RELATIONSHIP BETWEEN GROWTH PATTERNS AND PLANNING
PRACTICES: A CASE STUDY OF THE CITY OF ROANOKE

by
Rapsody Dawn Gallimore

Thesis submitted to the Faculty of the
Virginia Polytechnic Institute and State University
in partial fulfillment of the requirements for the degree of
Master of Science
in
Department of Geography

APPROVED:

[Signatures]

Dr. Susan R. Brooker-Gross
Dr. James B. Campbell
Dr. John M. Levy

September, 1992
Blacksburg, Virginia
LD 5655
V855
1992
G358
C.2
RELATIONSHIP BETWEEN GROWTH PATTERNS AND PLANNING PRACTICES: A CASE STUDY OF THE CITY OF ROANOKE

by
Rapsody Dawn Gallimore
Dr. Susan R. Brooker-Gross
Department of Geography

(ABSTRACT)

Land use pattern and plans influence future urban development. More desired urban forms can be created through land use decisions and policing power. Unfortunately, land use data is rarely analyzed, and researchers rely on a few historical, morphological studies for any information on land use change.

Historical, morphological studies show that cities, and sections of cities, face different developmental problems at various points in time; for example, out-migration, poor quality housing, competition among employment sectors and lack of undeveloped land. How these problems are addressed depends on the current state of planning. Well-organized and up-dated plans address current and future growth, and foster or hinder specific kinds of growth.

In Roanoke, Virginia, a bounded city with limited vacant land, redevelopment has become an essential element of growth. A case study of Roanoke examined the transformation of Roanoke's zoning ordinance from 1966 to 1987 when Roanoke was emerging from development into redevelopment.

Publications by Roanoke City Government, rezoning request notices for the city from 1978 to 1991 and rezoning request files from 1982 to 1991 and publications on five neighborhoods were used to examine the (1) differences between the 1966 and 1987 zoning ordinances, (2) application of the 1966 zoning ordinance, (3) application of the 1987 zoning ordinance, and (4) application of conditional zoning.
The data showed that zoning affected the land use pattern by fostering or hindering specific land use categories. The 1966 ordinance's large minimum lot sizes hindered the application of residential zoning categories by stopping small scale, inner city developments. The 1966 ordinance fostered the expansion of commercial and industrial zoning categories through an absence of lot size requirements.

The 1987 zoning ordinance decreased the minimum lot size in several residential categories and added lot width, area and yardage requirements to commercial and industrial zoning categories. This ordinance preserved old, inner city structures through techniques, including historic districts. By addressing different developmental stages within the city, the ordinance encouraged infill development in inner city areas and planned unit developments in peripheral locations.

Conditional zoning influenced the land use pattern by limiting changes. Land usage limitations give planners more control over land use changes that occur outside of the traditional rezoning process. Time limitations result in an automatic reversion of zoning if construction does not begin within the specified time.

The zoning decision-makers used discretion in implementing zoning. Such decisions are important to planning and influence the types of land use changes approved.
Acknowledgements

The author fully recognizes that many individuals have contributed to the successful completion of this study. It is appropriate that those who have contributed significantly to the researcher’s achievement be acknowledged for their help.

I offer my highest appreciation and esteem to Dr. Susan Brooker-Gross, my committee chair, because she not only guided me, but was right beside me every step of the way.

I would like to thank Dr. Jim Campbell and Dr. John Levy, my committee members, for their support and encouragement.

Mrs. Gunther, Mr. Miller, Mr. Bradshaw, and Mr. Reynolds deserve a thank you for taking the time to share their thoughts and ideas.

I sincerely thank Arun and Jayanthi Krishnaswamy for their generosity and friendship.

I offer my fondest gratitude and appreciation to my parents and family members for their never ending support and love. I love you all.
My greatest motivation and encouragement was found in Amlan Mitra, my best friend and companion. Without Amlan, this thesis would never have been completed. Thanks a million.
# Table of Contents

1. INTRODUCTION .................................................................................. 1

2. A LITERATURE REVIEW OF URBAN MORPHOLOGY .......................... 5
   - Urban Morphology: Economic Versus Social Factors ......................... 6
   - Urban Morphology in the United States ........................................... 7
   - The Economic-Rent Theory ............................................................ 9
   - Capital Investments and Innovations in Town Planning .................... 10
   - Urban Fringe-Belts ..................................................................... 11
   - A Historical, Morphological And Evolutionary Approach ................ 13
   - The Decision-Making Approach to Town Planning .......................... 14
   - Conclusion ............................................................................... 16

3. LITERATURE REVIEW OF ZONING ................................................. 18
   - 3.1: A HISTORY OF ZONING .......................................................... 18
   - Background of Zoning .................................................................. 19
   - The Zoning Ordinance .................................................................. 24
   - Alternative Land Use Controls ....................................................... 26
The Gainsboro Neighborhood ........................................... 88
The South Roanoke Neighborhood .................................... 91
The Williamson Road Neighborhood ................................... 94
Conclusion ................................................................. 98

7. RESULTS .................................................................. 104
Differences between the 1966 and 1987 zoning ordinances .......... 105
Application of the 1966 Zoning Ordinance .......................... 106
Application of the 1987 Zoning Ordinance .......................... 107
Application of Conditional Zoning .................................... 109
Concluding Remarks ..................................................... 110

Appendix A. Roanoke, Virginia: Map of Annexations ............... 112

Appendix B. Description of the 1966 Zoning Categories .......... 114

Appendix C. Description of the 1987 Zoning Categories .......... 116

Appendix D. City of Roanoke Orientation Map ...................... 118

Appendix E. Location of Zoning Category Changes: by Year (1978-91) .... 120

Appendix F. Data on Rezoning Requests (1978-91) ................. 122

Bibliography .................................................................. 137
Books and Articles ......................................................... 137
United States and State Supreme Court Cases ....................... 139
Publications by the City of Roanoke .................................. 140

Table of Contents ......................................................... viii
List of Illustrations

Figure 1. Location of Existing Categories ............................................. 76
Figure 2. Location of Requested Categories ........................................... 77
List of Tables

Table 1. Data on Rezoning Requests 1978 to 1986 ........................................ 69
Table 2. Data on Rezoning Requests 1987 to 1991 ....................................... 70
Table 3. Data on Rezoning Requests in Existing Zoning Categories ............... 71
Table 4. Data on Rezoning Requests in Requested Zoning Categories ............ 72
Table 5. Five Neighborhoods (1982-91): Basic Data .................................. 81
Table 6. Five Neighborhoods (1982-91): Detailed Data ................................. 82
1. INTRODUCTION

Land is a finite resource that must satisfy a multitude of needs. Land use development must be carefully planned out and continuously studied. Once changed, many developed lands can never be reverted back to their previous state. Therefore, today’s infrastructure must guide us through the decades to come.

Land use planning is complicated by the striking contrast between rapid land use changes created by technological advances and the slow process through which planning occurs. Although planning can never be perfect or all-encompassing, planning can be improved through monitoring, evaluating and updating procedures. Unfortunately, there is a lack of provisions for current and periodic planning revisions.

Land use patterns and plans influence future urban development. These plans and patterns determine the locations of functions that direct or guide future growth. More desired urban forms can be created through land use decisions and policing power applied within cities. According to Rhind and Hudson, the need for land use data is frequently ignored in the published literature, either because the answer is believed too trivially obvious or because the users are so numerous and diffuse that to list then is banal (Rhind and Hudson, 1980, p. 13).
As a result, researchers rely on a few historical, morphological studies for any information on land use change.

Historical, morphological studies show that cities, as well as sections within cities, are faced with different developmental problems at various points in time. There are problems created by an out-migration of the population including the deterioration of the central business district, longer travel times and deteriorated housing stock. Problems derived from multiple economic centers within a city include increased economic competition and job mobility. And problems created by growth itself including clearance of old structures for new ones and destruction of agricultural land and rural communities. How these problems are addressed depends on the current state of planning. Well-organized and up-dated plans and ordinances not only address current and future problems of development, but they also foster or hinder specific growth processes. For instance, historic districts and preservation techniques can stop Conzen’s burgage cycle (Conzen, 1969) and other processes requiring the clearance of old developments. The preservation of agricultural lands can stop Conzen’s fringe belt development and other processes allowing for the expansion of urban areas into the hinterland.

Land use data can be derived from list and texts, maps, remote sensing or ground surveys. This thesis uses rezoning requests information from Roanoke, Virginia, to obtain information on land use change and policy implementation.

The rezoning process is essential to land use change in Roanoke, Virginia. If a landowner wishes to develop or redevelop her/his land, s/he must apply for a zoning change. This change or rezoning is analyzed by the Planning Commission; and a recommendation of approval or denial is given. The City Council then hears the rezoning and makes the final yes or no decision. This decision tells whether or not the property can be use for a purpose different from that specified on the city’s zoning map. Outside of the rezoning process, landowners can develop their land for the land uses allowed by the zoning category specified on
the zoning map. In other words, they can only develop their land for a use already existing in that area or planned for that area.

Since 1978, landowners in Roanoke have been able to add conditions to their rezoning requests. These conditions are usually a result of negotiations between the landowner and city planners or zoners. These conditions place special regulations on how the land can be used in the future. These regulations must be followed until the property is rezoned and renegotiated.

In Roanoke, a bounded city with a limited supply of vacant land, redevelopment is essential for growth. A bounded city faces special problems created by its restricted supply of land relative to demand. This lack of land results in increased competition, price and demand for land as well as more restrictive government regulations.

Roanoke’s 1966 zoning ordinance was constructed to respond to urban blight around the central business district. This ordinance hindered redevelopment and infill development by requiring large minimum lot sizes, and it fostered suburban development and urban renewal through expansion of commercial, industrial, office and institutional spaces in inner city areas.

The 1987 zoning ordinance focused on preservation, design quality and neighborhood conservation. This ordinance fostered growth in all areas of the city through redevelopment and infill developments in inner city areas, and cluster and planned unit developments in the periphery. It created lower minimum lot sizes and added lot width, area and yardage requirements to commercial and industrial zoning categories.

The overall objective of this study was to examine the transformation of Roanoke’s zoning ordinance during the period from 1966 to 1987 when Roanoke was emerging from a state of development into a state of redevelopment. Publications by departments in the Roanoke City Government, rezoning requests notices for the City of Roanoke, Virginia, from 1978 to 1991,

1. INTRODUCTION
rezoning requests files from 1982 to 1991 and publications involving the neighborhoods of Highland Park, Gainsboro, South Roanoke, Williamson Road, and the Central Business District were examined. Interviews were conducted with individuals influential in zoning decisions in Roanoke, Virginia. This thesis concentrated on the (1) differences between the 1966 and 1987 zoning ordinances, (2) application of the 1966 zoning ordinance, (3) application of the 1987 zoning ordinance, and (4) application of conditional zoning.

This study discovered several important facts. Zoning decisions and regulations affect the land use pattern within the city by fostering or hindering specific land use categories. Conditional zoning influences the land use pattern in certain areas of the city by limiting land use changes and limiting the time span for changes. The zoning decision-makers use discretion to determine the importance of zoning ordinance goals. These implementation decisions are important to the functioning of the planning process and to the formation of the land use pattern within the city.
Cities are always in a state of change. If researchers could fully understand where, when, why and how these changes occur within cities, then they would have the ability to predict and direct future changes within urban environments. However, it is difficult to understand these changes due to their complex and varied nature.

Many theories have been developed to explain how cities grow, but only a few historical morphological studies provide planners with information on changing patterns of urban land use. The reuse of property for various purposes throughout time is essential to urban growth, but difficult to analyze. Charlton and Openshaw claim that land use change "represents the tangible outcome of that complex myriad of socio-economic and physical processes which together constitute the mechanisms responsible for growth, decline and change in urban environments," yet we know relatively little about these changes (Charlton and Openshaw, 1986, pp. 114-115). Knowledge of the changing pattern of urban land use would result in the ability to predict and control future urban land use patterns and to monitor and evaluate planning policies. It is surprising that the planning system has functioned for thirty-five years without any effective method for monitoring policies and receiving feedback.
The first historical morphological studies focused on the movement of people and goods from the center of the city to the surrounding countryside. Burgess found that this outward movement of growth resulted in concentric circles surrounding the central city. Hoyt discovered that residential areas form wedge-shaped sectors overlying the concentric circles. Harris and Ullman claimed that growth patterns did not only radiate from the central city but from various other nuclei. These socio-economic growth models challenged researchers to explore the economic-rent theory. Alonso and Muth examined the outward expansion of growth as a result of changes in transportation, population, and the average standard of living. In the 1960’s and 1970’s, researchers began to realize the importance of peripheral growth patterns. Conzen divided the city into an intramural zone and an extramural zone. Growth in the intramural zone occurs through periods of infill development, clearing, fallowing and redevelopment. Growth in the extramural zone occurs through expansion, fixation and consolidation. Recently, researchers have begun to focus on the decision-making process.

These historical, morphological studies showed that cities, as well as sections within cities, are faced with different developmental problems at various points in time. How these problems are addressed depends on the current state of planning as well as zoning.

Urban Morphology: Economic Versus Social Factors

Researchers and planners have relied on a few historical morphological studies for information on the changing patterns of urban land uses. Urban morphology is the study of the structure and form of cities. The physical expression of this structure and form is seen in the land uses within the city and the interaction and change of these land uses throughout time. Morphologists have debated for years on the importance of various economic and social factors in land use changes. James E. Vance, Jr., a leading American morphologist, emphasized periods of adaptation to political and economic change and land assignments within the city,
whereas J.W.R. Whitehand, a leading British morphologist, has emphasized the importance of social and cultural factors within the formation process of the physical expression of this form. Whitehand argued that the physical landscape is a result of processes and the embodiment of attitudes and decisions. He believed that most research in urban morphology consisted of isolated case studies and relied too much on the landscape as source of evidence.

By emphasizing certain factors over others, these researchers were influential in determining the structure and content of urban morphology studies. They formulated limits for academic debates. Although debates are essential and constructive, government officials need to consider all factors influencing changes in urban land uses to achieve a holistic approach. In addition, the main factors influencing urban land use change will vary according to time, space, and stage of growth.

**Urban Morphology in the United States**

In the United States, urban morphology has followed two strands of thought: a cultural strand and a socio-economic strand. Although the cultural strand of thought in American urban morphology "has always been comparatively weak" and has had minimal connections with similar European research (Whitehand, 1987, p. 8), the socio-economic strand has produced many "classic" models of urban growth and has inspired additional research in many different fields. The socio-economic strand of urban morphology within the United States includes the "classic" models of Ernest Burgess and Homer Hoyt. Both Burgess and Hoyt observed growth originating in the central city and expanding outward to the periphery. However, they had differing theories concerning the pattern of this outward growth. According to Burgess's concentric ring theory, this outward movement of growth resulted in a series of concentric circles surrounding the central city (Burgess, 1967, p. 50). Therefore a person traveling from
the central city to the outermost portion of the periphery would pass through the central business district, an area of transition, a working class residential area, a high class residential area, and finally reach a commuter zone on the farthest outskirts of the city. In Burgess’s model, the area of greatest mobility and highest land values is the central business district. The central business district is usually congested and noisy. Therefore, the higher a person’s income, the farther away from the central business district s/he can, and usually will, reside.

Hoyt, encouraged by Burgess’s concentric rings model, conducted a study of *The Pattern of Movement of Residential Rental Neighborhoods*. Hoyt found that “high-rent neighborhoods of a city do not skip about at random in the process of movement; they follow a definite path in one or more sectors of the city” (Hoyt, 1959, p. 501). This sectoral pattern is a result of the desire of higher income people to locate close to certain amenities or close to persons of similar social standing. In Hoyt’s model, “the low-rent categories tend to move out in bands from the center of the city mainly by filtering into houses left behind by the high-income groups” (Hoyt, 1958, p. 508). Therefore, in Hoyt’s sector model, residential areas form wedge-shaped sectors overlying Burgess’s concentric circles.

A third socio-economic model was formulated by Harris and Ullman in 1945. According to this model, also known as the multiple nuclei model, the land-use pattern is built not around a single center but around several discrete nuclei (Harris and Ullman, 1959, p. 283). These discrete nuclei may arise to take advantage of special facilities, industrial cohesion or low-rent peripheral development sites. So, the pattern and number of nuclei will vary from city to city.

Whitehand stated that the socio-economic perspective was “morphological only in its concern with land-use patterns: town plan and building form were generally treated as land-use containers, if considered at all. Perhaps its most important effect on British urban morphology was to generate interest in the theoretical explanations of neo-classical economics” (Whitehand, 1987, p. 8). Therefore, the socio-economic perspective of urban morphology leads
researchers to an exploration of the economic-rent theory as opposed to the evolutionary approach to townscape development advocated by Conzen.

The Economic-Rent Theory

The economic-rent theory, developed by Alonso and Muth, represents the leading alternative to Burgess's concentric ring theory. Muth used data from Southern Chicago to support the hypothesis that "the role of decline of housing prices in a city is influenced by the marginal costs of transport" (Muth, 1969, p. 308). Alonso examined three reasons for suburbanization: improvements in transportation, increase in the total metropolitan population, and increase in the average standard of living (Heilbrun, 1981, pp. 144-46). According to the urban rent theory, "the land intensive use is prepared to pay high rents for accessible sites, but low rents for sites further away" (Whitehand, 1987, p. 42). Retail establishments which are intensive users of land and require a high amount of customer interaction, therefore, will be willing to pay more than industrial plants for the greater accessibility of the central city, while industrial plants will be willing to pay more to be closer to the central city than residential land users. According to Alonso, the end result of changes in transportation, population, and the average standard of living would be an outward movement from the central city as a result of changes in land prices (Alonso, 1964, p. 142).

Zoning and the Economic-Rent Theory

Alonso also considered the effects of zoning on property values, real estate markets, and urban renewal. If the land use of highest demand for a piece of property is not permitted to locate on that property because of land use regulations, then that piece of property will sell to a land use of lower demand for a lower price. If a certain land use is not allowed in a particular area of the city because of land use regulations, then the supply of land for that land
use will decrease and the price of property on which that land use can be located will increase (Alonso, 1964, pp. 117-18). Furthermore, the developer who is forced to buy more land than desired because of minimum lot size requirements will pay less for the total amount of land purchased. So, urban renewal will be easier to implement if minimum lot size requirements are enforced in the central business district and maximum lot size requirements are enforced in the periphery (Alonso, 1964, p. 125).

**Capital Investments and Innovations in Town Planning**

Capital investments and innovations are major factors, besides land values, influencing changes in the land use composition of a city. The land users applying relatively small amounts of capital per unit of land are more likely to be located on cheaper, less accessible sites (Whitehand, 1987, p. 40). However, if the price of land falls, then the land extensive types of development will be able to purchase land in the more accessible areas of the city. So, cycles of economic investments result in land use cycles or a concentric pattern of intensive and extensive land users.

Four types of innovations affected urban form in the industrial era. These were innovations “relating to construction (for example, concerned with building materials and legislation); secondly, functional innovations, such as new methods of manufacturing and trading; thirdly, transport innovations,...; finally, perhaps one may recognize as a separate category, innovations in town planning” (Whitehand, 1987, p. 60). Although innovations which are related to construction and functional innovations affect the landscape both directly and indirectly, they are rarely devised or used to control urban development. Transport innovations are used to control urban development but not to the same extent as innovations in town planning. Innovations in town planning “... represent conscious attempts by some form of national or local authority to control urban development” (Whitehand, 1987, p. 70). Innovations in town
planning influence other factors including housing cycles, timing of development, and building design.

According to Whitehand, there are two inter-related types of spatial planning: “Intensity or density of development and the designation of greenbelt zones in which all or most types of urban buildings are precluded.” He emphasized the effect of planned physical limitations on urban growth. These physical limitations are obstacles to physical expansion of urban areas, constitute distinctive land use zones, and influence the nature and intensity of land use elsewhere within the urban and peri-urban area (Whitehand, 1987, pp. 70-73).

Whitehand also claimed that “the urban rent theory and innovation diffusion theory can take us only so far in our search for explanation” (Whitehand, 1987, p. 75). He believed that Conzen’s fringe-belt concept could clear up some of the complexity and obscurity created when the economic and innovation factors were joined.

**Urban Fringe-Belts**

In the 1960’s, Conzen, influenced by Bobeck and Louis, made a major contribution to urban development and urban morphology by giving an active role to the landscape. In Alnwick Northumberland, Conzen established a framework of principles for urban morphology; adopted into the English language a thoroughgoing evolutionary approach to urban morphology; and recognized the individual plots as being the fundamental units of analysis. He used detailed cartographical analysis; and conceptualized developments in the townscape (Whitehand, 1987, p. 6). Conzen’s research contained four strands: the introduction of different approaches and techniques; town management; the urban fringe-belt concept; and town plan analysis. The urban fringe-belt concept and the town plan analysis provide differing perspectives on urban land use change.
Urban fringe-belts are "physical manifestations of periods of slow movement or actual standstill in the outward extension of the built-up area and characterized in the initial stages of their development by a variety of extensive users of land..." (Whitehand, 1981, p. 15; Conzen, 1969, p. 125). Conzen identified three phases in fringe-belt development: expansion, fixation and consolidation. A town expands and changes in response to fluctuations in population, economic development and/or introduction of new innovations in a cyclical manner. This cyclical growth or expansion over a long period of time results in a series of successive, broadly concentric fringe-belts. Each fringe-belt represents a different period of growth and is separated from past and future fringe-belts by a fixation line. Fixation lines mark "major limitations on the outward growth of the built-up area and heavily condition the pattern of subsequent growth" (Whitehand, 1981, p. 15; Conzen, 1969, p. 81).

As a city grows, plots of land from the surrounding countryside progressively become physically and functionally closer and closer to the center of the city as development reaches beyond its initial beginnings to incorporate more and more of the surrounding lands. Eventually, the land where initial growth occurred and, over time, more and more of the surrounding lands no longer are connected with open or undeveloped countryside. These areas are called inner or closed fringe-belts in contrast to outer or open fringe-belts. Once fixation occurs, the fringe-belts become consolidated by attracting compatible land uses (Whitehand, 1981, p. 134). This consolidation may be either fostered or hindered by land use regulations.

Conzen classified the land within the city into a "... restricted intramural zone, consisting mainly of secondary development within the generally close-grained morphology frame of a traditional plot pattern, and the extramural zone, consisting of a more open, sometimes dispersed, development associated with the greater topographical freedom afforded by the relatively large-grained rural field pattern" (Whitehand, 1981, p. 15; Conzen, 1969, pp. 58-9). Extremely different developmental paths or planning methods should be applied within these two zones.
A Historical, Morphological And Evolutionary Approach

According to Conzen, the four most important attributes of towns are (1) discrete spatial integrations of a variety of forces and factors in nature and human society; (2) existence in time or continuity and change; (3) uniqueness; and (4) material form or the cultural landscape (Whitehand, 1981, p. 77). Conzen advocated an evolutionary approach to townscape development. By using this approach, researchers could trace the existing forms back to their underlying formative processes. Conzen believed that researchers needed to use a morphological analysis to understand the differences in the resistance of town plan, building fabric, and land and building utilization to pressure of changing functional needs (Whitehand, 1981, p. 88; Conzen, 1969, p. 6). Because the land use can be easily changed, it represents the most unstable influence on the historical character of the townscape.

Conzen identified three types of changes that occur within the townscape: accumulation or blending of the old and new; transformation or adaptation of the old for the new; and replacement of the old by the new. According to Conzen, morphological changes correspond to periods of socio-economic and cultural history. Conzen concentrated his research on the town plan, building forms, and land uses.

The Town Plan

The town plan provided the basic framework for the city. Conzen claimed “priority for the town plan on the grounds that it forms the inescapable framework for the man-made features and provides the physical link between these on the one hand and the physical site as well as the town’s past existence on the other” (Conzen, 1969, p. 4). He believed that a study of the town plan could explain differences planning styles and resulting land use categories. Town plans could only be examined through the physical and human context in which they were formu-
lated. He focused his town planning research on three planning elements: the plots and plot pattern; the streets and street system; and the building arrangements.

