* 57(5).
- Ostrom, E. (1990). *Governing the Commons: The Evolution of Institutions for Collective Action*. New York, NY, Cambridge University Press.

- Ostrom, E. (1999). *Institutional Rational Choice: An Assessment of the Institutional Analysis and Development Framework*. Theories of the Policy Process. P. Sabatier, Westview Press.
- Ostrom, E., V. Ostrom, et al. (1988). *Local Government in the United States*. San Francisco, Institute for Contemporary Studies Press.
- Pendall, R. (2000). "Local Land Use Regulation and the Chain of Exclusion." *Journal of the American Planning Association* 66(2): 125-141.
- Peterson, P. (1981). *City Limits*. Chicago, University of Chicago Press.
- Plante, P. (1999). "The high-profile project review team: Chandler's new economic development tool." *Public Management* 81(4): 14-17.
- Quigley, J. and L. Rosenthal (2004). "The Effects of Land-Use Regulation on the Price of Housing: What do we know? What can we learn?"
- Renner, T. (2001). *The Local Government Management Profession at Century's End*. The Municipal Yearbook. Washington, D.C., ICMA.
- Rueter, F. (1973). "Externalities in Urban Property Markets: an Empirical Test of the Zoning Ordinance in Pittsburgh." *Journal of Law and Economics* 16(2): 313-350.
- Ruhil, A. (2003). "Structural Change and Fiscal Flows: A Framework for Analyzing the Effects of Urban Events." *Urban Affairs Review* 38(3): 396-416.
- Ruhil, A., M. Schneider, et al. (1999). "Institutions and Reforms: Reinventing Local Government." *Urban Affairs Review* 34(3): 433-449.
- Rusteika, S. F. (1991). "Project Commencement Delays on Architectural Projects." *Transactions of the American Association of Cost Engineers*. American Association of Cost Engineers: 23-28.
- Schneider, M. and K. O. Park (1989). "Metropolitan Counties as Service Delivery Agents: The Still Forgotten Governments." *Public Administration Review* 49: 345-352.
- Schneider, M. and P. Teske (1993). "The Antigrowth Entrepreneur: Challenging the 'Equilibrium' of the Growth Machine." *The Journal of Politics* 55(3).
- Scholtz, J. (1984). "Voluntary Compliance and Regulatory Enforcement." *Law and Policy* 6: 385-405.
- Scholtz, J. (1991). "Cooperative Regulatory Enforcement and the Politics of Administrative Effectiveness." *American Political Science Review* 85: 115-136.

Simmonds, K. (1993). "Impact Fees: a method of paying for growth in Florida." *The International Journal of Public Sector Management* 6(3): 3-16.

Sharp, E. (2003) "Political Participation in Cities." In *cities, politics, and policy: a comparative analysis*. John Pelissero, Ed. CQ Press, Washington, D.C.

Steinacker, A. (1998). "Economic Restructuring in U.S. Cities, Suburbs, and Non-metropolitan Areas, 1977-1992." *Urban Affairs Review* 34(2): 212-29.

Stone, C. N. (1989). *Regime Politics: Governing Atlanta 1946-1988*. Lawrence, University of Kansas Press.

Tiebout, C. (1956). "A Pure Theory of Local Expenditures." *Journal of Political Economy* 64: 416-24.

Zorn, P., D. Hansen, et al. (1986). "Mitigating the Price Effects of Growth Control: A Case Study of Davis." *Land Economics* 62: 47-57.

BIOGRAPHICAL SKETCH

Edgar E. Ramirez de la Cruz was born in Parras, Coahuila, Mexico, and grew up in Saltillo, Coahuila. He earned a BS in Economics from the Autonomous University of Coahuila State in 1997; and an MPA from the Center for Teaching and Research in Economics (CIDE), in Mexico, in 2000. Before entering into the doctoral program in public administration at FSU, he served as assistant professor at CIDE where he conducted research in Mexican public administration and policy. In 2006 he defended successfully his dissertation at the Askew School of Public Administration and Policy at Florida State University. He joined the faculty at the School of Public Affairs at Arizona State University in 2007, as assistant professor in public administration.