The Burgage Cycle

The concept of the burgage cycle, developed by Conzen, explains the urban land utilization pattern based on its essential foundation, the individual plots and plot pattern. It is called the burgage cycle because Conzen examined cities developed during the middle ages where a burgess was a landowner and his urban plots were burgages. Today, a burgage would coincide to a plot of land within the city. The burgage cycle consist of five phases in the urban utilization pattern: institutive, repletive, climax, recessive, and urban fallow. In the institutive phase, the burgage and its traditional structure becomes established as a plot. The percentage of the total plot area covered by buildings greatly increases during the repletive phase. Eventually, the climax phase or saturation point is reached. In the recessive phase, a revaluation of existing building types and building uses results in a devaluation of the building fabric and the land use parcellation becomes obsolete. This devaluation promotes clearance of the burgage or the plot of land. In the final stage, building coverage decreases to its initial level; and temporarily, the burgage becomes a wasteland. This is known as the urban fallow phase which forms the initial stage of the redevelopment cycle (Conzen, 1969, pp. 92-94). This process is influential in the intramural zone as opposed to the urban fringe-belt concept which is in turn more applicable to the extramural zone. The burgages can be analyzed through rental records, court rolls, field evidence or archeological evidence.

The Decision-Making Approach to Town Planning

Harold Carter stated in A Decision-Making Approach to Town Plan Analysis that Conzen’s attempt to make an advance in the idiographic, evolutionary approach provides no foundation
for theory. If theory is to be formulated, it must originate in the realm of decision-making. Carter went on to say that "any town plan is only possible in terms of the values and decision-making characteristics of the society that gave rise to them, though periodic changes in emphasis and direction can be incorporated into the analysis" (Carter, 1970, p. 68).

F. Stuart Chapin examined the role of individuals and groups within the decision-making process. Chapin believed that the land development pattern of a city was a result of decisions and actions made by households, institutions, corporate interests and government. He identified two groups of decisions. The priming decisions are major in scope, and the secondary decisions are concerned with more detailed matters (Carter, 1970, p. 67). Together, these two groups of decisions produce the land development pattern. Zoning decisions and policing power can be used to create more desired urban forms. Unfortunately, the relationship between zoning regulations and decisions and growth patterns has not been extensively analyzed.

Arnold Fleischmann examined the decision-making process used in the formation of zoning policies in metropolitan Atlanta, Georgia. Fleischmann found through an analysis of "re zoning applications in metropolitan Atlanta for one year" that "citizens participated relatively infrequently" in the rezoning process, but they "did affect the decisions of the governing bodies" (Fleischmann, 1989, pp. 337-40). He also found that the planning commissions and governing bodies accepted a large majority of the staff recommendations. Fleischmann, however, did not consider how these decisions affected the actual land development pattern within metropolitan Atlanta.
Conclusion

Cities, as well as sections within cities, are faced with different developmental problems at various points in time. Burgess’s concentric ring theory and Alonso’s economic-rent theory emphasize the economic and social factors which lead to an out-migration of the population from the center of the city. This out-migration creates at least two problems: a dead downtown and longer travel times. Hoyt’s model adds a third problem. Hoyt believed that people moving out of the center city would be filtered through the inner city housing stock. This filtering ultimately leads to the deterioration and clearance of the inner city housing stock. Harris and Ullman’s multiple nuclei model describes a different urban form. In this city, the downtown is forced to compete with numerous economic centers as jobs move further and further into the periphery. In Conzen’s work, the different growth processes of the inner city and periphery are examined. The inner city grows through a process of plot formation, build-up, devaluation and clearance. This process leads to the destruction of old, inner city structures. The periphery grows through expansion, fixation and consolidation. Continued growth in the periphery leads to the destruction of agricultural lands and rural communities.

How these problems are addressed depends on the current state of planning. Well-organized and up-dated planning ordinances not only address current and future problems of growth, but they also foster or hinder specific growth processes. The decision-making process may have the most direct influence on the land use pattern. Land use planning and subsequent land use patterns set constraints and conditions on future land development. Zoning regulations and decisions can be used to change and control urban development. However, understanding of the changing patterns of urban land use is needed to gain control over the urban environment.

Knowledge of changing land use patterns is necessary for the prediction of future land use and the monitoring and evaluation of planning policies. Land use data can be derived from
lists and texts, maps, remote sensing or ground surveys. In this thesis, rezoning request data is used to gather information on land use changes. This information will then be used to examine the zoning ordinance of Roanoke, Virginia, from 1966 to 1987.
3. LITERATURE REVIEW OF ZONING

3.1: A HISTORY OF ZONING

Smith in *Citizen’s Guide to Zoning* states that “there is no single governmental function, other than taxation, that has a more direct bearing on our day-to-day lives than the thing called zoning” (Smith, 1983, p. 1). Information derived from theories about growth patterns and decision-making can be applied to actual changes in urban land uses through zoning regulations and decisions. The zoning ordinance controls the type, location, and density of developments as well as the development process. The morphology of the city, existing and expected, is affected by the regulations and land use categories created by the zoning ordinance. The effectiveness or advantages of a zoning ordinance depends on the formation, implementation and enforcement policies of the city government.

The question is how to formulate, monitor and evaluate zoning ordinances that address the differing developmental problems of the city and create an urban form that can lead us into the future. Although many state governments require that planning and zoning policies and ordinances be updated periodically, they provide no evaluation method. Academic research focuses on the legality, purpose, advantages and problems of zoning and zoning ordinances.
Instead of improving the structure, monitoring and evaluation techniques of the existing system, many researchers have developed alternative zoning systems to increase flexibility, reduce bias and increase citizen participation. This is a time-consuming and endless process. Researchers should spend more time and effort on updating and understanding the existing zoning system and the land use patterns which they create. One way that has been suggested to improve the existing system is conditional zoning. Conditional zoning increases the flexibility of the zoning process by allowing planners to negotiate with developers. This flexible technique allows planners to control a portion of the land use changes that occur in properly zoned areas and time span for changes. Although it often leads to better quality developments, conditional zoning has its deficiencies, including lack of uniformity, creation of spot zoning, and procedural defects (Buck, 1978).

Background of Zoning

According to Bassett, known as the father of zoning, "zoning merely means the division of land into districts having different regulations" (Bassett, 1940, p. 9). It is difficult to determine where zoning first began. The ideas of controlling building heights or certain obnoxious industries and creating fire districts were practiced very early in the history of the United States, but the first comprehensive zoning regulations were not enacted until 1916 by the City of New York.

Zoning regulations in the City of New York were constructed as a reaction to the overdevelopment of the central city. As preparation for the proposed construction of new subway lines, the New York City Board of Estimate and Apportionment appointed a Committee on Heights of Buildings to examine the problem of reduced light and air caused by large numbers of skyscrapers. This committee recommended that the City of New York regulate height, area and use of the land within its boundaries. These recommendations were followed by the policy-makers of New York City.
The residents of New York City were not the only people concerned about urban land uses. Lai in *Law in Urban Design and Planning* states that Herbert Hoover, Head of the Department of Commerce, had a particular interest in housing and the protection of residential neighborhoods from industrial encroachment (Lai, 1988, p. 85). In 1921, Herbert Hoover appointed an Advisory Committee on Zoning. This Advisory Committee formulated a Standard State Zoning Enabling Act (SZEA) which was distributed to the states in 1924. The Standard State Zoning Enabling Act "constitutes a general delegation of power to community (city or county) to regulate and control the use of property in zoning districts established by ordinance or resolution" (Yokley, Volume 1, 1978, p. 6). According to the SZEA, the most common reasons for zoning are to lessen congestion in the street; secure safety from fire, panic and other dangers; promote adequate light and air; prevent overcrowding of land and buildings; avoid undue concentrations of population; and promote health, morals and general welfare (Smith, 1965, pp. 21-22). The number of zoned cities in the United States increased significantly after 1924. According to Lai, "by the end of the 1930s, every state had some form of legislation that gave their municipalities the option to zone" (Lai, 1988, p. 85).

The SZEA has been criticized for being too static. The SZEA did not provide any criterion for changing the zoning regulations or maps. Zoning problems were to be handled by variances and special exceptions issued by the Board of Adjustments.

**Purpose of Zoning**

The purpose or goals of zoning can be described as suggestions for changes in the urban morphology. Purposes will vary according to the existing land uses, time, space and historical context. The stated goals of zoning maybe general in nature or specific to a given area. Areas experiencing growth will have different goals from areas of regression, and inner city areas will have different goals from the outer suburbs. In other words, the purpose of zoning in a given area depends on the specific needs and desires of that area.

3. LITERATURE REVIEW OF ZONING
According to Mandelker (1971), the intent of the original zoning legislation was to reduce conflicts between land uses or externalities by controlling the compatibility of land uses. Externalities are the positive or, often, negative effects of certain land uses on neighboring properties. The private market does not focus on the control of externalities. If a piece of land is negatively affected by neighboring properties, the private market will respond by lowering the value of that piece of land. Externalities can be controlled or minimized by separating differing land uses.

Yokley (1978) claims that zoning preserves the neighborhood character of an area by excluding incompatible land uses and protects property, businesses and individuals from strict regulations resulting from land use conflicts. Zoning also provides stability to the private realty market.

Sussna provides a more detailed list of zoning purposes or objectives. According to Sussna, the objectives of zoning were: 1) protection of property values by requiring uniformity in each district; 2) exclusion of dangerous and nuisance uses from residential districts; 3) prevention of the overexploitation of land and the reduction of building density; 4) fostering public service efficiency (Sussna, 1970, p. 6).

Babcock (1966) claims that zoning has no inherent purpose, but is a tool for fulfilling the comprehensive plan. In this view, the purpose of zoning is to implement changes in existing land uses to create a new morphology based on the land uses categorized in the comprehensive plan. Zoning regulations differ from the comprehensive plan in detail and scope. The comprehensive plan is a generalized indication of future land use and densities, whereas zoning is a detailed indication of legally permitted land uses at a scale of individual ownership. The purpose of the comprehensive plan and zoning ordinance are basically the same. According to Yokley, "the fundamental purpose of all zoning ordinances is to provide for the development of a balanced community which will make efficient use of the land available in the community" (Yokley, Volume 1, 1978, pp. 25-26).
Legality of Zoning

Although the SZE A was distributed by the Department of Commerce in 1924, the legality of zoning was not determined until 1926 with the U.S. Supreme Court case of *The Village of Euclid v Ambler Realty Company*. The Village of Euclid, a suburb of Cleveland, Ohio, adopted a zoning ordinance in 1922 that divided its land into six use districts, three height districts, and four area districts. The Ambler Realty Company owned and held a 68 acre tract of land to sell at a more profitable date as industrial or commercial land. The restriction of use on this 68 acre tract of land by Euclid’s zoning ordinance resulted lost property value for the realty company. The realty company sued the city to have the restrictions voided. However, the U.S. Supreme Court found that the municipality’s zoning ordinance did not violate the 14th amendment of the United States Constitution and was, therefore, within the legal power of the municipality. The 1926 decision of the U.S. Supreme Court was an encouragement for cities reluctant to implement the SZE A of 1924.

Legally, zoning was an expansion of the nuisance laws which were designed to protect neighborhoods from physical nuisances. The *Euclid* opinion states that “...the law of nuisances, likewise, may be consulted, not for the purpose of controlling, but for the helpful aid of its analogies in the process of ascertaining the scope of, the power” (BeVier and Brion, 1981, p. 5). The nuisance laws required physical proof of damages to persons within a stable area. If an area contained a mixture of uses or was no longer exclusive, the nuisance laws were not effective. Zoning regulations provided a more sound and broad protection for United States citizens.

Advantages of Zoning

The advantages derived through zoning depends on a municipality’s objectives and the developmental problems that it must address. Some objectives are easier to achieve than others, some problems easier to solve. Securing safety from fire, panic and other dangers or
promoting adequate light and air are easier than protecting property values or preventing overexploitation of the land. As developmental problems change, so too must zoning regulations and objectives. Researchers are quick to point out the problems with zoning, but when it comes to the advantages of zoning, they have had very little to contribute. This may be a result of their inability to monitor and evaluate planning policies and resulting land use changes.

Yokley states that "zoning itself has given the greatest amount of freedom and protection to the greatest number of people" (Yokley, Volume 1, 1978, p. 28). However, he does not elaborate or provide proof for this statement. Newman Baker in *Legal Aspects of Zoning* provides a more elaborate analysis of the advantages of zoning. According to Baker, the advantages of zoning include "stabilizing property values; promoting public health; promoting peace and quiet in residential neighborhoods; permitting the efficient platting of land; permitting the development of a functional street system; promoting home ownership; fostering civic pride and providing a greater total tax value" (Baker, 1927, p. 70).

**Problems of Zoning**

The many problems identified within the zoning system range across administration and implementation failures, structural and foundational weaknesses, unachieved or partially achieved objectives, and finally, unforeseen consequences. Several of these problems arise from a lack of information and knowledge about changing land use patterns and the resulting lack of procedures for revision.

Smith states that, "as is true in so many cases in our society, it is not the system that has failed, it is the people who have failed to make it work" (Smith, 1983, p. 111). There are many administrative or implementative problems within the zoning system. These include political favoritism or corruption; unqualified personnel; inadequate zoning ordinances; increased
complexity and bureaucracy; and lack of funding. These problems can easily be corrected if enough people demand a change.

The structural or foundational problems are harder to correct. These include too much reliance on the police power; too permissive systems; fragmentation of power; the use of unrelated controls; insufficient flexibility as a result of the SZE; and too much reliance on the legal system. A whole new type of controlling system could be formulated and implemented to completely correct these problems. However, development of a new system would be expensive and time consuming. A review and modification of the existing system would be more beneficial.

The problem of unachieved or partially achieved objectives and unforeseen consequences can be corrected through a mastery of changing land use patterns and resulting monitoring and evaluation techniques. Zoning has failed to protect residential neighborhoods and to prevent urban sprawl. It has managed, however, to reinforce racial and economic segregation; increase housing prices and encourage bad site and housing designs. Unachieved objectives can be corrected through monitoring and updating, and unforeseen consequences can be predicted by evaluation techniques.

**The Zoning Ordinance**

Before a municipal zoning ordinance is enacted, local officials examine the state enabling statute, the municipality’s comprehensive plan, and the results of a zoning study. This study of natural features, existing development and land uses, traffic and circulation, municipal facilities and services, and the economy of the area in question will allow the zoning ordinance to consider special needs and desires within the area. The zoning ordinance can be used to
regulate height, use and area within each district. The separate regulations implemented within each district must promote uniformity.

Within the zoning ordinance, the use of the land can be regulated inclusively or exclusively. In an inclusive ordinance, where the permitted uses are listed, new types of developments are automatically excluded until the Planning Commission and City Council determine if and where these developments should be allowed. In an exclusive ordinance, listing excluded uses, new types of developments are automatically included until the Planning Commission and City Council determine that they should be excluded. The inclusive ordinance provides planners with more control over future developments and land uses.

The first zoning ordinances included a hierarchy of land uses ranging from residential, to commercial and, finally, industrial. Any higher land use, for example residential, could be located in a lower land use classification, for example industrial. This hierarchy only protected residential lands. As time passed, the number of districts within the ordinance and the scope of the regulations increased and the need for exclusive districts for each land use arose. Therefore, in many localities residences can no longer be constructed within commercially or industrially zoned areas.

**Legality of the Zoning Ordinance**

The legal basis for a local zoning ordinance is a proper state enabling statute and an adequate comprehensive plan. Zoning ordinances can be found void by the courts if they are arbitrary, unreasonable or vague. However, it is hard to determine when an ordinance should be voided. The courts will not rule an ordinance void just because it resulted in a loss of property values. Most courts will uphold an ordinance if its validity is even debatable.
Alternative Land Use Controls

Although problems are always easier to find than solutions, many alternatives to the zoning system have been proposed. A few of the alternatives are the American Law Institute's (ALI) model code, Pareto optimality, a public defender system, a paid professional hearing officer, neighborhood organization's voice, zoning jury panel, and finally, conditional zoning.

The American Law Institute determined that the most serious problem facing the zoning process was local reliance on the SZE A model. The SZE A model is too static and does not provide local governments with enough discretion to make the zoning process work. Therefore, the ALI developed a new model for the guidance of local governments that provide flexibility without adding complexity.

The ALI model code relies on two types of permits: the general development permit and the special development permit. If a developer follows the required regulations, then s/he is automatically granted a general development permit, however, if the plans of the developer do not coincide with the required regulations, s/he must apply for a special development permit from the Standard Development Agency. This agency would use its regulatory, advisory and appellate powers to determine if the special development permit should be granted based on the land development plan. The Standard Development Agency would rely on the police power, public acquisitions, and compensation to balance the individual loss and the public gain.

An alternative land use control is through the use of Pareto optimality criterion. Pareto optimality is a way of joining public regulation and the private market. This model takes into account the assumption that "for optimal land use to occur, a binding agreement or a contract must be formed between the residents of a community and the landlord-developer between two time periods" (Garrett, 1987, p. 38). The landlord developer will establish lot sizes and
prices for land s/he is currently selling (period one) but not the lot sizes for land that will be
sold at a later date (period two). Because the lot size of neighboring lands will affect the tax
value and services of the lands in the process of being sold, the potential buyers will want to
know the lot size of all the land in periods one and two. This requires the developer to form
a contract with the residents specifying the size of current and future lots. To insure fairness,
the local government must act as a negotiator and mediator/arbitrator. The government adds
predictability to the process.

The ALI model code would reduce structural and foundational problems by reducing reliance
on the police power, ending the fragmentation of power and adding flexibility. However, the
ALI model code may increase administration and implementation problems by increasing
political favoritism. On the other hand, Pareto optimality would reduce administration and
implementation problems while increasing structural and foundational problems. The ALI
model code would be difficult to achieve because it must compete with well established state
enabling acts based on the SZEAA model codes, and Pareto optimality would give large de-
velopers too much power over the development process because they would be better
equipped to bargain with the residents. Instead of spending valuable time and resources
trying to perfect these new models, I believe researchers should place more effort on under-
standing and updating the existing system.

Smith discusses four ways to revise the current zoning system (Smith, 1983, pp. 125-127).
First, he examines the public defender system. In this system, the public has access to all the
information obtained by the government and can voice their concerns to an advocacy planner.
The advocacy planner would be responsible for fighting for the rights of the public groups.
This system would give the public a chance to review, analysis and provide feedback on the
zoning process. Feedback from the public is necessary to periodically revise the zoning
process. However, the public defender system would be expensive and complex and would
not ensure total participation.

3. LITERATURE REVIEW OF ZONING
Smith's second alternative is replacing the Board of Adjustments with a paid, professional hearing officer. This strategy would reduce the number of unqualified personnel and the number of conflicts of interest involved in the zoning process. It would make the appeals process more consistent and efficient. However, there would be a greater risk of bias and corruption if one person was responsible for such a large number of decisions.

In the neighborhood organization's voice, each neighborhood could have its own zoning council. These individual councils would vote on relevant issues and make a recommendation to the overall legislative body. The legislative body could overrule the decisions of these councils by a two-thirds vote. This method would allow adequate citizen participation but at the cost of complexity and bureaucracy. It could possibly increase the amount of government corruption and favoritism.

The fourth alternative is the zoning jury panel. Each citizen would be eligible for zoning duty. This alternative would increase citizen participation, but it would also increase the number of unqualified personnel and the number of conflicts of interest. Many of the citizens could be too easily persuaded to vote one way or the other.

**Conditional Zoning**

Conditional zoning provides a fifth way of improving the existing zoning system. According to Buck, "conditional zoning may be defined generally as the imposition of conditions upon a rezoning that do not arise out of the zoning resolution itself, or are not uniformly applicable throughout the zone category granted, but rather are uniquely applicable to the project or rezoning involved" (Buck, 1978, p. 11).

The conditions to be imposed must be reasonable, relate to the property in question or to the impacts of the project on neighboring properties, and to the general welfare of the community.
The conditions should be part of the zoning ordinance so that each developer will be treated equally. If the conditions of the rezoning are proposed by the applicant or the Government as a price for rezoning then such an act is invalid (Miller, 1974, p. 133).

Conditional zoning is a useful tool for providing the zoning process with added flexibility, but it has several deficiencies. These are lack of uniformity, creation of spot zoning, procedural defects and inefficient authorization (Buck, 1978, p. 11). The municipality must make sure that the procedural requirements for example notices and hearings are followed. Conditional zoning is a unilateral agreement from the developer to the municipality, whereas contract zoning is, in general, a bilateral agreement between the developer and the municipality. In some states, contract and conditional zoning are synonymous. Contract zoning is usually found to be invalid, whereas conditional zoning may be a valid use of the police power.

Legality of Conditional Zoning

Conditional zoning has had a troubled life in the courts marked with inconsistency and confusion. Miller states that “case law is almost divided evenly as to the validity of conditional zoning” (Miller, 1974, p. 129). According to Miller, “the case for conditional zoning began with the landmark decision of Church v Town of Islip”. He states that “as for the type of conditions which could be attached to an ordinance, Church laid down a broad test of reasonableness.” The conditions must relate to the general welfare, to the land itself, and to the impact of the project on neighboring properties. Church upheld the invalidity of contract zoning by recognizing “that a local government could not sell its powers” (Miller, 1974, pp. 122-133).

The case of Chrobuck v. Snohomish County in 1971 provided one of finest arguments in behalf of conditional zoning:

The indicia of validity in such agreements include: (1) The performance called for is directly related to public needs which may be expected to result from the use of property to be rezoned. (2) Fulfillment of those needs is an appropriate
function of the contracting governmental body. (3) Performance will mitigate the public burden by placing it more directly on the party whose property use will give rise to them. (4) The agreement involves no purported relinquishment by the governing body of its discretionary zoning power (Miller, 1974, p. 136).

More generally, Chrobuck reinforces the need for reasonable conditions and proper government authority and procedures.

Even though adoption of conditional zoning is a risky business, a "growing number of localities are enacting such provisions based on general state enabling legislation that grants zoning power to its communities" (Liebermann, 1981, p. 12). Virginia and California have passed statewide statutes allowing conditional or contract zoning.

Effectiveness Of Conditional Zoning

Freilich and Quinn provide a list of four criterion upon which flexible zoning techniques can be assessed: consistency; reasonability; protective; and simplicity (Freilich and Quinn, 1979, pp. 167-240). Zoning must be consistent with community goals, policies and the comprehensive plan; and it must follow the planning process to be reasonable. Zoning should try to protect the rights of affected individuals, and zoning regulations should be understandable and simple. The only way flexible zoning techniques can meet these criterion is through comprehensive planning, simplicity and judicial review.

The problem with conditional zoning is the "difficulty one would face in conceiving a list of conditions which would be adequate to the needs of a municipality, which would stand the tests of time and social change, and which would survive judicial tests of reasonableness" (Freilich and Quinn, 1979, p. 194). With conditional zoning, it must be asked: for what, by whom, and how is it regulated?
Conclusion

By the end of the 1930's, almost every state had enacted some form of legislation that provided them with the authority to zone lands within their boundaries. The zoning literature provides a long list of reasons for zoning. In fact, the purpose of zoning will vary according to the existing land uses, time, space and historical context. Zoning regulations and objectives will vary as time progresses and urban areas develop and change. Urban areas also have very specific needs or problems that may force them to choose different types of zoning regulations than usual or to change their zoning controls to address certain problems. For instance, if a city's supply of vacant land is limited for a variety of reasons including restrictive annexation policies, natural boundaries, or governmental decisions, its zoning regulations will become more restrictive.

According to Mandelker's impacts of an urban limits policy, limiting the edge of urbanization restricts the supply of land relative to demand (Mandelker, 1971, p. 42). This limitation will increase the competition for remaining development sites which, in return, will increase prices and raise the demand even higher. Whitehand believed that as land prices increased, landowners would be more willing to invest more capital into the development and maintenance of their lands. Available land will be used more intensely.

If the urban limits are narrower, each zoning decision will have greater consequences because each decision has a greater impact on the overall planning objective or reduces the amount of options available for the next decision. Narrow urban limits, therefore, require restrictive zoning choices and less reliance on the private market. Urban areas with narrow limits must put more emphasis on the removal of externalities or land use conflicts.

The government may try to strengthen the administration and enforcement of their regulations or increase the potency of their regulations by incorporating new innovations in town planning.
The incorporation of conditional zoning, transfer of development rights, planned unit developments or some other new flexible zoning techniques may be called for. These techniques allow more government discretion in development decisions. Within the transfer of development rights, landowners are given certain developmental rights which they can use themselves or transfer to other landowners. Landowners receiving development rights, not used by other landowners, can have developments with higher densities or stories than allowed by land use regulations. In some areas, developers constructing large residential or commercial complexes or planned unit developments (PUD’s) are given more developmental freedom.

The purpose of a zoning ordinance is to implement changes in existing land uses to create a new urban morphology based on the land uses categorized in the comprehensive plan. The advantage of zoning is its ability to control and change the urban environment to address changing needs. However, it is difficult to control and knowingly change what you do not understand. The main problem is our ability to understand, use and up-date the zoning system to address the changing needs within cities. However, the zoning system has been improved over the years and will continue to improve as our knowledge and understanding of land use patterns increases. More research is needed in the area of changing land use patterns and the review and modification of the existing zoning system.

3.2. ZONING IN ROANOKE, VIRGINIA

As the urban morphology of an area changes over time, the land use regulations of that area need to be revised to address new development problems. When a city reaches a state of redevelopment, government regulations need to be increased to control developers who are trying to increase the intensity and density of remaining vacant lands. These new and stricter regulations need to be monitored and evaluated to reduce problems and increase efficiency.
and implementation. In Roanoke, Virginia, planners have developed new and stricter planning and zoning regulations to implement redevelopment objectives. These plans and regulations can be monitored and evaluated by an examination of the number and nature of rezoning requests.

**Background of Virginia Zoning Laws**

All municipalities receive their powers from the state, therefore, they must work within the limits of state laws and acts. The Virginia Supreme Court adopted the Dillion’s Rule in 1873. This rule limits the powers of municipal corporations to (a) those granted in express words; (b) those necessarily or fairly implied in or incident to the powers expressly granted; and (c) those essential to the accomplishment of the declared objectives and purposes of the corporation (BeVier and Brion, 1981, p. 20). There is no requirement in the Virginia Constitution that the Dillion’s Rule be followed. However, the Virginia Supreme Court has determined that delegation of powers to subordinate local administrative bodies must be accompanied by decision-making standards which are as explicit as possible (BeVier and Brion, 1981, p. 23).

In 1908, the Virginia General Assembly amended the provisions of the Virginia Code to give more authority to city councils. This authority made regulations concerning the building of houses in the city or town, prescribed and established building lines, or required property owners in certain localities or districts to leave a certain percentage of lots free from buildings, and regulated the height of buildings (BeVier and Brion, 1981, p. 24). In 1922, this power was expanded to authorize cities to engage in full-fledged zoning.

In 1926, the Virginia General Assembly enacted a twenty-five section enabling act, very similar to the SZEAA, for municipalities within its jurisdiction. In 1927, a similar enabling act was enacted for counties, and in 1962, a general enabling act was enacted for counties and munici-
palities. In 1978, the Virginia General Assembly also authorized the municipalities and counties to enact conditional zoning.

The Virginia Supreme Court ruled upon seven significant cases between 1926 and 1948 (BeVier and Brion, 1981, p. 38). During this period, the Virginia Supreme Court ruled that local zoning actions were valid powers of the local government. Zoning actions could be ruled invalid only if they are plainly wrong, unrelated to the general welfare and unreasonable; and that the challenger bears the burden of proof in zoning cases.

After 1948, the Virginia Supreme Court did not rule on any zoning cases again until 1955 when the number of exclusionary zoning cases increased significantly. Between 1955 and 1980, the Virginia Supreme Court ruled on 19 significant cases. Sixteen of these cases were ruled against the local government regulations. Most of these cases involved changes within Northern Virginia.

The Virginia Supreme Court rulings between 1955 and 1978 established that the preeminent criterion of the validity of a local zoning action is whether that action is consistent with the land use preferences of the individual developer (BeVier and Brion, 1981, p. 105). In deciding these cases, the Virginia Supreme Court focused on the encouragement of economic development activities. In several of these cases, the Virginia Supreme Court acted as a local zoning board in requiring the enforcement of certain zoning classifications. This greatly reduced the local government discretion in zoning cases.

Since 1978, the pendulum has swung back to the side of the local government. The discretion of local governments has increased significantly. The Code of Virginia was amended in 1978 by the Virginia General Assembly to include sections 15.1-491.1 through 15.1-491.6 and to include definition (q) conditional zoning in section 15.1-430 (Virginia State Government, 1978, Chapter 320, Section 15.1-491.1-.6).
According to section 15.1-430 (q), "conditional zoning means, as part of classifying land within a governmental entity into areas and districts by legislative action, the allowing of reasonable conditions governing the use of such property, such conditions being in addition to the regulations provided for a particular zoning district or zone by the overall zoning ordinance" (Virginia State Government, 1978, Chapter 320, Section 15.1-430q).

Section 15.1-491.1 of the Code of Virginia states that "it is the purpose of 15.1-491.1 through 15.1-491.4 to provide a more flexible and adaptable zoning method to cope with situations found in such zones through conditional zoning, whereby a zoning reclassification may be allowed subject to certain conditions proffered by the zoning applicant for the protection of the community that are not generally applicable to land similarly zoned" (Virginia State Government, 1978, Chapter 320, Section 15.1-491.1-6). In 1989, section 15.1-491.2:1 was added to the Code of Virginia to expand the geographical applicability of conditional zoning. Section 15.1-491.2:1 also provides a summary of the rules and regulations that apply to conditional zonings.

The Charter of Roanoke, Virginia

The City of Roanoke was established from the incorporated town of Big Lick in 1884 when its Charter was accepted by the General Assembly of Virginia (Writer’s Program, Virginia, 1939, p. 1). Appendix A provides a map of annexations in Roanoke, Virginia. In 1907, John Nolen of Cambridge, Massachusetts prepared a master plan for the Civic Betterment Club of Roanoke (Writer’s Program, Virginia, 1939, p. 12). The 1907 Comprehensive Plan addressed the problems of unpaved streets, lack of recreation facilities, unsatisfactory schools, and general unsanitary conditions throughout the city. This unauthorized comprehensive plan stated that “Roanoke was one of the first cities of relatively small population, then only 30,000, to plan for its future in a business-like, comprehensive manner” (Roanoke City Planning and
Zoning Commission, 1928, forward). In 1922, the Mayor of Roanoke appointed a planning commission; and around 1928, a zoning commission was appointed by the City Council. The zoning commission was comprised of the same people as the planning commission in addition to the city manager and city engineer.

In 1924, Roanoke’s charter was amended and the existing charter and amendatory acts were repealed. The 1924 charter states that the City of Roanoke “...shall have and may exercise all powers which are now, or hereafter, may be, conferred upon or delegated to cities under the Constitution and Laws of the Commonwealth of Virginia...” (Roanoke City Government, 1928, p. 15). The 1924 charter created a city council with “full power and authority, except as herein otherwise provided, to exercise all of the powers conferred upon the city, and to pass all laws and ordinances related to its municipal affairs, subject to the constitution and general law of the state and of this charter (Roanoke City Government, 1928, p. 26). The new charter allowed the city to purchase land outside its boundaries to sell or lease to industrial or commercial developers (Writer’s Program, Virginia, 1939, p. 11).

The 1924 charter was amended in 1927 to include section 72, subsection I. Section 27, subsection I of the charter states “that for the promotion of safety, morals, comfort, prosperity or general welfare of the general public, the council of the City of Roanoke may, by ordinance, divide the area of the city into one or more districts of such shape and area as may be deemed best suited to carry out the purpose of this act, and in such district or districts may establish setback building lines, regulate and restrict the location, erection, construction, reconstruction, alternation, repair or use of buildings and other structures, their height, area and bulk and percentage of lot to be occupied by buildings and other structures, the size of yards, courts and other open spaces, and the trade, industry, residence and other specific uses of the premises in such district or districts ...” (Roanoke City Government, 1928, p. 60). Section 27 also states that uniformity shall exist in each district; zoning should be in compliance with the comprehensive plan; the zoning commission shall establish district boundaries and a board of appeals should be formed.
The 1928 Zoning Ordinance

In 1928, the planning commission and zoning commission approved a revised version of the 1907 Comprehensive Plan. The 1928 Comprehensive Plan addressed the issues of transportation and parking, parks and recreation, schools and other public buildings, the budget and zoning. The city’s first zoning ordinance was developed as one way of implementing the 1928 Comprehensive Plan. The 1928 Comprehensive Plan states that “it is in the orderly arrangement and distribution of land uses and the protection of the property owner in systematic manner that zoning has its greatest value” (Roanoke City Planning and Zoning Commission, 1928, p. 68).

The 1928 Zoning Ordinance regulated use, height and area. It divided all land within the city limits into five groups according to three broad uses: residential, business and industrial. The five zoning classifications are general residential for single family housing, special residential for multi-family housing, business for the suburbs and downtown areas, light industry and heavy industry.

The 1956 Zoning Ordinance

In 1956, Roanoke was still divided into the same five zoning districts as in 1928. The boundaries of and the regulations within these five districts were modified from 1928 to 1956, and the a new zoning map was constructed in 1932. However, the two ordinances are basically the same.
1962: Roanoke’s Neighborhoods and Zoning Ordinance

Neighborhoods of Roanoke, published in 1962 by the City Planning Commission of Roanoke, examines the structural, environmental and socio-economic conditions of Roanoke’s neighborhoods. The City Planning Commission discovered that 13 percent of Roanoke’s neighborhoods were blighted (Roanoke City Planning Commission, 1962, p. 42). This blight was most prominent in neighborhoods around the central business district, especially in the neighborhoods of Gainsboro, Highland Park, Southeast and East Gate. These areas were experiencing declining land values and increasing vacancy rates, partially as a result of conflicting land uses. In fact, the neighborhoods of Gainsboro, Highland Park, West End, and portions of Southeast and East Gate, containing only 31 percent of Roanoke’s total population and 17 percent of Roanoke’s total land area, accounted for 61 percent of the deteriorating and dilapidated housing units and 83 percent of the narrow building lots.

The City Planning Commission suggested more rigid enforcement of planning and zoning regulations and a concentration on conservation, rehabilitation, and redevelopment. According to the City Planning Commission, areas containing the highest concentration of blight or deteriorated housing (over 50 percent) should be completely cleared and redeveloped. Therefore, the City Planning Commission recommended, in essence, the fostering of Conzen’s (1969) burgage cycle in certain sections of the city. This documented cycle involves the formation, building-up, clearing and fallowing of plots of land in the inner city. This burgage cycle can be fostered or hindered through zoning regulations and decisions.

This same year, the City Planning Commission (1962) of Roanoke published Toward a New Zoning Ordinance for Roanoke. The purpose of this book was to provide guidance for a new zoning ordinance. According to the City Planning Commission, the current zoning ordinance, first adopted in 1932, had become obsolete as a result of changes in Roanoke’s people, industries and highways. New growth will occur “through rebuilding, filling in of scattered va-
cant parcels and conversions of existing buildings" (City Planning Commission, 1962, p. 4). The new ordinance "should be especially designed to encourage the injection of new life into older districts in the form of new construction and remodeling" (City Planning Commission, 1962, p. 4).

The City Planning Commission recommended that the new zoning ordinance eliminate the tiered zoning system; increase the use of density levels, performance standards and setback lines; separate differing land uses; and add off-street parking and loading areas.

**The 1966 Comprehensive Plan and Zoning Ordinance**


The 1966 zoning ordinance increased the number of zoning districts to thirteen and instituted setback lines (Roanoke City Government, 1966, Title XV, Chapter 4). The 1966 zoning ordinance listed the permitted uses as well as special exceptions that could be constructed if certain stated regulations were followed for each zoning district. For example, according to the 1966 ordinance, a daycare could be constructed in a single-family residential zone if the proposed lot was at least 18,000 square feet, at least 90 feet wide, and provided a certain amount of play feet per number of children. The daycare was also required to have a five-foot fence around the play area in which the children could play from 8 am to 8 pm. The fence had to be 20 feet from any neighboring residential lot line and 50 feet from any neighboring street line.
The zoning districts established by the 1966 zoning ordinance include (See Appendix B) six residential zones, four commercial zones, three industrial zones and a historic district overlay zone. All annexed areas were zoned single-family residential (RS-3) (Code of the City of Roanoke, 1966, Title XV, Chapter 4).

The 1966 zoning ordinance allowed a mixture of incompatible uses and resulted in strip, commercial development. It allowed commercial development and increased densities in old, inner city neighborhoods. Because of its large minimum lot sizes, the ordinance decreased the development of small, vacant lots and required the clearance of old structures to obtain minimum lot sizes. The 1966 ordinance lacked innovative preservation techniques, design guidelines and site development controls. The ordinance’s definitions were complex and confusing, its summaries were not easily used, and it contained extensive cross references (Roanoke City Planning Commission and Roanoke Office of Community Planning, 1986, p. 13).

The 1966 zoning ordinance could be amended by a motion of the planning commission, a resolution of city council or a petition by the citizens of Roanoke. Before the zoning ordinance could be amended, the planning commission was required to study the need for the amendment, the effect of the amendment, the amount of land within the zoning district experiencing change and the relation of the amendment to the general purposes of zoning. The planning commission would report their findings to the city council which would conduct a hearing to accept or decline the proposed amendment.

**The 1976 Zoning Ordinance**

The 1966 zoning ordinance was slightly amended in 1976 when a new zoning district was added. This agricultural district (AG) was designed to preserve agricultural and rural lands within the city. The 1976 zoning ordinance also included new floodplain regulations and a new zoning map.
The 1970's

During the 1970's, the leaders and citizens of Roanoke began to realize the value of their old, inner city neighborhoods and their downtown area (Roanoke City Planning Commission and Roanoke Office of Community Planning, 1986, p. 9). With this realization, came a focus on historic preservation and revitalization. According to the 1974 Roanoke: Land Usage Inventory and Analysis published by the Department of City Planning, "future additional development, as opposed to redevelopment or second generation usage, cannot proceed at the rate of the previous decade within the present confines of the municipal boundary as the bulk of the remaining "vacant" land is contained within a few active farms, redevelopment projects or has site size and/or topographic (slope) constraints which preclude its economic development in the foreseeable future" (Department of City Planning, Roanoke, 1974, p. 4). This statement was based on an inventory of the aggregated size area of each principal usage in Roanoke for 1973. At this same time, Roanoke was experiencing annexation problems as surrounding counties refused to relinquish their rights over property outside of Roanoke's city limits.

Conditional Zoning in Roanoke, Virginia

In 1978, a change occurred in the Code of the City of Roanoke which would have an influential effect on future zoning ordinances. This change involves the addition of article VIII to the Code of Roanoke. Article VIII authorizes the city to use conditional zoning as long as the conditions are voluntarily proffered by the property owner, contain no cash contributions, payment for offsite construction cost, or mandatory dedication of personal property, and conform to the comprehensive plan (Roanoke City Government, 1978, Article VIII, Section 36-554). The city
could enforce these regulations by ordering remedies, referrals to the city attorney for legal action and requiring a guarantee (Roanoke City Government, 1978, Article VIII, Section 36-555).

The 1985-86 Analysis of Existing Structures

During the late 1970's and early 1980's, small modifications were made to Roanoke's zoning ordinance: historic district regulations were established in 1979; adult use regulations were established in 1980; an airport zone was formed in 1981. Changes of far wider scope since 1966 began to take shape in 1985-86.

In 1985-86, the leaders and citizens of Roanoke began collecting and analyzing data on nine major elements within the city: housing, commercial development, industrial development, human development, parks and recreation, transportation, utilities, environmental quality, and historic and cultural resources. The end result of this extensive analysis was a new comprehensive plan for the City of Roanoke. Believing that Roanoke's future is shaped by its people, the Roanoke City Planning Commission and Roanoke Office of Community Planning involved the citizens of Roanoke in every step of the comprehensive plan development through a public opinion survey, TV specials and workshops and meetings (Roanoke City Planning Commission and Roanoke Office of Community Planning, 1985, p. 20). The new comprehensive plan provided a formula for the orderly growth of Roanoke from 1985 to 2005 with major emphasis on the first five years. The final product of this process would be action plans for each neighborhood within Roanoke accompanied by component plans for the entire city (Roanoke City Planning Commission and Roanoke Office of Community Planning, 1985, p. 17).

The goals of the new comprehensive development plan were orderly growth and revitalization; preservation of the environment and cultural resources; a pleasant, safe and suitable living environment; a balanced economy; public services, facilities and infrastructure to meet vary-
ing needs; and active citizen involvement (Roanoke City Planning Commission and Roanoke Office of Community Planning, 1985, p. 22).

To implement these goals, the leaders and citizens of Roanoke had to revise the land development regulations; improve administration procedures; examine partnership approaches; and determine the planning and development actions (Roanoke City Planning Commission and Roanoke Office of Community Planning, 1985, p. 11). The actions of the three administrative bodies were to be coordinated with a one-stop land development procedure and computerized land use mapping.

The purpose of the land development regulations were to preserve or conserve Roanoke's existing neighborhoods; facilitate infill development; provide downtown housing; increase the variety of housing choices; increase the quality of commercial and industrial development; decrease externalities; create neighborhood commercial centers; and create community-based human service programs and facilities (Roanoke City Planning Commission and Roanoke Office of Community Planning, 1986, p. 32).

The focus of development was no longer the suburban style subdivision or commercial development, but the improvement of existing residential areas and the revitalization of downtown and neighborhood commercial centers. Roanoke's undeveloped land suitable for residential development was limited to out-lying neighborhoods (Roanoke City Planning Commission and Roanoke Office of Community Planning, 1985, pp. 42-3). Residential development in neighborhoods closer to the downtown is limited to revitalization and renovation of existing structures as well as infill development. The regulatory tools that had remained constant since 1966 are now outdated and outmoded. In 1986, a new zoning ordinance was proposed by the Planning Commission and the Citizens Ordinance Review Committee. This new zoning ordinance was designed to promote preservation, design quality and neighborhood conservation. The 1986 proposed zoning ordinance used residential zoning changes, an overlay zone for neighborhood conservation, cluster developments, planned unit develop-
ments, neighborhood commercial districts and downtown development regulations to achieve its goals. The residential zoning classifications were designed to maintain stable areas, improve transitional or problem areas, and to change seriously deteriorated conditions (Roanoke City Planning Commission and Roanoke Office of Community Planning, 1986, pp. 15-7).

The 1987 Zoning Ordinance

Roanoke’s 1987 zoning ordinance divided the city into 18 zoning classifications (See Appendix C): nine residential zones, four commercial zones, three industrial zones, and two historic district overlay zones.

The Planning Commission and the Citizen’s Ordinance Review Committee also decided to incorporate the new technique of conditional zoning into their proposed zoning ordinance. Unlike transfer of development rights or neighborhood conservation special design districts, conditional zoning is found in the Code of Virginia and the Code of Roanoke.

The 1986 zoning ordinance allowed developers to build certain structures by special exception if they adhered to certain specified guidelines provided by the city, whereas conditional zoning allows developers to formulate their own guidelines within the broad limits of the zoning ordinance. Voluntarily offering conditions is one way of proving to the planning commission and city council that your development will be a benefit and not a hindrance to further growth and prosperity in the City of Roanoke.

The leaders of the City of Roanoke warn developers to be careful what they proffer because once the conditions are approved it is expensive and difficult to amend them. The city leaders provide a format for conditions along with the rezoning petition. These conditions can pertain to the use, density, site plans, landscaping or buffering, physical improvements, set backs,
access limitations and dedications. A developer can include a reversion clause that states if s/he has not completed the construction or implementation of the conditions by a certain time the zoning classification will revert back to its previous classification. The developer may also include a guarantee in the form of cash, bonds or credit to prove his commitment to the project.

In addition to voluntary conditions, a rezoning request must include a description of the property, proposed use of the property, features of the proposed use, map or maps of the area, and name and address of the property owners of lots adjacent to or opposite of the property in question.

Conclusion

Because of the deteriorating conditions in its older neighborhoods and downtown created by outdated and outmoded regulatory tools, the City of Roanoke in accordance with the Code of Virginia and the Code of Roanoke created a new zoning ordinance in 1985-86 that became effective in 1987.

The 1966 ordinance was formulated in response to urban blight around the central business district. The 1966 ordinance's solution to this problem was the encouragement of suburban growth in all areas of the city and urban renewal. The main purpose of the 1966 zoning ordinance was to allow and foster growth in Roanoke's outer fringe belt or suburbs. Because the 1966 zoning ordinance did not allow for a variety of growth types and rates throughout the city depending on the developmental stages, it resulted in the destruction of old, inner-city neighborhoods. These neighborhoods were dependent upon redevelopment and infill development which was hindered by large minimum lot sizes. Land can be redeveloped for uses allowed in the current land use category applied to the land without being rezoned, but an owner
wanting to redevelop the land for a differing land use or a higher density must go through the rezoning process. Developers owning small, vacant residentially zoned lots in inner city areas were forced to either rezone to a zoning category with smaller minimum lot sizes or purchase neighboring lands within the same zoning category to obtain the minimum lot size. Owners of lands zoned for commercial or industrial development had no problem with minimum lot sizes or width, area and yardage requirements. During this time period, the Virginia Supreme Court and local governments allowed developers significant freedom, hoping for economic stability and a larger tax base.

By the late 1970's, Roanoke had exhausted its supply of undeveloped land and could no longer annex surrounding areas. As previous literature showed, a lack of vacant land resulted in a increased demand for land and higher competition for development sites. The impact of each development decision on the overall planning objective increased. The government may need a more restrictive zoning ordinance to control externalities. In Roanoke, redevelopment became an essential part growth, and rezoning an essential part of the planning. In the 1970's, the Virginia Supreme Court allowed local governments more discretion in zoning issues. In 1978, conditional zoning was added to the Code of Virginia. Planners were provided with the ability to control a portion of the land use changes occurring outside of the rezoning process and the time span for changes. The 1987 zoning ordinance provided site plan review, site criterion and more restrictive regulations.

The 1987 zoning ordinance and 1985-2005 Comprehensive Development Plan were designed to promote preservation, design quality and neighborhood conservation. The goals of this plan and ordinance were the separation of incompatible land uses, neighborhood preservation, protection of property, maintenance of a balanced and efficient use of Roanoke's land supply, and prevention of externalities. This ordinance lowered the minimum lot sizes in several residential zoning categories and add lot width, area and yardage requirements in commercial and industrial zones. The 1987 ordinance allowed further development of the outer fringe belt through cluster developments and planned unit developments, but it also
addressed the issues of the inner fringe belt by allowing and fostering redevelopment and infill development.

The 1987 zoning ordinance also incorporated the new technique of conditional zoning. Although conditional zoning does not have a strong legal basis, more governments are using conditional zoning in an attempt to increase their decision-making flexibility. It allows developers to offer a wide range of voluntary conditions along with their rezoning request to convince the city council members that their developments are beneficial to the city.

The details of “Roanoke’s case are very specific to the unique set of conditions within the city’s older neighborhoods created by an outdated and outmoded zoning code and map”; however, “the discussion of Roanoke’s solutions should help other localities discover and examine the trouble spots in their own ordinances” (Roanoke City Planning Commission and Roanoke Office of Community Planning, 1986, p. 19).
4. RESEARCH METHODOLOGY

This thesis examined the transformation of Roanoke, Virginia’s zoning ordinance during the period from 1966 to 1987 when Roanoke was emerging from a state of development into a state of redevelopment or second generation growth.

As we saw in the history of zoning in Roanoke, the 1966 zoning ordinance was constructed during a period of rapid suburban growth which began to decline in the mid-1970’s. The 1966 ordinance is a reflection of the 1964 Comprehensive Development Plan which encouraged the reuse of older neighborhoods as business, industrial, institutional and office spaces. In accordance with this plan, the 1966 zoning ordinance allowed a mixture of incompatible land uses, increased densities, large minimum lot sizes and increased demolition of existing structures. The 1964 Comprehensive Development Plan and 1966 zoning ordinance fostered the formation of urban renewal projects and transitional areas. As time progressed, the amount of vacant land within the city of Roanoke decreased and the desire of Roanoke’s residents for preservation and conservation increased. During the 1970’s, the citizens of Roanoke realized that the 1966 zoning ordinance was resulting in the destruction of many old and valuable neighborhoods. This destruction was a result of the continued use of regulations that focused on suburban growth.
During the late 1970’s and early 1980’s, Roanoke experienced a period of inconsistency between its regulatory tools including its zoning regulations and its developmental path. This period of inconsistency ended in 1987 when the City developed a new zoning ordinance. Through an examination of current trends in land use, development, population, and public values as well as predictions of future land use and public service needs and public values, Roanoke’s planners tried to correct specific problems that existed in the 1966 zoning ordinance.

The goals of Roanoke’s 1987 zoning ordinance are preservation, neighborhood conservation and design quality. This ordinance focuses on the redevelopment of Roanoke’s inner city areas. It allows smaller lot sizes to foster redevelopment and infill development and lower densities, which are consistent with existing developments. The 1985-2005 Comprehensive Development Plan and 1987 zoning ordinance focuses on the consolidation of land uses within areas previously classified as transitional areas and the formation of historic districts. The 1987 zoning ordinance incorporates new planning techniques and stricter regulations, as suggested by the City Planning Commission in 1962. In addition, the 1987 zoning ordinance created land use categories applicable in the inner city as well as the periphery. Monitoring, evaluations and updates are necessary to the success of the new zoning ordinance. Unfortunately, there is currently a lack of monitoring and evaluation techniques. One way of examining the actual land use pattern and evaluating the 1987 zoning ordinance is an analysis of the type and number of rezoning requests.

Research Objectives

The overall objective of this study is to examine the transformation of Roanoke, Virginia’s, zoning ordinance during the period from 1966 to 1987 using an analysis of rezoning request data from 1978 to 1991, publications and interviews. This rezoning request information must
be examined in the context of past land use regulations, land use changes, and administrative decisions. This thesis concentrates on four areas of concern.

I) An analysis of the differences between the 1966 and 1987 zoning ordinances of Roanoke, Virginia. The main difference between the 1966 and 1987 zoning ordinances was their focus on differing growth processes and problems. The 1966 zoning ordinance used zoning regulations to foster suburban growth and urban renewal, while the 1987 zoning ordinance’s regulations were centered on preservation, conservation and design quality. This ordinance was designed to address the problems created by the clearance of old structures and conflicting and incompatible land uses. The rules and regulations of the 1987 zoning ordinance effect the rezoning requests information as well as rezoning decisions. Questions to be answered are:

1. How were the goals of each ordinance formulated?
2. How and to what extent were the citizens of Roanoke involved in the development of the ordinances?
3. Was a land use inventory conducted before the development of the ordinances?
4. If so, what were the results of each land use inventory?
5. How do the ordinances differ structurally?
6. How do the administration and implementation policies for the ordinances differ?
7. How was the rezoning process changed from 1966 to 1987?

II) An analysis of the application of the 1966 zoning ordinance. The purpose of the 1966 zoning ordinance was dependent on Roanoke’s stage of growth. The 1966 zoning ordinance was formulated during a state of development and suburban growth. The ordinance’s goal was to foster growth in all areas of the city. The 1966 zoning ordinance was amended during a state of redevelopment and preservation. Social goals and protection of cultural and historical resources became important issues in the 1970’s. Questions to answer are:

1. What were the goals of the 1966 ordinance?
2. Were the goals of the 1966 ordinance achieved?
3. Why the goals were or were not achieved?
4. Who or what can be blamed for the failure or success of the 1966 zoning ordinance?
5. How were the problems of the 1966 ordinance corrected?
6. Where was growth expected to occur within Roanoke in 1966?
7. Where did growth occur within Roanoke between 1966 and 1987?
8. Why did growth occur within these areas of the city?
9. What type of growth occurred during this time period?

III) An analysis of the application of the 1987 zoning ordinance. The 1987 zoning ordinance was formulated to address the problems of redevelopment. This ordinance focused on preservation, conservation and design quality. This document can be analyzed using rezoning requests information on land use changes. Questions to answer are:

1. What are the goals of the 1987 zoning ordinance?
2. What reforms were implemented?
3. How do these reforms differ from the organization of the 1966 ordinance?
4. What are the current or expected zoning problems?
5. What, if any, are the plans for reforms in the immediate future?
6. Where was growth expected to occur within Roanoke in 1987?
7. Where did growth occur between 1987 and 1990?
8. Why did growth occur in these areas within this time period?
9. What type of growth occurred during this time period?

VI) An analysis of conditional zoning. Conditional zoning, included in the 1987 zoning ordinance, allows planners to negotiate with developers to control land use changes, the time limit for changes and quality of developments in certain sections of the city. Information on conditional zoning is an integrate part of the rezoning requests information. Questions to be answered are:

4. RESEARCH METHODOLOGY
1. Why was conditional zoning chosen?
2. Has it been an effective method of control?
3. What are the current or expected problems?
4. What are the most frequently offered conditions?
5. How many of the rezoning requests submitted after 1987 have included conditions?

Methodology

Instead of gradually changing the zoning regulations along with developmental changes in the city, the Roanoke Planning Department relied on major zoning changes during times of transformations from one stage of development into another to guide city growth. A content analysis, a historical/comparative analysis and interviews were conducted to examine the transformation of the zoning ordinance in Roanoke, Virginia during the period from 1966 to 1987.

Numerous publications by the Roanoke Planning Commission and the Roanoke City Government were examined. These publications include: Roanoke Visions--Zoning: A Process For Balancing Preservation and Change (1986); Roanoke Visions--Comprehensive Development Plan For Roanoke, Virginia 1985-2005 (1986); Comprehensive City Plan, Roanoke, Virginia (1928); Code of the City of Roanoke (1966)(1978) (1987); Roanoke Land Usage Inventory and Analysis (1974); “Procedure to Rezone” (1991); “Statement of Policy” (1991); Charter of the City of Roanoke, Virginia (1928); “Critical Issues Fund Proposal” (1984); and “Twelve Problem Areas” (1985). These are the most reliable and informative sources available on zoning in Roanoke, Virginia. These sources provide a background on Roanoke’s zoning laws and history, an analysis of Roanoke’s 1966 and 1987 zoning ordinances, an examination of Roanoke’s existing conditions and an examination of Roanoke’s zoning process.
The second part of my research involves an examination of rezoning request notices for the City of Roanoke, Virginia, from 1978 to 1991 and rezoning request files from 1982 to 1991 for five neighborhoods in Roanoke. The rezoning request notices for the entire city were examined using microfilm copies of the Roanoke Times & World-News, Roanoke's prominent newspaper, from 1978 to 1991. Information gathered and coded from these notices includes data on the name of the petitioner, location of the land to be rezoned, the existing zoning category, the requested zoning category, and the inclusion or exclusion of conditions.

Rezoning request files at Roanoke's Office of Community Planning were examined for proposed rezonings in the neighborhoods of Highland Park, Gainsboro, South Roanoke, Williamson Road and Central Business District. These files contained rezoning requests, minutes of Planning Commission Staff meetings, minutes of City Council meetings and notes or letters received by the Planning Commission or City Council relevant to the rezonings. Additional information obtained from these files includes the type and number of conditions proffered, inclusion or exclusion of citizen participation, current land use, the proposed land use, and governmental decisions.

This neighborhood data provides an in-depth study of actual land use changes. These neighborhoods, surrounding the downtown, were chosen because of their unique zoning histories. The Highland Park area was greatly affected by the office-institutional (C-1) zoning category created by the 1966 zoning ordinance. The Gainsboro neighborhood was the main focus of Roanoke's urban renewal projects. South Roanoke was the focus of the first detailed neighborhood plan. Williamson Road is a commercial area with a strong neighborhood organization. Information on rezonings in the central business district was collected and analyzed in the five neighborhood study; however, an in-depth analysis of zoning in the central business district was not attempted due to the vast amount of historical data and studies on this area. Other areas of the city were completely excluded because of unique development features, including the airport and the Roanoke Center for Industry and Technology.

4. RESEARCH METHODOLOGY
The third section of my research involves an examination of publications on the Highland Park, Gainsboro, South Roanoke, and Williamson Road neighborhoods. These publications provide a history of zoning in these neighborhoods and emphasize the affect of the zoning ordinances on specific land areas. Relevant publications are *Highland Park Neighborhood: Prospects for the Future* (1961); *Preliminary Report on Highland Park* (1975); *Gainsboro Development Study Report* (1969); *South Roanoke Neighborhood Plan* (1988); *A Place Apart* (1982); and "Critical issues Fund Proposal" (1984).

Lastly, taped interviews were conducted with individuals influential in zoning decisions in Roanoke, Virginia. I interviewed Mrs. Evie Gunther, planner; Mr. Ron Miller, zoning administrator; Mr. John Bradshaw, Jr., Planning Commission member (formerly Chairman); and Mr. Earl Reynolds, Jr., Assistant City Manager (formerly Chief of the Office of Community Planning). These interviews were open-ended with the interviewed persons controlling the direction of the conversion within the broad subject of zoning in Roanoke, Virginia, between 1968 and 1987. These interviews helped explain the trends found in the zoning histories and re-zoning data.
5. THE 1966 AND 1987 ZONING ORDINANCES OF ROANOKE, VIRGINIA

The 1964 Comprehensive Development Plan and the 1966 zoning ordinance were formulated during a period of suburban growth. These documents encouraged large minimum lot sizes in residential zoning categories, a mixture of land uses, and the spread of commercial and industrial land uses into the inner city areas. The goals of this plan and ordinance were fulfilled. New developments, mainly commercial and industrial, were fostered in all areas of the city. However, problems arose as vacant land decreased, land use conflicts increased, inner city neighborhoods were cleared for urban renewal projects, and historic and cultural resources were diminished. These developmental problems were addressed through the 1985-2005 Comprehensive Development Plan and the 1987 zoning ordinance. This later plan and ordinance encouraged smaller minimum lot sizes in several residential zoning categories, the addition of lot area, width and yardage requirements to industrial and commercial zoning categories, reuse and renovation of inner city structures, separation of different land uses, and the preservation of residential areas.

The 1987 zoning ordinance tried to eliminate the major problems of the 1966 zoning ordinance including lack of regulations in some zoning categories, high densities and large minimum lot
sizes in the residential zoning categories and lack of preservation techniques. Implementation of the 1987 zoning ordinance has influenced urban land use changes in many areas of Roanoke, Virginia. The first urban land use changes that resulted from the implementation of this ordinance were the amendments to the 1976 zoning map. This amendment applied the new zoning categories to individual plots of land in the city. Some of these new regulations replaced old zoning categories, while others represented new zoning category choices. These changes were kept to a minimum because of a desire for acceptance and stability. In some areas of the city, the existing land use does not match the 1987 zoning ordinance’s suggested land use categories for that region. Studies must be done of the existing land uses before the 1987 zoning categories can be applied to large areas of the city.

Some revisions have been made in the 1987 zoning ordinance to improve implementation and enforcement efforts. The 1987 zoning ordinance was amended in 1991 to clarify definitions, expand permitted uses, include new State Laws and Codes, and include suggestions by citizens, public officials and private enterprises. An in-depth up-date has not been attempted.

A Comparison of the 1966 and 1987 Zoning Ordinances

According to Mr. Earl Reynolds, Jr., Assistant City Manager and Former Chief of the Office of Community Planning, there were four major problems with the application of Roanoke’s 1966 zoning ordinance. These problems are (1) outdated and inappropriate zoning designations for older neighborhoods and commercial areas, (2) lack of specificity and controls in zoning categories and lack of categories to cover sensitive rehabilitation and infill, (3) overly complicated language in the zoning code and lack of clarity on procedures, and (4) lack of training for board members and commissions in neighborhood and community preservation (Office of Community Planning, 1984, p. 3).
In 1985, Mr. Reynolds wrote a letter to Ms. Constance Beaumont, Program Officer for the National Trust for Historic Preservation, summarizing 12 specific problem areas within the 1966 zoning ordinance (Office of Community Planning, 1985, pp. 1-16). These problem areas were:

1. The minimum lot area, width, and yardage requirements in the RS-1, RS-2, RS-3, C-2, RG-1, RG-2 and LM zoning categories;
2. The uses and structures permitted through special exceptions in the RS-1, RS-2, RS-3, and C-1 zoning categories;
3. The permitted principal uses and structures in the C-1 zoning category;
4. The application and administration of performance standards, transitional uses and the historic district zoning category;
5. The zoning of high rise apartments and townhouses.

Some appropriate development did occur under the 1966 zoning ordinance through conditional zoning which was enacted in 1978. However, the conditional zoning process is complex, time consuming, and dependent upon the knowledge and negotiation skills of changing staff members. Mr. Reynolds believed that for Roanoke to continue to move forward, the legal documents had to be changed. This change finally occurred in 1987 with the adoption of the 1987 zoning ordinance based on the 1985-2005 Comprehensive Development Plan.

The 1987 zoning ordinance and 1985-2005 Comprehensive Development Plan were developed to correct problems related to the demolishing of inner city structures and conflicting and incompatible land uses created by the 1966 zoning ordinance and 1964 Comprehensive Development Plan. These developmental problems were addressed in the structure and purpose of the 1987 zoning ordinance. The 1987 zoning ordinance created lower minimum lot sizes for the RS-1, RS-2, and RS-3 categories. Appendices B and C provide a list of the 1966 and 1987 zoning categories. In the RS-2 zoning category, the 1966 zoning ordinance created a minimum lot size of 9,000 square feet (70 feet) whereas, in the 1987 zoning ordinance, this figure was reduced to 7,000 square feet (60 feet). The minimum lot size of the RS-3 category was 7,000 square feet (60 feet) in 1966, as compared to 5,000 square feet (50 feet) in 1987. These smaller lot sizes allowed infill development on small vacant lots around the inner city. The minimum
lot size requirements, (13,500 square feet), for the RS-1 category, as well as minimum yardage requirements for all three zoning categories, remained the same in both zoning ordinances.

In the RS-1, RS-2, and RS-3 zoning categories, the 1966 zoning ordinance allowed private daycares, hospitals, sanitariums, rest homes, colleges, off-street parking lots, private clubs and repair shops through special exceptions granted by the Zoning Board of Appeals. The inclusion of these land uses created a mixture of business type land uses within the once strictly residential land use zones. The 1987 zoning ordinance created one zoning category, RS-3, that was more business-oriented whereas, the RS-1 and RS-2 zoning categories remained more strictly residential. Special exceptions in the 1987 zoning ordinance allowed congregate homes, elementary and secondary schools, community centers, outdoor recreation facilities, bed-and-breakfast inns, and golf courses in the RS-1 and RS-2 zoning categories, uses compatible with existing residential structures. In RS-3 zones, the 1987 ordinance allowed landowners to seek special exceptions for single-family apartments, nonprofit counseling centers, daycare centers, elderly care centers, libraries, and art galleries. These uses are more business-oriented, but still compatible with existing residential structures. These changes in the regulations of the RS-1, RS-2 and RS-3 zoning categories encouraged the separation of different land uses and preservation of residential areas.

The definition of the C-1 zoning category changed from 1966 to 1987. In 1966, the C-1 zoning category was applied to areas undergoing a transition from residential land uses to other land uses perhaps incompatible with existing residential structures. The C-1 zoning category was suppose to preserve the residential character of the area while permitting limited additional land uses. This idea of transitional areas encouraged the spread of office and institutional land uses into residential areas. In many cases, these additional land uses became the principal use within these transitional areas. In 1987, the C-1 zoning category was applied to areas with limited commercial land uses where existing residential structures were to be preserved. This focus on preservation resulted in the consolidation of land uses and a re-
duction of conflicting and incompatible land uses. The amount of land designated as a C-1 zoning district decreased in 1987 as a result of the deletion of the term transitional area.

The 1966 zoning ordinance allowed medical supply houses and laboratories, hospitals, and all uses permitted in the RG-1 and RG-2 multi-family zoning categories as principal uses in the C-1 zoning category. The 1966 zoning ordinance created a mixture of residential and commercial land uses. In fact, many areas designated as C-1 zoning districts in 1966 became office and institutional zones. The 1987 zoning ordinance allowed duplexes, townhouses, nonprofit counseling centers, elementary and secondary schools, colleges, rest homes, churches, community centers, police stations, fire stations, post offices, playgrounds, and home occupations as principal uses in the C-1 zoning category. The 1987 zoning ordinance greatly reduced the amount of conflict between residential land uses and new developments within the C-1 zoning district.

In C-1 zones, the 1966 ordinance allowed landowners to seek special exceptions granted by the Board of Zoning Appeals for high-rise apartments, financial institutions, parking lots, restaurants, and recording studios. In 1987, multi-family dwellings, clubs or lodges, hospitals, medical laboratories, personnel services, bed-and-breakfast inns, and public parking lots were allowed in C-1 zones through special exceptions.

The 1966 zoning ordinance did not state minimum lot width or area requirements for lands in C-2 zones. The minimum front yardage was 25 feet, and the maximum lot coverage was 60 percent. The 1987 zoning ordinance stipulated minimum lot width, area and yardage requirements as well as height restrictions. It required lower lot coverage and more buffering between commercial and residential areas.

The 1966 zoning ordinance created two multi-family zoning categories, RG-1 and RG-2. For single-family units and duplexes in the RG-1 and RG-2 categories, the 1966 zoning ordinance required minimum lot sizes of 7,000 square feet. For RG-1 zone multi-family units, the 1966
zoning ordinance created minimum lot sizes of 1,800 square feet per unit. For RG-2 zone
multi-family units, the 1966 ordinance mandated minimum lot sizes of 1,000 square feet per
unit. In contrast, the 1987 zoning ordinance expanded the number of categories to four: RM-1,
RM-2, RM-3 and RM-4. Minimum lot size for the RM-1 and RM-2 categories was 5,000 square
feet (50 feet). This minimum lot size allows for infill development on small and irregularly
shaped vacant lots. The RM-1 and RM-2 zoning categories also contained lower density lev-
els. For the RM-3 and RM-4 zones minimum lot sizes of the 1966 ordinance for RG-1 and RG-2
zones were adopted. RM-3 and RM-4 categories were created to preserve the character of
older neighborhoods, while enhancing the potential for new developments.

The 1966 zoning ordinance did not stipulate lot width, area, yardage or coverage requirements
in the LM zoning category. These requirements were established by the 1987 zoning ordi-
nance. The new ordinance also established landscaping and buffering requirements. The
goal of these zoning requirements was to accommodate and preserve the character of older
industrial areas, and to reduce conflicts between new industrial developments and adjacent
land uses.

Another difference between the two ordinances was the inclusion of performance or devel-
opment standards. In 1966, no list of important development factors or zoning categories was
developed to guide in the application of performance standards. Therefore, administrators
were given the discretion to decide when and where performance standards were applied.
The 1987 zoning ordinance applied development standards to Industrial Planned Unit Devel-
opments (IPUD’s), industrial developments involving at least 20 acres of land and two
buildings. These standards regulated vehicular access, floor area ratio, yardage, height, open
space, circulation and energy. The creation of this standardized list for developers to follow
reduced administrative discretion in the formulation and application of development stand-
ards.
Under the 1966 ordinance, high-rise apartments were allowed in appropriate areas if the developer submitted a design plan and received approval from the Planning Commission Review Board. High-rise apartments were eliminated under the 1987 ordinance. The 1966 ordinance defined transitional uses as those areas experiencing a change from one land use to another land use. The transitional uses were used to reduce the spread of a particular land use by creating a buffer zone. However, in many cases the transitional use became the permanent, principal use. In the 1987 zoning ordinance, the spread of a particular land use into an adjacent land uses was reduced by language that encouraged preservation of existing land uses.

Both ordinances allowed townhouses to be built, if guidelines and design criteria were met. The 1966 ordinance created the RD zoning category to encourage single-family and duplex housing. However, RD zones were applied mainly in transitional areas. The duplex zone was broadened by the 1987 ordinance’s creation of an RM-1 category. This change allowed development of small and irregular shaped vacant lots.

The preservation of areas of historic, architectural and cultural importance was addressed in 1966, with the most important historic areas located adjacent to Virginia historic landmarks, other historic buildings, and areas of historic events or public values. The 1987 zoning ordinance included two historic district categories, H-1 and H-2. The H-1 essentially duplicated the 1966 zoning ordinance, while the H-2 was created to enhance neighborhood preservation. The H-2 category was applied to areas of local significance.

The final comparison to be drawn is the creation of new zones in 1987: an RA zone, a CN zone and a Residential Planned Unit Development zone. RA was created to preserve and protect agricultural areas; CN to preserve and enhance the development of commercial neighborhood centers; and the RPUD to encourage more innovative site and design guidelines for residential complexes. The C-4 zoning category, developed in 1966 to allow for the expansion of the central business district into surrounding older neighborhoods, was eliminated in 1987. The goal of the 1987 zoning ordinance was to preserve these older neighborhoods.
Amendment of the 1976 Zoning Map

With the adoption of the 1987 zoning ordinance, the official zoning map of 1976 needed to be amended. A public hearing was held to discuss the proposed rezonings on March 27, 1987 (Office of Community Planning, 1987). This meeting was attended by 160 citizens. As a result of citizen opposition, two areas, parcels on 13th Street, Dale, Jamison and Stewart Avenues, Southeast; and Williamson Road, 10th and Lynhurst Streets, and Burton Avenue; Northwest, were withdrawn from the original proposal. The amended rezoning request was adopted by City Council on April 20, 1987, incorporating changes to the 1976 map. These changes can be summarized as:

1. Areas previously zoned AG were rezoned to RA;
2. Areas previously zoned RD were rezoned to RM-1;
3. Areas previously zoned RG-1 or RG-2 were rezoned to RM-2;
4. Parcels of land throughout the city were rezoned from C-2 to CN, C-4 to C-3, IDM to C-2, IDM and C-2 to C-2 and IDM to LM;
5. One area in Highland Park Neighborhood and the Westend Neighborhood and one area within the Westend Neighborhood were zoned H-2.

Amendments to the 1987 Zoning Ordinance

During 1991, various amendments were made to the 1987 zoning ordinance. These amendments are a result of changes or amendments in state laws or standards, inconsistencies in wording, inconsistencies with other city regulations, requests from citizens of Roanoke, private or public organizations or the city staff, and up-dates in information (Office of Community Planning, 1991).

These amendments included the redefining of boarding houses, dwelling, mobile home, manufactured home, family, fast food restaurant, hotel or motel, and restaurant. The number
of zoning categories in which police stations, fire stations, public schools, public facilities, and playgrounds could be located was increased. Columbarums or incinerators were added in zoning categories permitting churches. The location of radio and television transmitters, tractor-trailers, bus depots and repair stations was determined. Regulations were placed on the location of temporary buildings, street or construction dumpsters and the parking of commercial vehicles. Further amendments were made in the submission procedures, general procedures, planning commission actions, and fees.

Conclusion

The purpose of the 1964 Comprehensive Development Plan and the 1966 zoning ordinance was to encourage development through urban renewal projects and suburban style developments. In 1962, thirteen percent of Roanoke’s total available housing supply was blighted (Roanoke City Planning Commission, 1962). This blight was most prominent around the central business district especially in the neighborhoods of Gainsboro and Eastgate. In the 1964 Comprehensive Development Plan and the 1966 zoning ordinance, this blighted region was treated like a zone of transition (Burgess, 1967). This transition was fostered by encouragement of the reuse of older, inner city neighborhoods as business, industrial, office and institutional land uses. The 1966 ordinance fostered this reuse of old structures by requiring large minimum lot sizes only in residential categories. Old structures were destroyed to obtain developable sites. This created an influx of incompatible land uses instead of a consolidation of existing uses.

In the Highland Park Neighborhood, a large amount of land was zoned C-1, office-institutional district. This C-1 district was formulated to act as a buffer between commercial and residential land uses. However by 1974, these institutional and office land uses had consumed a large portion of the previously residential land use areas.
The 1966 zoning ordinance fostered urban renewal by enforcing minimum lot size requirements around the center business district. According to Alonso (1964) and Whitehand (1987), these minimum lot sizes requirements would result in lower land prices and increased extensive users of land. The planning model used in Roanoke in the 1960's, focusing on urban renewal, did not include low density family zones, site plan reviews or site criterion for development.

The main focus of urban renewal efforts in Roanoke was the Gainsboro and Williamson Road Neighborhoods. According to the Roanoke Department of Health in 1961, 33 percent of the houses in the Gainsboro Neighborhood needed major repairs and one percent needed clearing. In 1962, 40 percent of the non-residential structures were considered unsound (Urban Design Studio, Virginia Tech, 1969, pp. 1-2, 12). In 1964, planning for the clearance of Northeast Roanoke began. The first section to be cleared was 83 acres in the Gainsboro Neighborhood (White, 1982, pp. 115-118). The new residential structures built on this cleared land were incompatible with the older houses. Many of these older houses as well as other inner city structures were divided into apartments, while small vacant lots remained undeveloped because of the minimum lot size requirements. In the Williamson Road area, 96 acres of land were cleared and rebuilt for businesses and the post office.

The underlying premise of the 1966 zoning ordinance and the 1964 Comprehensive Development Plan was the replacement of older areas with newer, more viable developments. The 1966 ordinance resulted in the replacement of many inner city structures. The ultimate result of this ordinance was an accumulation or blending of older and newer developments. Some of the older areas managed to withstand the development storm and remain intact while, others were transformed for new uses or destroyed completely for new development. According to Conzen’s burglary cycle, it is common for the inner city to be cleared and redeveloped. The 1966 ordinance fostered the clearance of inner city structures, and the redevelopment of these areas as commercial or institutional land uses. The developments
that occurred in Roanoke during the 1960's were augmentative or resulted a complete new pattern of development.

The 1987 zoning ordinance treated the inner city as areas of mixed land uses instead of a transitional area. This ordinance tried to consolidate the existing land uses within inner city areas by enforcing compatibility of new developments. It attempted to separate all land uses into isolated areas, requiring the elimination of the hierarchy of land uses. In the Highland Park Neighborhood, the 1987 zoning ordinance focused on revitalizing houses, isolating residential areas, and encouraging compatible developments.

The 1987 zoning ordinance lowered the minimum lot size for areas around the central business district to increase the opportunity for development of small, vacant lots. The downtown area was protected by an expanded version of the historic district. The traditional historic district protected areas of historical significance, while the conventional historic district provided for neighborhood conservation. Structures within a historic district cannot be demolished or extensively remodeled. This ended the development cycle of infilling, clearing, falling, and rebuilding.

The 1985-2005 Comprehensive Development Plan and 1987 zoning ordinance tried to address different developmental stages within the city. It allowed redevelopment and infill development in the inner city areas through smaller minimum lot sizes and historic districts, and it allowed for development in the outer periphery by incorporating the Residential Planned Unit Development and the Industrial Planned Unit Development. Developments in these RPUD and IPUD districts are controlled by development standards, while developments in the inner city are controlled by site plan review and conditional zoning.

In his 1984 letter, Mr. Earl Reynolds, Jr. suggested that the new zoning ordinance could be evaluated by examining the number and nature of rezonings and variances; the number and type of infill or rehabilitation projects; the reduction of staff time for routine task; and the
number and type of appropriate versus inappropriate commercial and industrial uses in residential areas (Office of Community Planning, 1984, p. 29).

The first of these evaluation techniques is the examination of the number and nature of new rezonings. Chapter five will focus on a brief examination of rezoning requests filed with the planning department of Roanoke, Virginia, between 1978 and 1991 and an in-depth examination of rezoning requests involving lands in the neighborhoods of Highland Park, Gainsboro, South Roanoke, Williamson Road and the Central Business District filed with the Planning Department of Roanoke between 1982 and 1991.
6. REZONING REQUESTS IN ROANOKE, VIRGINIA

Between 1978 and 1991, 264 rezoning requests were filed with the City of Roanoke, Virginia. These requests were examined using microfilm copies of the Roanoke Times & World-News. This Roanoke newspaper first began printing the proposed rezonings in 1978 under the legal notices column located at the beginning of the classified ads. A notice is printed for each month in which zoning requests are filed. Requests are never filed in December because of the closure of government offices during the holiday season.

Five pieces of information were obtained from the notices.

1. The name of the petitioner. I coded this information as business, individual or the city. The name printed is subject to the discretion of the petitioner. A business can be listed by the owner's personal name or the name of the business itself.

2. The location of land involved in the rezoning requests. This data has been coded as Northeast, Northwest, Southeast, and Southwest. These are "standard" regions and frequently used designations for Roanoke. Appendix D provides a City of Roanoke orientation map, and Appendix E contains a map of the location of zoning category changes by year (1978-91).

3. The existing zoning category or categories. One rezoning request may include several zoning category changes.

4. The requested zoning category or categories. There may be more than one per zoning request.

5. The inclusion or exclusion of conditions within the rezoning requests. The type or number of conditions is not included. Some requests are amended to include conditions. This
amendment will be noted because it is often a result of opposition. A few of the more recent requests, filed in 1991, may be amended at a later date.

Fewer than 50 percent of these notices included information on acreage; therefore, this information was discarded. As announcements of requested changes, the newspaper notices do not reveal whether the proposed changes were withdrawn, approved or denied. An detailed summary of the rezoning requests data can be found in Appendix F.

Rezonings Filed from 1978 to 1991

In the nine years between 1978 and 1986, 161 requests were filed with the Planning Department in Roanoke, whereas from 1987 to 1991, 103 requests were filed. If these requests were spread out equally per year, more requests would have been filed per year from 1987 to 1991 than each year of the previous time period.

Between 1978 and 1986, individuals filed more requests than businesses, whereas from 1987 to 1991, businesses filed more requests than individuals. The city's main requests were filed in 1983 to implement the Gainsboro Redevelopment Plan and in 1990 to implement the South Roanoke Neighborhood Plan. Overall, the type of petitioner did not vary significantly over time.

Conditional zoning was an integral part of the 1987 zoning ordinance. Its effect is seen in the increasing number of petitioners proffering conditions, with a higher percentage of petitioners proffering conditions from 1988 to 1991.
Table 1. Data on Rezoning Requests 1978 to 1986

<table>
<thead>
<tr>
<th>1978-86</th>
<th>Northwest (31.1%)</th>
<th>Southwest (40.4%)</th>
<th>Northeast (17.4%)</th>
<th>Southeast (10.6%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Percentage of rezoning requests from different regions of Roanoke City</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Types of petitioners</strong></td>
<td>Businesses (38.5%)</td>
<td>Individuals (47.8%)</td>
<td>City (13%)</td>
<td></td>
</tr>
<tr>
<td><strong>Existing zoning categories</strong></td>
<td>RS-3 (23.4%)</td>
<td>RD (20.9%)</td>
<td>C-2 (12%)</td>
<td>C-1 (10.8%)</td>
</tr>
<tr>
<td></td>
<td>RG-2 (4.4%)</td>
<td>RS-2 (3.2%)</td>
<td>IDM (1.9%)</td>
<td>LM (3.8%)</td>
</tr>
<tr>
<td><strong>Requested zoning categories</strong></td>
<td>C-2 (41.3%)</td>
<td>LM (18.1%)</td>
<td>RG-1 (14.2%)</td>
<td>C-1 (8.4%)</td>
</tr>
<tr>
<td></td>
<td>HM (1.9%)</td>
<td>C-4 (1.9%)</td>
<td>C-3 (1.3%)</td>
<td>Others (1.8%)</td>
</tr>
<tr>
<td><strong>Percentage of petitioners proffering conditions</strong></td>
<td></td>
<td></td>
<td></td>
<td>44.7%</td>
</tr>
</tbody>
</table>

RD = Duplex residential
RG-1 and RG-2 = General residential
RS-1, RS-2 and RS-3 = Single-Family residential
RM-1, RM-2, RM-3 and RM-4 = Multi-family residential
C-1 = Office-Institutional
C-2 = General commercial
C-3 = Central Business District
C-4 = Central District
CH = Neighborhood commercial
IDM = Industrial development
LM = Light manufacturing
HM = Heavy manufacturing
H-1 = Historic district
<table>
<thead>
<tr>
<th>Percentage of rezoning requests from different regions of Roanoke City</th>
<th>1987-91</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Northwest</td>
</tr>
<tr>
<td></td>
<td>(43.7%)</td>
</tr>
<tr>
<td>Types of petitioners</td>
<td>Businesses</td>
</tr>
<tr>
<td></td>
<td>(47.6%)</td>
</tr>
<tr>
<td>Existing zoning categories</td>
<td>RS-3</td>
</tr>
<tr>
<td></td>
<td>(25.7%)</td>
</tr>
<tr>
<td></td>
<td>HM</td>
</tr>
<tr>
<td></td>
<td>(6.9%)</td>
</tr>
<tr>
<td>Requested zoning categories</td>
<td>C-2</td>
</tr>
<tr>
<td></td>
<td>(28.6%)</td>
</tr>
<tr>
<td></td>
<td>H-1</td>
</tr>
<tr>
<td></td>
<td>(4.8%)</td>
</tr>
<tr>
<td>Percentage of petitioners proffering conditions</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

RD = Duplex residential  
RG-1 and RG-2 = General residential  
RS-1, RS-2 and RS-3 = Single-Family residential  
RM-1, RM-2, RM-3 and RM-4 = Multi-family residential  
C-1 = Office-Institutional  
C-2 = General commercial  
C-3 and C-4 = Central Business District  
CN = Neighborhood commercial  
IDM = Industrial development  
LM = Light manufacturing  
HM = Heavy manufacturing  
H-1 = Historic district
Table 3. Data on Rezoning Requests in Existing Zoning Categories

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage of rezoning requests in existing zoning categories*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RD</td>
</tr>
<tr>
<td>1978</td>
<td>42.9</td>
</tr>
<tr>
<td>1979</td>
<td>36.4</td>
</tr>
<tr>
<td>1980</td>
<td>33.3</td>
</tr>
<tr>
<td>1981</td>
<td>6.7</td>
</tr>
<tr>
<td>1982</td>
<td>14.3</td>
</tr>
<tr>
<td>1983</td>
<td>8.0</td>
</tr>
<tr>
<td>1984</td>
<td>27.3</td>
</tr>
<tr>
<td>1985</td>
<td>20.0</td>
</tr>
<tr>
<td>1986</td>
<td>16.0</td>
</tr>
<tr>
<td>1987</td>
<td>5.6</td>
</tr>
<tr>
<td>1988</td>
<td>---</td>
</tr>
<tr>
<td>1989</td>
<td>---</td>
</tr>
<tr>
<td>1990</td>
<td>---</td>
</tr>
<tr>
<td>1991</td>
<td>---</td>
</tr>
</tbody>
</table>

* Major existing zoning categories:
- RD = Duplex residential
- RG-1 and RG-2 = General residential
- RS-1, RS-2 and RS-3 = Single-Family residential
- RM-1, RM-2, RM-3 and RM-4 = Multi-family residential
- C-1 = Office-Institutional
- C-2 = General commercial
- C-3 and C-4 = Central Business District
- IDM = Industrial development
- LM = Light manufacturing
- HM = Heavy manufacturing
- H-1 = Historic district
Table 4. Data on Rezoning Requests in Requested Zoning Categories

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage of zoning requests in requested zoning categories*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RD</td>
</tr>
<tr>
<td>1978</td>
<td>___</td>
</tr>
<tr>
<td>1979</td>
<td>___</td>
</tr>
<tr>
<td>1980</td>
<td>8.3</td>
</tr>
<tr>
<td>1981</td>
<td>6.7</td>
</tr>
<tr>
<td>1982</td>
<td>6.7</td>
</tr>
<tr>
<td>1983</td>
<td>3.8</td>
</tr>
<tr>
<td>1984</td>
<td>4.5</td>
</tr>
<tr>
<td>1985</td>
<td>5.0</td>
</tr>
<tr>
<td>1986</td>
<td>___</td>
</tr>
<tr>
<td>1987</td>
<td>10.5</td>
</tr>
<tr>
<td>1988</td>
<td>___</td>
</tr>
<tr>
<td>1989</td>
<td>___</td>
</tr>
<tr>
<td>1990</td>
<td>___</td>
</tr>
<tr>
<td>1991</td>
<td>___</td>
</tr>
</tbody>
</table>

* Major requested zoning categories
RD = Duplex residential
RG-1 and RG-2 = General residential
RS-1, RS-2 and RS-3 = Single-Family residential
RM-1, RM-2, RM-3 and RM-4 = Multi-family residential
CN = Neighborhood commercial
C-1 = Office-Institutional
C-2 = General commercial
C-3 and C-4 = Central Business District
IDM = Industrial development
LM = Light manufacturing
HM = Heavy manufacturing
H-1 = Historic district
Tables 1-4 show that between 1978 and 1986 a high percentage of requests involved lands in the Southwest and Northwest regions of Roanoke. According to Roanoke’s 1985-2005 Comprehensive Development Plan, the Southwest contained mainly residential and agricultural land uses in the late 1980’s (Roanoke City Planning Commission and Roanoke Office of Community Planning, 1985, p. 84). Industrial and commercial developments in this region were centered around Interstate 581. The Northwest contained vacant land located in the Roanoke Center of Industry and Technology. Remaining areas in the Northwest were recreational and agricultural with major commercial and industrial developments around the intersection of Orange Avenue and Williamson Road.

The percentage of requests involving the existing categories of RS-3 and RD was slightly lower than that for all other existing categories combined. All of the rezoning requests filed in 1978 and 1979, a total of 25, involved a change from the zoning category RD. RD was also the most common category in 1980 and 1984. A large number of rezoning requests filed in the 1980’s contained the existing category RS-3. Before 1987, the RD and RS-3 zoning categories contained large minimum lot sizes. Therefore, developers were unable to apply these zoning categories to small, vacant lots in the inner city. Before 1987, parcels in existing LM and HM zones were involved in a small percentage of requests. Lot area, width and yardage requirements were not added to these categories until 1987.

The most frequently requested category from 1978 to 1986 was C-2. The C-2 category was involved in 41.3 percent of the requests. This category contained no requirements for lot area, width or yardage until 1987. Before 1987, the RS-1 and RS-2 zoning categories were requested in an extremely small percentage of requests. The RD, RG-2 and RG-1 categories were requested in a small percentage of requests. The C-1 category was almost never requested, while the C-2 and LM categories were requested quite frequently.

From 1987 to 1991, the percentage of requests involving parcels in the Northwest region was almost double that of other regions. The Northeast also registered a higher percentage of
requests. Growth in these regions can be contributed to the economic centers located within them: the Roanoke Center for Industry and Technology in the Northwest and the airport in the Northeast.

The most significant difference in the existing categories from 1987 to 1991 was an increased percentage of requests to change from the LM (light manufacturing) category. In two years, 1988 and 1990, LM was the dominant existing category. Significantly, lot area, width and yardage requirements were added to this category in 1987. After 1987, the percentage of requests seeking to replace the existing RM-1 (previously RD) category decreased slightly, and the existing RS-1 zones rarely were involved in rezoning requests. By contrast, the existing RS-3 zone frequently was the initial zoning involved in requests. This decrease in the percentage of petitioners seeking to replace residential categories can be linked to the 1987 zoning ordinance's reduction of minimum lot sizes and density levels for residential categories. Although the minimum lot sizes in the RS-3 category were reduced, this category contained the largest lot sizes applied to single-family residential land uses. The C-1 and C-2 categories involved in a small percentage of requests, while the percentage of requests involving the LM and HM categories increased significantly. In 1987, lot area, width and yardage requirements were added to commercial and industrial zoning categories. These additional requirements may have influenced the decision of developers to replace these categories.

C-2 (general commercial) was the most frequently requested category from 1987 to 1991. It was requested almost twice as often as any other category. In fact, from 1978 to 1991 the C-2 category was requested almost every year. From 1978 to 1988, the C-2 category was requested in 41.3 percent of the rezoning requests. This percentage dropped during the years 1987 to 1991 to 28.5 percent. This lower percentage may be a result of the addition of lot requirements to this category in 1987. Another often-sought zoning category was RM-1/RD (multi-family residential), especially after 1987. The RM-2 (previously RG-1 and RG-2) category was requested just as frequently as before 1987. Reduced minimum lot sizes and density levels after 1987 made these multi-family residential categories more applicable to parcels in
inner city areas. The RM-2 category was involved in a higher percentage of requests because it replaced two 1966 zoning categories. The C-1 category was requested in a larger percentage of requests. After 1987, this category was applied to areas with limited commercial land uses, increasing its application in residential areas. The percentage of requests requesting the C-2 and LM categories decreased after 1987.

Figures 1 and 2 show the location of existing and requested categories: by land use. Previously existing categories (Figure 1) showed that multi-family residential parcels were centered around the central business district, while single-family residential land uses were mainly found in the periphery. Of these rezoned plots of land, existing commercial plots were clustered around the central business district, the airport and the Roanoke Center for Industry and Technology. Light manufacturing plots were centered around the central business district, the Roanoke Center for Industry and Technology and the intersection of Orange and Melrose Avenues.

Figure 2 provides different picture. Single-family residential land uses were nearly absent from the requested zoning changes. An analysis of these rezoned parcels of land showed that multi-family residential plots were located in peripheral areas. Commercial developments were dispersed throughout the entire city with large concentrations along the major corridors. Light manufacturing plots were centered around the central business district, the Roanoke Center for Industry and Technology, Interstate 581 and Williamson Road.

According to the rezoning request data, single-family residential areas were changed to multi-family residential or commercial land uses, while the multi-family residential areas were changed to commercial or industrial land uses. Some of the commercial land use areas changed to light manufacturing, while other areas remained commercially oriented and expanded. Some of the light manufacturing areas turned to heavy manufacturing or commercial land uses, while other areas remained light manufacturing and expanded. Historic districts were applied to the Highland Park neighborhood and to the central business district after 1987.
City of Roanoke, Virginia

Legend:
S - Single-family residential
M - Multi-family residential
A - Residential-agricultural
O - Office-Institutional
C - Commercial
L - Light manufacturing
     Industrial development
H - Heavy manufacturing

Figure 1. Location of Existing Categories: by Land Use (1978-91)

6. REZONING REQUESTS IN ROANOKE, VIRGINIA
City of Roanoke, Virginia

Legend:

S - Single-family residential
M - Multi-family residential
A - Residential-agricultural
O - Office-Institutional
C - Commercial
L - Light manufacturing - Industrial development
H - Heavy manufacturing
= - Historic District

Figure 2. Location of Requested Categories: by Land Use (1978-91)

6. REZONING REQUESTS IN ROANOKE, VIRGINIA
The existing land use map of the 1985-2205 Comprehensive Development Plan verifies some of these changes. Certain multi-family areas were changed to industrial and commercial uses, especially around Williamson Road. Commercial land uses in the Roanoke Center for Industry and Technology were changed to industrial land uses, while industrial parcels at the intersection of Brandon Avenue and Interstate 581 became commercial lands. Commercial and industrial land uses were located along major corridors.

This land use data illustrates the continuous movement of people and residences from the central city to the periphery (Alonso, 1964; Burgess, 1967). Single-family residential areas and probably structures are being reused for multi-family land uses (Hoyt, 1959). Economic centers are developing outside of the central business district (Harris and Ullman, 1959). This economic activity is centered around the Roanoke Center for Industry and Technology and the airport. Industrial and commercial land uses are locating at the most accessible sites (Alonso, 1964). Therefore, Roanoke’s zoning regulations are fostering documented growth patterns.

Five Neighborhood Study: Rezoning Files from 1982 to 1991

An in-depth study was conducted of 38 rezoning request files involving land parcels in the neighborhoods of Highland Park, Gainsboro, South Roanoke, Williamson Road, and the Central Business District from 1982 to 1991. The Roanoke Planning Department’s rezoning files from 1982 to 1991 are kept in the Planning Department for public use. Files for years prior to 1982 are stored in the basement and may only be acquired after several hours of tedious searching by the Planning Secretary. In fact, even some of the files stored in the office were not located. These files may be in use, incomplete, or contain varying dates.

Included in these rezoning files are the initial rezoning requests (including all maps and plans), amended rezoning requests, minutes of the Planning Commission staff meetings, final
decisions of the Planning Commission, minutes of the City Council meetings, letters or notes received by the Planning Commission or City Council, and final decisions of the City Council. Only the files involving land parcels in the five aforementioned neighborhoods were examined. The location of these five neighborhoods is provided on the map in Appendix D. These neighborhoods, surrounding the central city, have unique zoning histories. The Highland Park neighborhood contains a large number of offices and institutions created by the 1966 ordi-nance’s C-1 zoning category. Gainsboro was the main focus of Roanoke’s urban renewal ef-fort. Twenty-five acres in the Gainsboro neighborhood were cleared and rebuilt in accordance with the regulation of the 1966 zoning ordinance. South Roanoke is the focus of Roanoke’s first detailed neighborhood plan. These detailed neighborhood plans are an influential part of the implementation policy of the 1987 ordinance. Williamson Road is a more peripheral and commercial area. Planning in this neighborhood is centered on neighborhood organizations. Files involving land in the Central Business District were included because of its influential location and its effects on surrounding areas. An in-depth analysis of the Central Business District was not attempted due to the large amount of literature and previous studies on this area.

These rezoning files provided ten valuable pieces of information.

1. The name of the petitioner. This information was coded as a business, individual or the city.
2. The location of the land involved in the rezoning. This information was classified as Northwest, Southwest, Northeast, or Southeast, and by the specific neighborhoods.
3. The existing zoning category or categories.
4. The requested zoning category or categories.
5. If conditions have been proffered by the petitioner, and the type and number of conditions that were proffered.
6. Citizen involvement: pro, con or none.
7. The decision of the Planning Commission, and why this decision was reached.
8. The final result: City Council approval, City Council denial, or withdrawn by petitioner.
9. The current use of the land involved in the rezoning.
10. The proposed use of the land involved in the rezoning.

6. REZONING REQUESTS IN ROANOKE, VIRGINIA
Five Neighborhood Study: Analysis of 38 Rezoning Files

For the five neighborhoods, 38 rezoning requests files from 1982 to 1991 were examined. Individuals accounted for fully half of the requests (See Table 5). The three requests filed by the city included rezonings for the Gainsboro Redevelopment Plan and the South Roanoke Neighborhood Plan. Land involved in the thirty-eight rezoning requests was located in the Southwest, specifically in the neighborhoods of Highland Park, Gainsboro, South Roanoke, Williamson Road and the Central Business District. Petitioners primarily requested changes from existing single-family residential, commercial and multi-family residential land uses. The main land uses zones requested were general commercial and light manufacturing. A large percentage of the requests involved a change from existing residential land uses, mainly vacant structures (See Table 6). A majority of the rezoning requests file requested the construction of commercial developments.
### Table 5. Five Neighborhoods (1982-91): Basic Data

<table>
<thead>
<tr>
<th>Percentage of rezoning requests from different regions of Roanoke City</th>
<th>FIVE NEIGHBORHOODS: 1982-91</th>
</tr>
</thead>
<tbody>
<tr>
<td>(13.2%) (39.5%) (34.2%) (13.2%)</td>
<td>Northwest</td>
</tr>
<tr>
<td>Types of petitioners</td>
<td>Businesses</td>
</tr>
<tr>
<td>(42.1%) (50.0%) (7.9%)</td>
<td>(17.0%)</td>
</tr>
<tr>
<td>Existing zoning categories</td>
<td>RS-3</td>
</tr>
<tr>
<td>(17.0%) (13.2%) (13.2%)</td>
<td>(13.2%)</td>
</tr>
<tr>
<td>Requested zoning categories</td>
<td>C-2</td>
</tr>
<tr>
<td>(18.5%) (18.5%) (11.2%)</td>
<td>(9.3%)</td>
</tr>
<tr>
<td>Percentage of petitioners proffering conditions</td>
<td>65.8%</td>
</tr>
</tbody>
</table>

RD = Duplex residential  
RG-1 and RG-2 = General residential  
RS-1, RS-2 and RS-3 = Single-Family residential  
RM-1, RM-2, RM-3 and RM-4 = Multi-family residential  
CN = Neighborhood commercial  
C-1 = Office-Institutional  
C-2 = General commercial  
C-3 and C-4 = Central Business District  
IDM = Industrial development  
LM = Light manufacturing  
HM = Heavy manufacturing  
H-1 = Historic district
Table 6. Five Neighborhoods (1982-91): Detailed Data

<table>
<thead>
<tr>
<th>FIVE NEIGHBORHOODS: 1982-91</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Percentage of rezoning requests)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Current land use</th>
<th>residential (38.5%)</th>
<th>commercial (23.1%)</th>
<th>vacant (26.8%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposed Land use</td>
<td>residential (32.1%)</td>
<td>commercial (57.1%)</td>
<td>Industrial (10.7%)</td>
</tr>
<tr>
<td>Denied or withdrawn</td>
<td>City Council none</td>
<td>Planning Commission (1.2%)</td>
<td>property owner (15.8%)</td>
</tr>
<tr>
<td>Main conditions</td>
<td>development or site plan (23.5%)</td>
<td>land usage limitation (20.1%)</td>
<td>landscaping etc. (16.2%)</td>
</tr>
<tr>
<td>Approved because of</td>
<td>compatibility (20.7%)</td>
<td>consistency (10.3%)</td>
<td>conformity (10.3%)</td>
</tr>
<tr>
<td></td>
<td>renovation or rehabilitation (10.3%)</td>
<td>expansion of business (10.3%)</td>
<td>transitional state of the area (10.3%)</td>
</tr>
</tbody>
</table>
The number of petitioners proffering conditions was relatively high within these five neighborhoods. Petitioners commonly offered two types of conditions. The most frequent conditions were the formation of a development or site plan, a land usage limitation, installation of plantings, buffers, berms, trees, or landscaping, and a time limitation for the beginning of construction. These conditions affected the land use pattern by controlling changes in properly zoned areas and the time span in which these changes occurred. If developers failed to begin construction within the allotted time period, the land reverted back to its previous zoning category. This time limitation creates an automatic change in the permitted land use.

There was little citizen opposition to these rezonings, with public protest voiced in only 11 (28.9%) rezonings. Of these, City Council eventually approved 9 (81.8%). Two were withdrawn by the petitioner. In fact, the City Council did not directly deny any of the 38 proposed rezonings. Four were denied by the Planning Commission, followed in two cases by withdrawal of the requests by the petitioner. Of the 38 proposed rezonings, a total of 6 (15.8%) were eventually withdrawn by the petitioner.

The reasons for approval given by the Planning Commission were compatibility with surrounding land uses, consistency with the intent of the comprehensive plan, conformity with the comprehensive plan, renovating or rehabilitating of structures, not demolishing old structures, expansion of an existing business, and transitional areas. The Planning Commission denied requests that contained incomplete development or site plans, negative impacts on the neighborhood, negative impacts on traffic patterns, insensitivity to development issues, strip zoning, and opposition.
The Highland Park Neighborhood

In 1771, the land now known as Highland Park Neighborhood was granted by King George III to James Alexander. By 1892, all of the land in the Highland Park Neighborhood were annexed into the City of Roanoke. The Highland Park Neighborhood is bounded by the Roanoke River, Walnut Avenue, Interstate 581, Elm Street, Franklin Road, Day Avenue, 5th Street, Marshall Avenue, and 10th Street. By the mid 1920's, this area was almost entirely developed. Between 1930 and 1960, business land uses began to spread into the Highland Park area due to rapid city growth. In 1961, Highland Park contained 6.4 percent of Roanoke's population and 2.4 percent of the City's total land area. Highland Park, containing narrow building lots (30 to 40 feet), had a relatively high density of residential structures as well as people (32.6 people per net residential acre).

In 1960, residential structures occupied almost half of Highland Park's total land area (City Planning Commission, 1961, p. 89). The main land uses were single-family residential (26.7%), industrial (2.9%), commercial (4.2%), and institutional (4%). In 1960, about 13 percent of Highland Park's total land area was still vacant.

In the mid 1960's, the encroachment of incompatible business land uses into the Highland Park area increased rapidly. No thought was given to orderly development. By 1961, Highland Park suffered from an archaic and inefficient street system, aged and deteriorating structures, and invading incompatible land uses. In 1961, the City Planning Commission proposed that business land uses be contained and concentrated, commercial areas be reduced and confined to peripheral areas, and professional offices, institutional land uses and park lands be used as buffers (City Planning Commission, 1961, p. 23). Structures in poor condition or in need of major repairs were to be torn down and replaced.
Between 1960 and 1970, suburban development became an important growth factor. Businesses and industries took over the downtown area. Residential structures deteriorated and were demolished. From January 1960 to September 1963, 30 houses, mostly in the Northeast quadrant of Highland Park, were demolished. By July 1974, 36 housing units had been converted from single-family residential structures to non-residential land uses. An intensive land survey, conducted from June to July of 1974, found that, while the western half of the neighborhood was still residential, the eastern half was of a mixture of land uses. Business land uses were concentrated on Franklin Road and Jefferson Street (City of Roanoke Redevelopment and Housing Authority, 1975, pp. 23-5). The 1979 detailed thoroughfare plan prepared by the Virginia Department of Highways for the Roanoke Metropolitan Area included several major transportation changes in the Highland Park area. The City of Roanoke Redevelopment and Housing Authority classified this plan as unnecessary and detrimental. The City of Roanoke Redevelopment and Housing Authority stated that "the security of the neighborhood will depend on a rigid enforcement of land use controls, not to be altered by mere whim in the form of frequent zoning amendments or lenient spot zoning" (City of Roanoke Redevelopment and Housing Authority, 1975, p. 24).

The 1974 land uses in the Highland Park Neighborhood reflected the enforcement of the 1964 Comprehensive Development Plan. Commercial land uses (C-1, C-2, C-3 or C-4) were located in the eastern and northern areas of Highland Park. The main zoning category was C-1, created as a buffer between residential and commercial areas. This zoning category resulted in almost total replacement of residential structures by office and institutional land uses. In fact, in one year, 25 houses were razed.

In 1975, the City of Roanoke Redevelopment and Housing Authority recommended the formation of a high density residential zone, RG-2, in the northern portion of the Highland Park area to preserve the residential character of the area and provide housing closer to the downtown core of the city. They recommended limiting the amount of commercial land uses in the area, encouraging rehabilitation of old structures for new developments, enforcing housing codes,
and forming a neighborhood organization (City of Roanoke Redevelopment and Housing Authority, 1975, pp. 26-7).

In 1980, the western half of the Highland Park Neighborhood was still residential. The area around I-581 and Franklin Road was commercial. The area between Interstate 581 and the railroad line was industrial. Recreational areas were located in the far northeastern and southeastern corners. Vacant land remained between Interstate 581, Williamson Road and Maple Avenue.

According to the 1985-2005 Comprehensive Development Plan, major housing improvements and land use changes were needed in the area contained by Franklin Road, Highland Avenue, 1st Street, and Walnut Avenue. This area was to be isolated by buffers and controlled by site and design guidelines. No new residential or commercial developments were foreseen for this neighborhood. The area around Interstate 581 and Franklin Road in the east is commercial. Industrial land uses are located between Interstate 581 and the Roanoke River. Intermixing of commercial, office and institutional land uses was suggested to allow more services close to the downtown. This area contains two parks: one in the western half, Highland Park, and the other in the southeastern corner. The 1985 Comprehensive Development Plan recommended the formation of a large historic district to preserve local historic survey properties (Roanoke City Planning Commission and Roanoke Office of Community Planning, 1985, pp. 42-59).

Rezonings in the Highland Park Neighborhood: 1982 to 1991

Between 1982 and 1991, four rezoning requests were filed with the Planning Department in Roanoke involving land parcels in the Highland Park Neighborhood. In 1987, a rezoning was filed by a business wishing to change a piece of land on Allison Avenue and Walnut Avenue from RM-2 to C-1. This mainly vacant land contained one apartment building which was being used as an office. The petitioner, proposing to expand the parking and office services of
her/his business, proffered to limit the use of the land to only the permitted uses of the adja-
cent property and accessory uses thereof. The Highland Park Neighborhood Organization
submitted a 120 person petition opposing the rezoning because other parking spaces were
available. The Planning Commission, however, approved the request and allowed the ex-
pansion of an existing business. The Planning Commission recommended that the developer
and residents work out their differences. City Council approved the rezoning.

In 1988, a rezoning request was filed by an individual proposing to open an office building for
her/his graphic art business. The petitioner, proposing to change from an RM-2 zone to the
C-1 category on her/his Elm Street property, proffered to comply with the site plan. The
Planning Commission approved the request and allowed the utilization of an old residential
structure. This development was compatible with the neighborhood and a less intense land
uses than required by regulations. City Council approved the rezoning.

In 1990, a rezoning request was filed to change a piece of land on Reserve Avenue and
Jefferson Street from HM to C-1. The petitioner, a business, proposed to reuse existing com-
mercial buildings as general office space. The petitioner proffered to follow the conceptual
plan and to begin construction within three years. The Planning Commission approved the
rezoning because it used existing structures and land which was undevelopable by industrial
uses.

In 1990, a business filed a rezoning request involving a piece of property located on Jefferson
Street. The petitioner proposed to expand his restaurant. The Planning Commission ap-
proved the rezoning, which eliminated demolitions and adverse alternations.
The Gainsboro Neighborhood

The Gainesborough community, also known as Big Lick, grew up around a tavern, store, and mill at the twentieth-century intersection of Orange Avenue and Interstate 581 (White, 1982, p. 35). In 1834, lands within the Gainesborough community were divided and sold. The new landowners petitioned the General Assembly in 1835 to charter the Town of Gainesborough, later shortened to Gainsboro. The joining of the Virginia and Tennessee Railroads, in 1952, created a new Big Lick centered around the depot on Commerce Street. This new Big Lick, later known as Roanoke, expanded rapidly. Gainsboro, known as Old Lick, became a primarily black neighborhood.

In 1962, the Gainsboro Neighborhood, containing land between the Norfolk and Western Railroad, 5th Street, Loudon Avenue, 1st Street, Gilmer Avenue, Patton Avenue, Interstate 581, and 10th Street, comprised 4.2 percent of the total land area of Roanoke and around 9 percent of its total population. Gainsboro contained 2,488 houses, mainly located on 40 feet lots, with a density of 9 houses per acre. In 1962, 37.1 percent of the 715 acres that comprised the Gainsboro Neighborhood were used for residential purposes. Single-family houses comprised 30.5 percent of the land use in this area.

In 1981, a Roanoke Health Department survey showed that 33 percent (829) of the houses in this area needed major repairs, and one percent (31) of the houses needed clearing (Urban Design Studio, Virginia Tech, 1969, pp. 2, 12). Non-residential structures were even more deteriorated. In 1962, 40 percent of the non-residential structures were considered unsound (Urban Design Studio, Virginia Tech, 1969, p. 1). In 1962, commercial areas comprised only 9 percent of Gainsboro’s total land uses. In fact, 19.6 percent of the land was still vacant. Institutional land uses occupied 3 percent of the land, while industrial land use occupied 6 percent of the land.
According to the Urban Design Studio at Virginia Tech, in 1969 six percent of the houses in the Gainsboro neighborhood were in need of clearance. Researchers at Virginia Tech projected that these houses would be cleared by 1985. Roads would displace 2.5 percent of the houses, and new projects would displace 5.5 percent. The researchers at Virginia Tech recommended rehabilitating in phases the increasing number of deteriorating houses. They suggested a more decentralized form of planning with the community forming a non-profit corporation to voice their ideals and goals.

In 1964, planning began for the clearing of old houses in Northeast Roanoke. The first section to be cleared was 83 acres in the Gainsboro Neighborhood. At completion, 452 dwellings had been cleared (White, 1982, pp. 115-118). Under the 1966 ordinance, one story, brick houses on suburban lots and cul-de-sacs were built. These house stand out in striking contrast to older houses in this neighborhood. The previous homeowners were forced to relocate into low-rent public housing. The major new tenant in this area was the city’s civic center (22 acres).

In 1972, the city adopted a Gainsboro Redevelopment Plan. This plan called for the renewal of the Gainsboro area as a residential neighborhood and allowed for new construction, infill development, and rehabilitation of old structures. The Gainsboro Redevelopment Plan was amended from 1975 to 1983. In 1983, the city filed a rezoning request to have various zoning categories changed to meet the goals of the Redevelopment Plan.

In 1980, the Gainsboro area contained a small number of commercial developments located in the southeastern and southwestern corners around the railroad line. According to the Roanoke Office of Community Planning, these lands around the railroad line are potential sources for new commercial developments. In 1980, industrial land uses were located in the southwestern corner of the intersection of Interstate 581 and Orange Avenue and between Wells Avenue and the railroad line. The industrial lands in the southwestern corner of the Gainsboro Neighborhood are suitable for producing an employment base closely linked and
compatible with surrounding residential areas. Institutional land uses were located in the south, around Patton Avenue and Interstate 581 and, in the north, around 10th Street and Orange Avenue. The Roanoke Office of Community Planning discovered in its 1985-2005 Comprehensive Development Plan that a large portion of the Gainsboro Neighborhood was in need of housing revitalization, especially the area below Orange Avenue. More restrictive design and site plan review controls were needed to insure the compatibility of new developments (Roanoke City Planning Commission and Roanoke Office of Community Planning, 1985, pp. 42-59).

Rezonings in the Gainsboro Neighborhood: 1982 to 1991

Between 1982 and 1991, four rezoning requests involving land parcels in the Gainsboro area were filed with the Planning Department of Roanoke, Virginia. In 1983, the city staff, implementing the plans of the Gainsboro Redevelopment Plan, filed a rezoning request proposing to rezone 12 land areas within the Gainsboro Neighborhood. This rezoning file involved several kinds of changes in zoning categories: from C-2 to RG-2; RG-2 to LM; C-2 to LM; RG-2 to C-4; C-4 to RG-2; C-4 to LM; and LM to C-4. These rezonings were approved by the Planning Commission and City Council without citizen opposition.

In 1984, a request was filed by an individual to change the zoning category of a vacant lot from RG-2 to LM. The Planning Commission staff denied the request because other industrially zoned lands were available. The petitioner withdrew the request.

In 1987, a request was filed by a business proposing to change the zoning category of a piece of land from HM to C-2. The petitioner proposed to construct a highway convenience store. The Planning Commission approved the request, without opposition, because the development was an appropriate use for land in this area.

6. REZONING REQUESTS IN ROANOKE, VIRGINIA
In 1991, a business, proposing to construct two-family dwellings, submitted a request to change the zoning category from CN to RM-2 on a piece of land containing a single-family residential structure. The petitioner proffered to conform to a site plan, limit the use of the land, and to begin construction within three years. The Planning Commission and City Council approved the rezoning request.

The South Roanoke Neighborhood

The South Roanoke Neighborhood, located south of the Roanoke River and adjacent to Mill and Yellow Mountains, contains a large percentage (45%) of housing stock constructed before 1940. The remaining housing stock was constructed after 1970. In 1980, South Roanoke contained 5 percent of the total housing units in Roanoke with a population of around 5,000 people. In 1980, South Roanoke was still largely residential with a few small pockets of commercial, institutional and recreational uses. Commercial land uses are mainly centered around Franklin Road. Professional and business services are located along the northern section of Crystal Springs Avenue, while office and medical facilities are located along the northern section of McClanahan Street. Institutional land uses are located in the north close to the Roanoke River. The three recreational areas in the South Roanoke Neighborhood are located around the Roanoke River, around Mill Mountain and in the eastern section. According to the Roanoke Office of Community Planning, residential expansion should occur along the southeastern boundary. Housing revitalization is needed in the northwest close to the Roanoke River. The South Roanoke Neighborhood contains three parks: South Roanoke and Crystal Springs Parks in the north and Fern Park in the east (Roanoke City Planning Commission and Roanoke Office of Community Planning, 1985, pp. 42-59).

Detailed neighborhood plans were proposed by the Roanoke Office of Community Planning to implement the 1985-2005 Comprehensive Development Plan. In 1988, the South Roanoke
Neighborhood Plan, the first detailed neighborhood plan, was adopted. Citizens of the South Roanoke Neighborhood and the city planning staff held three workshops to formulate the detailed neighborhood plan. These workshops included the gathering of information, establishment of neighborhood goals, and development of an action strategy. The main issues of this community were quality of schools, the history of the neighborhood, raising of children, formation of commercial neighborhood districts, and security. Other important concerns were preservation of Cherry Hill and other historic places, expansion of the Roanoke Memorial Hospital, the number of multi-family districts, need for elderly housing, commercial developments along Franklin Road and Jefferson Street and controlling of traffic.

According to the South Roanoke Neighborhood Plan, preservation of the single-family residential character of the neighborhood can be achieved by preserving old structures, regulating new developments, and reducing multi-family zoning districts (Office of Community Planning, 1988, pp. 7-8). Zoning category changes were recommended and approved for the area between 22nd and 26th Streets and the southside of Broadway to reduce residential densities. Expansion of the existing businesses was desired by the local residents. New commercial developments should be located along McClanhan Street and Franklin Road and regulated by signs, parking and landscaping regulations. This plan encouraged the formation of H-1 zoning districts, better inventories of historic and cultural resources and tree lined streets and gateways.

Rezonings in the South Roanoke Neighborhood: 1982 to 1991

Between 1982 and 1991, nine rezoning requests involving land parcels in the South Roanoke Neighborhood were filed with the Planning Department in Roanoke, Virginia. In 1983, a request was filed by a business, proposing to build six single-family detached houses on four vacant lots. The petitioner proposed to change the zoning category from RS-3 to RG-1. The petitioner proffered to limit the use of the land; to build compatible, standard houses; to form a homeowners association; to follow a site plan; to receive a variance; and to begin con-
struction within two years. Citizens opposed the rezoning due to the petitioner's lack of sensitivity to development issues. The Planning Commission denied the request because of unaddressed concerns and a lack of contact with the Planning Department. Once the developer had reestablished contact, the City Council returned the file to the Planning Commission for further consideration. The Planning Commission and City Council approved the rezoning request.

In 1983, a request was filed by an individual proposing to construct two duplexes. This rezoning request involved a zoning category change from RS-3 to RD. Although there was no citizen opposition, the Planning Commission was concerned over the developer's lack of a development plan. The Planning Commission and City Council approved the rezoning request with the stipulation that a site plan would be formulated.

In 1984, an business filed a rezoning request to change a piece of land from RD to C-2. The petitioner, owning an oddly configured and restrictive piece of property, wished to move his convenience store with gas to a less restrictive, adjacent piece of property. This adjacent property contained a condemned residential structure. The petitioner proffered to limit the use of the land. The Planning Commission approved the request because it allowed the improvement of an existing business. The City Council approved the rezoning request.

In 1985, an individual filed a request proposing to rehabilitate an old residential structure for use as a four-unit dwelling. The petitioner, proposing to change the zoning category from RS-3 to RG-1, proffered to remove the existing porch, build a deck in the rear for each apartment, replace the windows and exterior siding, and to improve the rear parking area. Although there was no citizen opposition, the Planning Commission denied the request because concerns about the quality of the rehabilitation and the safety of the tenants were not addressed. Once the petitioner offered design ideas, the Planning Commission reevaluated the file and approved the request. The City Council approved the rezoning request.
In 1988, a request was filed to change the zoning category on a piece of land on Bellevue Street from RS-3 to RM-1. The petitioner proposed to construct three two-family dwellings on vacant lots. The petitioner proffered to comply with the site plan, to minimize the gross area, begin construction within three years, and to include plantings. Citizens in this area opposed the request because of concerns over the amount of traffic created by the construction of three units. The petitioner withdrew the request.

In 1990, a rezoning request was filed by the city to change the zoning categories of 130 parcels of land in the South Roanoke neighborhood. This request involved rezonings from RM-1 to RS-3, RM-2 to RS-3, and RM-2 to RM-1. Citizens in the area want to preserve the single-family character of the neighborhood by controlling the amount of multi-family housing. Land belonging to citizens opposing the rezoning request were omitted. The Planning Commission and City Council approved the rezoning request because it was consistent with the goals of the South Roanoke Neighborhood Plan.

**The Williamson Road Neighborhood**

Development began in the Williamson Road area in the early 1900's when large land owners began to selling their land in small tracts (Prillaman, 1982, p. 96). By the 1930's, most of the farms had been subdivided into building lots. During this time, there were no building plan or zoning laws of consequence (Prillaman, 1982, p. 102). Most of the development in the Williamson Road area was initiated by local citizens and civic leagues. Part of the 1964 clearance of Northeast Roanoke was the clearing of 96 acres on the eastside of Williamson Road. The 450 displaced families were replaced by businesses and a new post office (White, 1982, pp. 115-118).
By 1980, the Williamson Road area had spread from Orange Avenue to the city limits in the north; from Tinker Creek and Norfolk and Western Railroad in the east; to Interstate 581, 10th Street, and Williamson Road in the west. Commercial developments in the Williamson Road area were clustered around Williamson Road with the exception of a small cluster of developments on Plantation Road. Industrial development was located between Plantation Road, the Norfolk and Western Railroad and Tinker Creek in the east and from Kimball Avenue to the border in the south. Institutional zones were dispersed throughout the area with the largest concentration in the southwestern corner along Interstate 581. The northwestern portion of the area is occupied by Preston Park.

According to the Roanoke Office of Community Planning, housing revitalization is needed in the residential area between Williamson Road and Norfolk and Western Railroad in the south. Industrial and commercial land uses have had a negative effect on parcels of land in this area. Revitalization can occur through careful design and site plan controls, adequate buffering, and replacement of deteriorated housing with new compatible construction (Roanoke City Planning Commission and Roanoke Office of Community Planning, 1985, pp. 42-59).

Rezonings in the Williamson Road Neighborhood: 1982-91

Between 1982 and 1991, 12 rezoning requests involving lands in the Williamson Road area were filed with the Planning Department. In 1982, a business, proposing to expand a trucking terminal, filed a request to change the zoning category from RD to LM. This rezoning would require the removal of several houses. The petitioner proffered to limit access, include berms, trees and landscaping, to limit the use of the land, and not to grade the area. The Planning Commission approved the request because the conditions proffered minimized the impact of the development on adjacent areas, and the use is consistent with the intent of the comprehensive plan.
In 1983, a individual filed a request changing the zoning category from RS-3 to C-2 on a piece of property on Frontier Road. The petitioner proffered to limit access, not to store merchandise outside, and to erect the building as shown. The Planning Commission denied the request due to an incomplete development plan and negative impacts. The City Council approved the request after assisting the petitioner in improving his development plan.

In 1985, a rezoning request was filed to change the zoning category from RD to RG-1 on a piece of property on Laconia Avenue. The petitioner, an individual, proposed to build two triplexes and one single-family residence on a vacant lot. The petitioner proffered to limit the use of the land, build safe, desirable houses, keep the trees already on the property, and handle runoff. The Planning Commission staff denied the request due to insensitivity of the petitioner to development issues. The petitioner withdrew the rezoning request.

In 1985, a business, proposing to build a automobile dealership, filed a rezoning request to change the zoning category from RD to C-2. Neighborhood residents (20) opposed the dealership based on potential noise levels and disturbances and the piecemeal approach offered by the petitioner. However, the Williamson Road Area Business Association supported the request. The Planning Commission approved the rezoning because of the existing state of transition in this area.

In 1985, a business filed a rezoning request to change the zoning category from C-1 to C-2 on a piece of property on Pioneer Road. The petitioner amended the request to include the following conditions: the development will be oriented toward office (maximum half devoted to retail); buffers will be created; and the development will conform to the development plan. One resident opposed the rezoning request. The Planning Commission approved the request based on its utilization of a vacant parcel, conformity to the commercial pattern of the area, and conditions.
In 1987, a zoning change from RM-1 to C-1 was requested by an individual wishing to build a real estate office. The request was amended to include the following conditions: a land usage limitation and sign regulation guidelines. Neighborhood residents disliked the negative impacts the development would cause. The Planning Commission denied the request due to its impact on neighborhood stability and its encouragement of strip zoning. The petitioner withdrew the request.

In 1986, a individual, proposing to create office space in an existing building, filed for a zoning category change from RD to C-2. The petitioner proffered to limit the use of the land, to maintain fences, landscaping and parking, and not to use signs. The request was withdrawn.

In 1988, an individual, proposing to build a six-unit apartment building, filed a rezoning request to change the zoning category on a piece of land from RM-1 to RM-2. The petitioner proffered to comply with the site plan, and to provide a front elevation as shown on the plan. Neighborhood residents opposed the request because of its high densities and its inclusion of children and pets. The petitioner amended the request, reducing the density level. The Planning Commission approved the amended request because the development was not detrimental to the neighborhood. The City Council approved the request.

In 1988, an individual filed a rezoning request changing the zoning category on a piece of land on Plantation Road from HM to LM. The petitioner proposed to build a manufacturing facility and wholesale office on undeveloped land. The request was amended to include the conditions of complying to a site plan and beginning construction in three years. One resident opposed the request due to concerns over runoff and sight visibility. The petitioner tried to address these problems. The Planning Commission approved the request due to consistency with zoning in the area.

In 1988, a rezoning request was filed by an individual to change the zoning category on a piece of land on Oaklawn Avenue from RS-3 to RM-1. The petitioner proposed to build two duplexes
on a lot containing a vacant residential structure. The petitioner proffered to limit the use of the land, begin construction in three years, and to subdivide by city regulations. The Planning Commission staff denied the petitioner’s request for an incompatible land use. The petitioner withdrew the request.

In 1989, a business proposed to use an old church building as a meeting hall, requiring a zoning category change from RM-1 to C-1. The petitioner amended the request to proffer to receive a special exception from the Zoning Board of Appeals. The Planning Commission and City Council approved the request.

In 1990, a individual filed a request to change the zoning category on her/his land from RS-3 to C-2. The petitioner proffered the following revised conditions: compliance with the site plan; beginning construction in three years; no outside storage; a land usage limitation; building of a fence; limiting access; and maintaining plantings. Neighborhood residents were concerned with the issues of runoff and privacy. The Planning Commission staff was concerned with the issues of parking and size. The Planning Commission and City Council approved the request because it allowed for the reuse of an old residential structure.

**Conclusion**

Data gathered from the rezoning requests filed from 1978 to 1991 in Roanoke showed that land use patterns were affected by zoning decisions and zoning regulations. An examination of Table 3 showed that before 1987 petitioners most frequently requested a change from the existing RD, RS-1 and RS-3 zoning categories. After 1987, the percentage of petitioners requesting a change from the RM-1 (previously RD) and RS-1 categories decreased, while the percentage of petitioners wishing to change from the existing LM and HM categories increased. Under the guidance of the 1986 zoning ordinance, developers were discouraged by
large minimum lot sizes and high densities from constructing residential units. After the 1987 ordinance took effect, developers influenced by regulations on setback lines, site plans and lot coverage showed less interest in constructing industrial establishments.

Data gathered from Table 4 showed that before 1987 petitioners were mainly requesting the LM, and C-2 zoning categories. After 1987, the percentage of petitioners requesting a change to the LM and C-2 categories decreased. The 1966 zoning ordinance’s lack of regulations and controls on industrial and commercial land uses resulted in an increase in petitioners proposing these types of developments. After regulations were added in 1987, the percentage of developers proposing to construct these types of developments decreased.

Figures 1 and 2 showed that single-family residential land uses areas in the periphery were changed to multi-family residential and commercial land uses, while multi-family residential land use areas around the central business district were changed to commercial and industrial land uses. Single-family residential land uses were almost completely absent from the requested zoning changes. Some peripheral commercial land uses areas were changed to light manufacturing land uses, while other commercial areas remained intact. In fact, commercial land uses spread throughout the entire city. Some light manufacturing land use areas were changed to heavy manufacturing and commercial, while other areas remained for light manufacturing uses.

Data from the requests for the five neighborhoods from 1982 to 1991 showed that there was little citizen opposition. Almost all of the requests were approved by the Planning Commission and City Council, including a majority of the requests receiving opposition. The Planning Commission approved requests based on compatibility with existing developments, protection of existing land uses, and reuse of old structures. The Planning Commission and City Council used conditional zoning to work closely with developers to solve developmental problems. About half of the petitioners proffered conditions only after facing opposition. Most petitioners withdrew requests that were unlikely to be approved. Individuals withdrew more requests
than other types of petitioners. This may be a result of a lack of time, negotiating skills or resources with which to proffer conditions.

A majority of the petitioners proffered conditions with the requests. Petitioners most frequently offered two conditions. The most common conditions were the formation of a site plan, a land usage limitation and a time limitation. These conditions affected the land use pattern by controlling a portion of the land use changes that occur outside of the rezoning process and limiting the time for changes. This time limitation created an automatic land use change for land where construction is not begun within a specified time period.

Within the individual neighborhoods, the data showed that the urban form created by the 1966 zoning ordinance will be difficult to change. This change is especially difficult to achieve in a bounded city where the decision-makers are forced by a limited supply of land to compromise one goal for another. However, the 1987 ordinance has influenced the land use pattern through the creation of historic districts and land use changes occurring outside of the zoning system have been reduced.

Highland Park was initially developed in the 1920’s as a residential community. In the 1960’s, business uses were allowed to invade this residential sector. By the end of the 1960’s, the neighborhood was experiencing blight and deterioration. The government responded by creating a zoning ordinance that fostered the clearance of inner city areas for business, industrial, office and institutional land uses. In this neighborhood, the ordinance created a large C-1 district that replaced residential houses with office and institutional land uses. By the 1970’s, the eastern half of this neighborhood was a mixture of incompatible land uses. By 1985, many of the houses in this area were in need of major repairs.

Rezoning requests in the Highland Park neighborhood from 1982 to 1991 show that the main issues were the expansion of existing businesses, availability of lands for certain land uses, reuse of structures and compatibility of land uses. These issues are compatible with the goals
of the 1987 ordinance and address the problems created in the 1960's and 1970's. The Planning Commission and City Council tried to accommodate the wishes of existing businesses while controlling the design and compatibility of new developments. Almost all of the requests contained conditions proffered by the petitioners; however, these conditions did not guarantee approval.

Within the Highland Park area, Petitioners requested changes from multi-family and light manufacturing categories. The main categories to change to were office and institutional. According to the existing categories data (Figure 1), parcels in the western half of the area were mainly multi-family residential, while parcels in the eastern half were offices and light and heavy manufacturing. Figure 2 (requested categories) showed that certain multi-family residential uses were replaced by offices and heavy manufacturing. Historic districts were constructed after 1987.

By the 1960's, the Gainsboro neighborhood was also experiencing blight and deterioration. The 1966 ordinance's encouragement of business, industrial, office and institutional land uses in this region led to the clearance of 83 acres of land. These lands were rebuilt with suburban style homes and a new civic center. In 1972, the Gainsboro Redevelopment Plan was adopted to maintain the residential character of the area.

The main issues of the rezoning requests in this neighborhood from 1982 to 1991 were preservation of the residential character of the neighborhood, encouragement of growth, availability of land for certain land uses, and appropriate development. Multi-family residential (RG-2, especially) and commercial (C-2, in particular) land uses were major existing categories. The main requested new uses were multi-family residential and light manufacturing. Figure 1 showed that this neighborhood had been mainly commercial, and rezoning regulations increased the amount of in light manufacturing land uses within the area (Figure 2).
The South Roanoke Neighborhood Plan, the first detailed neighborhood plan, was focused on the single-family residential character of the neighborhood, preservation of the structures, regulation and reduction in commercial developments, reduction in multi-family land uses, and encouragement of historic districts. This plan was adopted in 1988.

Rezoning requests in this area from 1982 to 1991 showed that four of the nine rezoning requests involved changes from a single-family zoning category to a multi-family zoning category. The Planning Commission focused on the expansion of existing businesses, quality of rehabilitations and design guidelines. The Planning Commission and City Council did not follow the neighborhood plan with the exception of the city’s request to rezone certain areas from multi-family to single-family. The Planning Commission and City Council worked closely with developers to resolve development problems. A large number of petitioners proffered conditions. These conditions helped petitioners to receive approval. A large number of requests receiving opposition from local residents were approved.

This neighborhood had been mainly single-family and multi-family residential land uses; however, rezoning request data showed a change to primarily multi-family residential land uses (See Figures 1 and 2).

By the late 1960’s, the Williamson Road neighborhood was also experiencing the effects of the 1966 zoning ordinance. In this area, 96 acres were cleared and rebuilt for businesses and a new post office. In 1985, many houses were in need of revitalization because of negative impacts of commercial and industrial land uses.

The rezoning requests in this area prove that the proffering of conditions does at times lead to approval. Most of the proffered conditions centered on environmental issues. The Planning Commission used the old idea of transitional areas to justify their approval of a request requiring the removal of several residential structures. Other reasons given for approval were consistency of use, utilizing vacant land, and reusing structures. The Planning Commission
denied a request in which the petitioner was insensitive to development issues. However, many of the rezoning requests opposed by local residents were approved.

The main existing categories were duplex and multi-family residential. The most frequently requested zoning category was general commercial. Figure 1 (existing categories) showed that plots of land in the southern portion of this area had been mainly multi-family residential, while plots of land in the northern portion were single-family residential. Parcels in the southern portion changed to commercial and light manufacturing land uses, while parcels in the northern portion changed to commercial and multi-family land uses (See Figure 2).

Within the individual neighborhoods, results show the ability of zoning decision-makers to use their discretion to determine the importance of various zoning goals. This is especially relevant in the South Roanoke and Williamson Road neighborhoods. In South Roanoke, the neighborhood development plan encouraged a reduction in multi-family developments, however the decision-makers approved several requests proposing to construct multi-family developments. In Williamson Road, the 1987 ordinance focused on the preservation of existing structures, but the decision-makers approved a request requiring the removal of several houses based on the transitional state of the area. Of course, in a bounded city the expansion of existing businesses is hard to achieve without a compromise of other goals. These decisions are important because they affect the land use pattern by their approval of certain land use changes.
Many theories have been formulated over the years to explain the growth patterns within cities. However, the relationship between these documented patterns of growth and methods of regulating and controlling growth for various purposes has not been extensively analyzed. There is a lack of information on land use changes and a lack of understanding, explanations and predictions of land uses. Mastery of the changing patterns of urban land use would result in the ability to predict future land use change and to monitor, evaluate and update planning policies. Planning and zoning regulations are designed to address specific problems within the city by influencing the land use pattern. Zoning regulations and decisions can be used to control and change urban forms. This thesis attempted to analyze the relationship between growth patterns and planning practices in Roanoke, Virginia. The transformation of Roanoke's zoning ordinance from 1966 to 1987 when Roanoke was emerging from development into redevelopment was analyzed. This thesis concentrated on the (1) differences between the 1966 and 1987 zoning ordinances, (2) application of the 1966 zoning ordinance, (3) application of the 1987 zoning ordinance, and (4) application of conditional zoning.
Differences between the 1966 and 1987 zoning ordinances

The main difference between the 1966 and 1987 ordinances is the growth patterns or processes which they encourage. The 1966 zoning ordinance used zoning regulations to foster suburban growth and urban renewal. In contrast, the 1987 zoning ordinance encouraged infill and redevelopment in inner city areas by lowering minimum lot sizes in several residential categories and by adding lot requirements in commercial and industrial categories; and it fostered industrial and residential planned unit developments and cluster developments in the periphery.

The 1966 ordinance addressed the problems of urban blight through large minimum lot sizes in residential zoning categories. According to Alonso (1964) and Whitehand (1987), these large minimum lot sizes will decrease land prices and increase extensive users of land. In Roanoke, these minimum lot sizes hindered the development of small, vacant inner city lots. Landowners with property smaller than the minimum lot sizes were forced to rezone their property to categories containing smaller or no minimum lot sizes or purchase neighboring properties within the same zoning category to obtain developable sites. The 1966 ordinance led to the clearing of large portions of inner city neighborhoods and redevelopment of these lands for business and institutional land uses.

The 1985 Comprehensive Development Plan and the 1987 zoning ordinance were formulated to address the emerging problems of conflicting and incompatible land uses and the destruction of inner city areas created by the 1966 zoning ordinance’s focus on suburban growth. The 1987 zoning ordinance focused on preservation of cultural and historical resources as well as Roanoke’s diminishing supply of vacant land. According to Mandelker (1971), this diminishing supply of vacant land created by limited boundaries would result in an increase in the price, competition and demand for land. This increased demand would result in more restrictive government regulations. This ordinance promoted preservation, design quality and
neighborhood conservation. It stopped growth processes that led to clearance of inner city areas and tried to reduce conflicts and incompatible land uses through the use of buffer zones and the separation of different land uses.

Application of the 1966 Zoning Ordinance

Actual rezonings were consistent with the expected patterns intended by the 1966 zoning ordinance. The more detailed neighborhood data also was consistent with the goals.

The main categories prior to rezoning between 1978 and 1986 were RD, RS-1 and RS-3. These residential categories had limited continued application in inner city areas because of large minimum lot size requirements and so were categories landowners sought to discard. The main newly requested categories were LM and C-2. These categories in direct contrast to the pre-zoning categories, contained no lot area, width or yardage requirements before the 1987 ordinance.

According to the neighborhood data, certain sections of the Highland Park neighborhood changed from residential to office and institutional land uses. Portions of the Gainsboro neighborhood changed from residential and commercial to light and heavy manufacturing land uses. Residential neighborhoods in the South Roanoke area became intermixed with commercial and office land uses. The Williamson Road area continued to be a mixture of residential, commercial and light manufacturing land uses.
Application of the 1987 Zoning Ordinance

Actual rezonings were also consistent with the expected patterns intended by the 1987 zoning ordinance. However, the neighborhood data was partially consistent with the goals of the 1987 ordinance. The data showed some inconsistencies between approved land use changes and goals of the 1987 zoning ordinance.

After 1987, there was a decrease in the percentage of requests seeking to replace residential zoning categories and requesting commercial and industrial categories. This change in zoning category usage resulted from a reduction in minimum lot sizes in residential categories and the addition of lot requirements in the commercial and industrial categories in 1987. The most significant change in the main existing categories from 1987 to 1991 was a rise in the percentage of requests involving the LM (light manufacturing) category. Lot area, width and yardage requirements were added to this category in 1987.

The 1987 ordinance influenced changes in the land use pattern by fostering the formation of historic districts and the preservation and conservation of residential areas. Clearance of inner city structures was reduced, especially in the Highland Park area and the Central Business District. The reuse of structures and utilization of vacant land became essential elements in the approval of requests.

However in some sections of the city, old patterns of incompatibility and conflict were strengthened. In the Williamson Road area, commercial and industrial land uses were expanded. Office and commercial land uses increased around the airport; and light manufacturing land uses increased around the Roanoke Center for Industry and Technology. This inconsistency arose as a result of the structure and administration of the 1987 ordinance.
The structure and administration of the 1987 zoning ordinance reduced its impact on the land use pattern. Information in the rezoning requests data showed that the zoning decision-makers used their discretion to determine the relative importance of the goals of the 1987 zoning ordinance. Development trends fostered by the regulations of the 1966 zoning ordinance were allowed to continue to influence the land use pattern. Once a particular land use is allowed in a certain section of the city, this land use can more readily expand and spread into surrounding areas. A well-organized and up-dated ordinance is needed to control these growth trends.

In Roanoke, one problem lies in the zoning map. The zoning map was adopted with few changes. Therefore, there are areas of the city that are zoned differently from the existing land use. The zoning map cannot be changed until these areas are analyzed by the planning staff. The full impact of the 1987 zoning ordinance on the land use pattern has yet to take effect.

Administration presents a second problem. There are several ways in which the administration can either improve or diminish the impact of the zoning ordinance on planning decisions. If there is a lack of communication and understanding between the Board of Zoning Appeals, the Planning Commission, the City Council or the planning staff, plans and ordinances will not be implemented or enforced as intended. In Roanoke, the planning staff is under the direction of the public works department with no direct lines to the Board of Zoning Appeals. This separation could result in a breakdown in communication and cooperation. The 1987 ordinance tried to address administrative problems by formalizing responsibilities and strengthening interactions between administrators of land use regulations (Roanoke City Planning Commission and Roanoke Office of Community Planning, 1986, p. 14). However, inter-departmental communication and cooperation is still a problem.

Individual administrators can also have a big impact on the enforcement of planning policies and ordinances. In a bounded city, a balance between the expansion and creation of busi-
nesses and industries and the preservation and conservation of structures is difficult to achieve. In most cases, a solution to a problem in one area will create problems in another area. The neighborhood data suggest that the decision-makers often placed more importance on the expansion of existing businesses than on preservation techniques. Although these decisions may be necessary for the growth of the area, these conflicting decisions result in different types of changes in the land use pattern. Therefore, these decisions have differing effects on the urban morphology. A singular, desired urban form was not fostered.

Application of Conditional Zoning

Conditional zoning influenced the land use pattern through specific limitations on land usage and on the time span for development. Procedures and effects of conditional zoning need to be analyzed periodically to ensure consistency, reasonability, simplicity and equal protection (Freilich and Quinn, 1979).

Outside of the rezoning process, a plot of land can be developed for any land use allowed by the zoning category applied to that plot. Through the rezoning process, planners can strictly regulate the type of land use applied to a specific plot of land. If proffered, a land usage limitation would require that the land be developed for one specific land use. To develop the land for any other use, the developer would have to apply for a rezoning. Therefore, land usage limitations control the number of land use changes that occur outside of the rezoning process. In some instances, a land owner may have her/his property rezoned for a particular use but never begin construction. This period of no activity extends the urban fallow process and leads to further deterioration of structures on the property. A time limitation would force the developer to begin construction by a specific deadline. If construction has not begun by this deadline, the land reverts back to its previous zoning category. Therefore, time limitations allow planners to control the time span of land use changes.
It is difficult to achieve consistency and equal protection in the application of conditional zoning without controlling citizen participation. Conditional zoning will be applied more often in areas with strong citizen organizations. There was no citizen opposition in the Gainsboro Neighborhood; and no conditions were proffered by developers. The type and number of conditions should be analyzed to determine the consistency in application and simplicity in language and conditions. If the conditions are too specific or unflexible then problems may arise in the future due to changes in technology. For instance, requiring certain building materials or housing styles. In Roanoke, some petitioners offered eight or nine conditions. Some of these conditions were to construct safe, desirable housing, build porches on each apartment or replace windows and siding. I do not know the details of these cases, but what is safe, desirable housing? Why is building porches so important? With conditional zoning, it must be asked: how is it regulated, for what and by whom?

Concluding Remarks

Land use patterns and plans influence future urban development. More desired urban forms can be created by land use decisions and policing power applied within cities. However, the ability of planners to knowingly change and control the urban environment is hindered by a lack of data on changing land use patterns. Mastery of the changing patterns of urban land use would result in the ability to predict urban land uses and to monitor and evaluate plan policies.

This thesis used zoning request data to gather information on land use change in Roanoke, Virginia. This information showed that:

1. The main difference between the 1966 and 1987 ordinances is the growth patterns or processes which they encourage.
2. Regulations of the 1966 zoning ordinance and zoning decisions derived from this ordinance hindered or fostered specific zoning categories and effected land use patterns.

3. The 1987 zoning ordinance influenced specific zoning categories and land use patterns. However, the structure and administration of the 1987 zoning ordinance reduced its impact on the land use pattern.

4. Conditional zoning influenced the land use pattern through limitations on land usage and on the time span for development. However, procedures and effects of conditional zoning need to be analyzed periodically to ensure consistency, reasonability, simplicity and equal protection.

The use of rezoning request data was helpful in gathering information on land use changes and evaluating the consistency of those changes with the ordinances goals. Periodically, planners should evaluate changes in land use to monitor and evaluate the success of zoning. Refinement of the process of using rezoning data to evaluate plans suggests the following improvements. Standardized data on acreage involved in each requests should be provided. This data would allow a more detailed analysis of differences between types of petitioners. Tracking informal and formal meetings between developers and planners would allow a more precise analysis of negotiations and decision-making.

7. RESULTS
Appendix A. Roanoke, Virginia: Map of Annexations
Appendix B. Description of the 1966 Zoning Categories
<table>
<thead>
<tr>
<th>ZONING CODE</th>
<th>ZONING DISTRICT</th>
<th>DESCRIPTION OF INTENDED USES</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS-1</td>
<td>Single-family residential</td>
<td>Single-family residential areas with low to medium</td>
</tr>
<tr>
<td>RS-2</td>
<td>(three districts)</td>
<td>population densities.</td>
</tr>
<tr>
<td>RS-3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RD</td>
<td>Duplex residential</td>
<td>Single-family and two-family residential areas with medium</td>
</tr>
<tr>
<td></td>
<td></td>
<td>population density.</td>
</tr>
<tr>
<td>RG-1</td>
<td>General residential</td>
<td>Single-family, two-family and multi-family residential</td>
</tr>
<tr>
<td>RG-2</td>
<td>(two districts)</td>
<td>areas with medium to high population densities.</td>
</tr>
<tr>
<td>C-1</td>
<td>Office and Institutional</td>
<td>Transitional area between residential and other uses.</td>
</tr>
<tr>
<td>C-2</td>
<td>General Commercial</td>
<td>Normal retail sales activities.</td>
</tr>
<tr>
<td>C-3</td>
<td>Central Business District</td>
<td>Center for commercial, financial, governmental, etc.,</td>
</tr>
<tr>
<td></td>
<td>(CBD)</td>
<td>activities.</td>
</tr>
<tr>
<td>C-4</td>
<td>Central Business District</td>
<td>Expansion area for future CBD uses.</td>
</tr>
<tr>
<td></td>
<td>Expansion</td>
<td></td>
</tr>
<tr>
<td>IDM</td>
<td>Industrial Development</td>
<td>Industrial areas.</td>
</tr>
<tr>
<td>LM</td>
<td>Light Manufacturing</td>
<td>Light manufacturing, processing storage, wholesaling, and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>distribution uses.</td>
</tr>
<tr>
<td>HM</td>
<td>Heavy Manufacturing</td>
<td>Heavy manufacturing and closely related uses.</td>
</tr>
<tr>
<td>H-1</td>
<td>Historic Districts</td>
<td>Areas or structures of historical, architectural, or cultural</td>
</tr>
<tr>
<td></td>
<td></td>
<td>importance.</td>
</tr>
</tbody>
</table>
Appendix C. Description of the 1987 Zoning Categories
<table>
<thead>
<tr>
<th>ZONING CODE</th>
<th>ZONING DISTRICT</th>
<th>DESCRIPTION OF INTENDED USES</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS-1</td>
<td>Single-family residential (three districts)</td>
<td>Single-family residential areas with low to medium population densities. Preservation of existing areas.</td>
</tr>
<tr>
<td>RS-2</td>
<td>Residential multi-family</td>
<td>Single, duplex and townhouse dwellings with low-medium population densities. Preservation of existing areas.</td>
</tr>
<tr>
<td>RS-3</td>
<td>Residential multi-family</td>
<td>Single, duplex, and multi-family dwellings with high population densities.</td>
</tr>
<tr>
<td>RA</td>
<td>Residential-Agricultural</td>
<td>Agricultural and low population density residential areas.</td>
</tr>
<tr>
<td>C-1</td>
<td>Office</td>
<td>Commercial uses compatible with residential areas. Preservation of existing areas.</td>
</tr>
<tr>
<td>C-2</td>
<td>General Commercial</td>
<td>All other commercial areas outside of the CBD.</td>
</tr>
<tr>
<td>C-3</td>
<td>Central Business District (CBD)</td>
<td>Center for commercial, financial, governmental, etc., activities.</td>
</tr>
<tr>
<td>CN</td>
<td>Neighborhood Commercial</td>
<td>Neighborhood-oriented retail and service uses. Preservation of existing areas.</td>
</tr>
<tr>
<td>IPUD</td>
<td>Industrial Planned Unit Developments</td>
<td>Industrial developments involving at least 20 acres and two buildings.</td>
</tr>
<tr>
<td>LM</td>
<td>Light Manufacturing</td>
<td>Light manufacturing, processing storage, wholesaling, and distribution uses. Preservation of existing areas.</td>
</tr>
<tr>
<td>HM</td>
<td>Heavy Manufacturing</td>
<td>Heavy manufacturing and closely related uses.</td>
</tr>
<tr>
<td>RPUD</td>
<td>Residential Planned Unit Developments</td>
<td>Mixed commercial, community services, or public uses with residential developments.</td>
</tr>
<tr>
<td>H-1</td>
<td>Historic Districts</td>
<td>Areas of historical importance.</td>
</tr>
<tr>
<td>H-2</td>
<td>Neighborhood Preservation</td>
<td>Conservation and revitalization of existing areas.</td>
</tr>
</tbody>
</table>

Appendix C. Description of the 1987 Zoning Categories
Appendix D. City of Roanoke Orientation Map
Neighborhoods Cited In Text

1) Highland Park
2) Gainsboro
3) South Roanoke
4) Williamson Road
5) Central Business District

Base map prepared by:
Roanoke City Planning Commission and
Roanoke Office of Community Planning,
1985
Appendix E. Location of Zoning Category Changes: by Year (1978-91)
Appendix F. Data on Rezoning Requests (1978-91)
<table>
<thead>
<tr>
<th>Percentage of rezoning requests from different regions of Roanoke City</th>
<th>Northwest (35.7%)</th>
<th>Southwest (57.1%)</th>
<th>Northeast (7.1%)</th>
<th>Southeast (None)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Types of petitioners</td>
<td>Businesses (57.1%)</td>
<td>Individuals (35.7%)</td>
<td>City (7.1%)</td>
<td></td>
</tr>
<tr>
<td>Existing zoning categories</td>
<td>RD (42.9%)</td>
<td>RG-1 (14.8%)</td>
<td>RS-1 (21.4%)</td>
<td>RS-3 (7.1%)</td>
</tr>
<tr>
<td>Requested zoning categories</td>
<td>LM (14.3%)</td>
<td>RG-1 (14.3%)</td>
<td>C-1 (7.1%)</td>
<td>C-2 (64.3%)</td>
</tr>
<tr>
<td>Percentage of petitioners proffering conditions</td>
<td>None</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

RD = Duplex residential  
RG-1 and RG-2 = General residential  
RS-1, RS-2 and RS-3 = Single-Family residential  
RM-1, RM-2, RM-3 and RM-4 = Multi-family residential  
CN = Neighborhood commercial  
C-1 = Office-Institutional  
C-2 = General commercial  
C-3 and C-4 = Central Business District  
IDM = Industrial development  
LM = Light manufacturing  
HM = Heavy manufacturing  
H-1 = Historic district
<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage of rezoning requests from different regions of Roanoke City</th>
<th>Types of petitioners</th>
<th>Existing zoning categories</th>
<th>Requested zoning categories</th>
<th>Percentage of petitioners proposing conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1979</td>
<td>Northwest (27.3%)</td>
<td>Businesses (45.5%)</td>
<td>RD (15.4%)</td>
<td>C-1 (23.1%)</td>
<td>27.3%</td>
</tr>
<tr>
<td></td>
<td>Southwest (36.4%)</td>
<td>Individuals (34.5%)</td>
<td>RG-2 (36.4%)</td>
<td>C-2 (38.5%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Southeast (9.1%)</td>
<td>City (5.5%)</td>
<td>RS-1 (9.1%)</td>
<td>C-0 (38.5%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Northeast (27.3%)</td>
<td>(none)</td>
<td>RS-2 (18.2%)</td>
<td>H-1 (15.4%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>RS-3 (9.1%)</td>
<td>LW (9.1%)</td>
<td></td>
</tr>
</tbody>
</table>

Legend:
RD = Duplex residential
RG-1 and RG-2 = General residential
RS-1 = Single-family residential
RS-2 and RS-3 = Multi-family residential
C-1 to C-4 = Commercial
IDM = Industrial development
LM = Light manufacturing
HM = Heavy manufacturing
H-1 = Historic district
| Percentage of rezoning requests from different regions of Roanoke City | Northwest (33.3%) | Southwest (50%) | Northeast (8.3%) | Southeast (8.3%) |
|---|---|---|---|
| Types of petitioners | Businesses (66.7%) | Individuals (33.3%) | City (None) |
| Existing zoning categories | RD (33.3%) | RG-1 (25%) | RG-2 (8.3%) | RS-1 (8.3%) | RS-3 (16.7%) | C-1 (8.3%) |
| Requested zoning categories | RD (8.3%) | RG-1 (8.3%) | C-2 (66.7%) | LM (16.7%) |
| Percentage of petitioners proffering conditions | 50% |

**RD** = Duplex residential  
**RG-1 and RG-2** = General residential  
**RS-1, RS-2 and RS-3** = Single-Family residential  
**RM-1, RM-2, RM-3 and RM-4** = Multi-family residential  
**CN** = Neighborhood commercial  
**C-1** = Office-Institutional  
**C-2** = General commercial  
**C-3 and C-4** = Central Business District  
**IDM** = Industrial development  
**LM** = Light manufacturing  
**HM** = Heavy manufacturing  
**H-1** = Historic district
<table>
<thead>
<tr>
<th>Percentage of rezoning requests from different regions of Roanoke City</th>
<th>Northwest (26.7%)</th>
<th>Southwest (46.7%)</th>
<th>Northeast (13.3%)</th>
<th>Southeast (13.3%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Types of petitioners</td>
<td>Businesses (46.6%)</td>
<td>Individuals (53.3%)</td>
<td>City (None)</td>
<td></td>
</tr>
<tr>
<td>Existing zoning categories</td>
<td>RD (6.7%)</td>
<td>RG-1 (6.7%)</td>
<td>RS-1 (6.7%)</td>
<td>RS-2 (13.3%)</td>
</tr>
<tr>
<td>Requested zoning categories</td>
<td>RD (6.7%)</td>
<td>RG-1 (20%)</td>
<td>RG-2 (20%)</td>
<td>C-1 (26.7%)</td>
</tr>
<tr>
<td>Percentage of petitioners proffering conditions</td>
<td>66.7%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

RD = Duplex residential  
RG-1 and RG-2 = General residential  
RS-1, RS-2 and RS-3 = Single-Family residential  
RM-1, RM-2, RM-3 and RM-4 = Multi-family residential  
CN = Neighborhood commercial  
C-1 = Office-Institutional  
C-2 = General commercial  
C-3 and C-4 = Central Business District  
IDM = Industrial development  
LM = Light manufacturing  
HM = Heavy manufacturing  
H-1 = Historic district
<table>
<thead>
<tr>
<th>Percentage of rezoning requests from different regions of Roanoke City</th>
<th>1982</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Northwest (28.6%)</td>
</tr>
<tr>
<td>Types of petitioners</td>
<td>Businesses (57.1%)</td>
</tr>
<tr>
<td>Existing zoning categories</td>
<td>RD (14.3%), RG-2 (7.1%), RS-1 (14.3%), RS-3 (21.4%), C-1 (14.3%), C-2 (14.3%), C-4 (7.1%), LM (7.1%)</td>
</tr>
<tr>
<td>Requested zoning categories</td>
<td>RD (6.7%), RG-1 (6.7%), C-1 (6.7%), C-2 (40%), C-3 (6.7%), H-1 (13.3%), LM (20%)</td>
</tr>
<tr>
<td>Percentage of petitioners proffering conditions</td>
<td>35.7%</td>
</tr>
</tbody>
</table>

RD = Duplex residential  
RG-1 and RG-2 = General residential  
RS-1, RS-2 and RS-3 = Single-Family residential  
RM-1, RM-2, RM-3 and RM-4 = Multi-family residential  
CN = Neighborhood commercial  
C-1 = Office-Institutional  
C-2 = General commercial  
C-3 and C-4 = Central Business District  
IDM = Industrial development  
LM = Light manufacturing  
HM = Heavy manufacturing  
H-1 = Historic district
<table>
<thead>
<tr>
<th>1983</th>
<th>Percentage of rezoning requests from different regions of Roanoke City</th>
<th>Types of petitioners</th>
<th>Existing zoning categories</th>
<th>Requested zoning categories</th>
<th>Percentage of petitioners proffering conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Percentage from: Southeast: (7.1%)</td>
<td>Businesses (17.9%)</td>
<td>RD (8%)</td>
<td>RD (3.8%)</td>
<td>25%</td>
</tr>
<tr>
<td></td>
<td>Northwest: (14.3%)</td>
<td>Individuals (21.4%)</td>
<td>RG-2 (12%)</td>
<td>RG-1 (11.5%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Southwest: (67.5%)</td>
<td>City (60.7%)</td>
<td>RS-3 (16%)</td>
<td>RG-2 (19.2%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Northeast: (10.7%)</td>
<td>Others (16%)</td>
<td>C-1 (8%)</td>
<td>RS-3 (15.4%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>C-2 (16%)</td>
<td>C-2 (8%)</td>
<td>C-3 (3.8%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>C-4 (16%)</td>
<td>C-4 (3.8%)</td>
<td>HM (30.8%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>LM (30.8%)</td>
<td></td>
</tr>
</tbody>
</table>

RD = Duplex residential  
RG-1 and RG-2 = General residential  
RS-1, RS-2 and RS-3 = Single-Family residential  
C-1 and C-4 = Multi-Family residential  
RM-1, RM-2, RM-3 and RM-4 = Commercial  
IDM = Industrial development  
LM = Light manufacturing  
HM = Heavy manufacturing  
H-1 = Historic district
<table>
<thead>
<tr>
<th>Percentage of rezoning requests from different regions of Roanoke City</th>
<th>Northwest (36.4%)</th>
<th>Southwest (18.2%)</th>
<th>Northeast (22.7%)</th>
<th>Southeast (22.7%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Types of petitioners</td>
<td>Businesses (31.8%)</td>
<td>Individuals (59.1%)</td>
<td>City (9.1%)</td>
<td></td>
</tr>
<tr>
<td>Existing zoning categories</td>
<td>RD (27.3%)</td>
<td>RG-2 (4.5%)</td>
<td>RS-3 (18.2%)</td>
<td>C-1 (13.6%)</td>
</tr>
<tr>
<td>Requested zoning categories</td>
<td>RD (4.5%)</td>
<td>RG-1 (18.2%)</td>
<td>C-2 (45.5%)</td>
<td>C-3 (4.5%)</td>
</tr>
<tr>
<td>Percentage of petitioners proffering conditions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

RD = Duplex residential
RG-1 and RG-2 = General residential
RS-1, RS-2 and RS-3 = Single-Family residential
RM-1, RM-2, RM-3 and RM-4 = Multi-family residential
CN = Neighborhood commercial
C-1 = Office-Institutional
C-2 = General commercial
C-3 and C-4 = Central Business District
IDM = Industrial development
LM = Light manufacturing
HM = Heavy manufacturing
H-1 = Historic district
<table>
<thead>
<tr>
<th>Percentage of rezoning requests from different regions of Roanoke City</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Northwest</strong></td>
</tr>
<tr>
<td>(42.1%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Types of petitioners</th>
<th>Businesses</th>
<th>Individuals</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(21.1%)</td>
<td>(73.7%)</td>
<td>(None)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Existing zoning categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>RD (20%)</td>
</tr>
<tr>
<td>RS-2 (5%)</td>
</tr>
<tr>
<td>RS-3 (50%)</td>
</tr>
<tr>
<td>C-1 (15%)</td>
</tr>
<tr>
<td>LM (10%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Requested zoning categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>RD (5%)</td>
</tr>
<tr>
<td>RG-1 (20%)</td>
</tr>
<tr>
<td>C-2 (50%)</td>
</tr>
<tr>
<td>AG (10%)</td>
</tr>
<tr>
<td>LM (5%)</td>
</tr>
<tr>
<td>RG-2 (5%)</td>
</tr>
<tr>
<td>HM (5%)</td>
</tr>
</tbody>
</table>

| Percentage of petitioners proffering conditions | 73.7% |

**Legend:**
- RD = Duplex residential
- RG-1 and RG-2 = General residential
- RS-1, RS-2 and RS-3 = Single-Family residential
- RM-1, RM-2, RM-3 and RM-4 = Multi-family residential
- CN = Neighborhood commercial
- C-1 = Office-Institutional
- C-2 = General commercial
- C-3 and C-4 = Central Business District
- IDM = Industrial development
- LM = Light manufacturing
- HM = Heavy manufacturing
- H-1 = Historic district
<table>
<thead>
<tr>
<th>Percentage of rezoning requests from different regions of Roanoke City</th>
<th>Northwest (38.5%)</th>
<th>Southwest (30.8%)</th>
<th>Northeast (15.4%)</th>
<th>Southeast (15.4%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Types of petitioners</td>
<td>Businesses (38.5%)</td>
<td>Individuals (57.7%)</td>
<td>City (3.5%)</td>
<td></td>
</tr>
<tr>
<td>Existing zoning categories</td>
<td>RD (16%)</td>
<td>RS-2 (4%)</td>
<td>RS-3 (24%)</td>
<td>C-1 (16%)</td>
</tr>
<tr>
<td>Requested zoning categories</td>
<td>RG-1 (8%)</td>
<td>RG-2 (8%)</td>
<td>C-1 (16%)</td>
<td>C-2 (44%)</td>
</tr>
<tr>
<td>Percentage of petitioners proffering conditions</td>
<td>65.4%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of rezoning requests from different regions of Roanoke City</td>
<td>Northwest (38.9%)</td>
<td>Southwest (27.8%)</td>
<td>Northeast (27.8%)</td>
<td>Southeast (5.6%)</td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
<td>------------------</td>
<td>-------------------</td>
<td>-------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Types of petitioners</td>
<td>Businesses (61.1%)</td>
<td>Individuals (33.3%)</td>
<td>City (5.6%)</td>
<td></td>
</tr>
<tr>
<td>Existing zoning categories</td>
<td>RD (5.6%)</td>
<td>RS-1 (5.6%)</td>
<td>RS-3 (27.8%)</td>
<td>C-1 (11.1%)</td>
</tr>
<tr>
<td>Requested zoning categories</td>
<td>RG-1 (5.3%)</td>
<td>RG-2 (5.3%)</td>
<td>C-1 (21.1%)</td>
<td>C-2 (31.6%)</td>
</tr>
<tr>
<td>Percentage of petitioners proffering conditions</td>
<td></td>
<td></td>
<td></td>
<td>27.8%</td>
</tr>
</tbody>
</table>

RD = Duplex residential  
RG-1 and RG-2 = General residential  
RS-1, RS-2 and RS-3 = Single-Family residential  
RM-1, RM-2, RM-3 and RM-4 = Multi-family residential  
CN = Neighborhood commercial  
C-1 = Office-Institutional  
C-2 = General commercial  
C-3 and C-4 = Central Business District  
IDM = Industrial development  
LM = Light manufacturing  
HM = Heavy manufacturing  
H-1 = Historic district
<table>
<thead>
<tr>
<th>Percentage of rezoning requests from different regions of Roanoke City</th>
<th>Northwest (44%)</th>
<th>Southwest (20%)</th>
<th>Northeast (24%)</th>
<th>Southeast (12%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Types of petitioners</td>
<td>Businesses (36%)</td>
<td>Individuals (52%)</td>
<td>City (12%)</td>
<td></td>
</tr>
<tr>
<td>Existing zoning categories</td>
<td>RM-1 (16.7%)</td>
<td>RM-2 (16.7%)</td>
<td>RS-2 (8.3%)</td>
<td>RS-1 (8.3%)</td>
</tr>
<tr>
<td>Requested zoning categories</td>
<td>RM-1 (16%)</td>
<td>RM-2 (4%)</td>
<td>C-1 (16%)</td>
<td>C-2 (28%)</td>
</tr>
<tr>
<td>Percentage of petitioners proffering conditions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

RD = Duplex residential  
RG-1 and RG-2 = General residential  
RS-1, RS-2 and RS-3 = Single-Family residential  
RM-1, RM-2, RM-3 and RM-4 = Multi-family residential  
CN = Neighborhood commercial  
C-1 = Office-Institutional  
C-2 = General commercial  
C-3 and C-4 = Central Business District  
IDM = Industrial development  
LM = Light manufacturing  
HM = Heavy manufacturing  
H-1 = Historic district
### 1989

<table>
<thead>
<tr>
<th>Percentage of rezoning requests from different regions of Roanoke City</th>
<th>Northwest (63.6%)</th>
<th>Southwest (13.6%)</th>
<th>Northeast (22.7%)</th>
<th>Southeast (None)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Types of petitioners</td>
<td>Businesses (40.9%)</td>
<td>Individuals (54.5%)</td>
<td>City (4.5%)</td>
<td></td>
</tr>
<tr>
<td>Existing zoning categories</td>
<td>RM-1 (18.2%)</td>
<td>RM-2 (9.1%)</td>
<td>RS-2 (4.5%)</td>
<td>RA (4.5%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>RS-3 (4.5%)</td>
<td>C-1 (40.9%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>LM (4.5%)</td>
</tr>
<tr>
<td>Requested zoning categories</td>
<td>RM-1 (4.5%)</td>
<td>RM-2 (18.2%)</td>
<td>C-1 (13.6%)</td>
<td>C-2 (22.7%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>LM (18.2%)</td>
<td>HM (9.1%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>H-1 (4.5%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CN (9.1%)</td>
</tr>
<tr>
<td>Percentage of petitioners proffering conditions</td>
<td></td>
<td></td>
<td></td>
<td>68.2%</td>
</tr>
</tbody>
</table>

RD = Duplex residential  
RG-1 and RG-2 = General residential  
RS-1, RS-2 and RS-3 = Single-Family residential  
RM-1, RM-2, RM-3 and RM-4 = Multi-family residential  
CN = Neighborhood commercial  
C-1 = Office-Institutional  
C-2 = General commercial  
C-3 and C-4 = Central Business District  
IDM = Industrial development  
LM = Light manufacturing  
HM = Heavy manufacturing  
H-1 = Historic district
<table>
<thead>
<tr>
<th>Percentage of rezoning requests from different regions of Roanoke City</th>
<th>Northwest (33.3%)</th>
<th>Southwest (42.9%)</th>
<th>Northeast (14.3%)</th>
<th>Southeast (9.5%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Types of petitioners</td>
<td>Businesses (47.6%)</td>
<td>Individuals (38.1%)</td>
<td>City (14.3%)</td>
<td></td>
</tr>
<tr>
<td>Existing zoning categories</td>
<td>RM-1 (20%)</td>
<td>RM-2 (10%)</td>
<td>RS-1 (5%)</td>
<td>RS-3 (15%)</td>
</tr>
<tr>
<td>Requested zoning categories</td>
<td>RM-1,2 (13.6%)</td>
<td>RS-3 (4.5%)</td>
<td>C-1 (13.6%)</td>
<td>C-2 (36.4%)</td>
</tr>
<tr>
<td>Percentage of petitioners proffering conditions</td>
<td>81%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of rezoning requests from different regions of Roanoke City</td>
<td>Northwest (35.2%)</td>
<td>Southwest (17.6%)</td>
<td>Northeast (23.5%)</td>
<td>Southeast (23.5%)</td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
<td>-------------------</td>
<td>------------------</td>
<td>------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Types of petitioners</td>
<td>Businesses (58.8%)</td>
<td>Individuals (41.2%)</td>
<td>City (None)</td>
<td></td>
</tr>
<tr>
<td>Existing zoning categories</td>
<td>RM-1 (17.6%)</td>
<td>RM-2 (23.5%)</td>
<td>RS-3 (29.4%)</td>
<td>CN (5.9%)</td>
</tr>
<tr>
<td>Requested zoning categories</td>
<td>RM-1 (11.8%)</td>
<td>RM-2 (11.8%)</td>
<td>RM-4 (11.8%)</td>
<td>RS-3 (5.9%)</td>
</tr>
<tr>
<td>Percentage of petitioners proffering conditions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

RD = Duplex residential  
RG-1 and RG-2 = General residential  
RS-1, RS-2 and RS-3 = Single-Family residential  
RM-1, RM-2, RM-3 and RM-4 = Multi-family residential  
CN = Neighborhood commercial  
IDM = Industrial development  
C-1 = Office-Institutional  
C-2 = General commercial  
LM = Light manufacturing  
C-3 and C-4 = Central Business District  
HM = Heavy manufacturing  
H-1 = Historic district
Bibliography

Books and Articles


Townscapes,” Transactions of the Institute of British Geographers, 21.

pany.


Virginia Polytechnic Institute and State University.


Transactions of the Institute of British Geographers, 2, pp. 400-416.


Blackwell, Limited.

Wright, R.R. and Wright, S.W. (1985), Land Use In a Nutshell. West Publishing Company, 2nd
edition.

United States and State Supreme Court Cases


Church v. Town of Islip, 100 N.Y.S. 2nd 45 (1956)

Euclid v. Amber Realty Company, 272 U.S. 365 (1926)

Publications by the City of Roanoke


Department of City Planning (1977), Population of Roanoke. Virginia: Department of City Planning.

Department of City Planning (1974), Roanoke Land Usage Inventory and Analysis. Virginia: Department of City Planning.


Roanoke City Planning and Zoning Commission (1928), Comprehensive City Plan, Roanoke, Virginia. Virginia: Department of City Planning.

Writers’ Program, Virginia (1939), Government of Roanoke.
Virginia Codes and Roanoke, Virginia Codes and Charter

Roanoke City Government (1928), Charter of the City of Roanoke, Virginia.

Roanoke City Government (1966), Code of the City of Roanoke, Title XV, Chapter 4.

Roanoke City Government (1978), Code of the City of Roanoke, Article VIII, Section 36-554-5.

Roanoke City Government (1979), Code of the City of Roanoke, Article VII, Section 36.

Roanoke City Government (1987), Code of the City of Roanoke, Section 36.

Virginia State Government (1978), Code of Virginia, Chapter 320, Section 15.1-49.1-.6, 15.1-430q.


Virginia State Government (1990), Code of Virginia, Chapter 320, Section 15.1-491.2-2:1, Subsection B-D.
Rapsody Dawn Gallimore was born in Randolph County, North Carolina on March 28, 1967, the daughter of Lacy E. and Carrie B. Gallimore. She graduated from Randleman High School in Randleman, North Carolina in 1985. She received her Bachelor of Arts in Geography from the University of North Carolina at Greensboro in May 1989. During the summer, she worked as an intern in the Greensboro and High Point Planning Departments.

Rapsody began her graduate studies at Virginia Polytechnic Institute and State University in August, 1989. She worked for two years as a graduate assistant in the Geography Department at Virginia Tech. In September, 1992, she completed requirements for the Master of Science in Geography.