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The purpose of this dissertation was to conduct a systematic examination into municipal incorporation activity in the United States through three primary avenues. To accomplish this task Boundary and Annexation Survey (BAS) and 2000 U.S. Census Bureau data was examined.

First, a geographical analysis of NIMs was conducted to determine the essential spatial attributes of newly incorporated municipalities. The geographical analyses of NIMs revealed that the South Census region received a disproportionate share of NIM activity (151 out of 263) and North Carolina witnessed the most incorporations of any state (34). Likewise, a unique clustering of NIMs within certain counties was evident while other NIMs were formed in relative isolation. The geography of these clustering NIMs can be partially explained by a "herd mentality" where a local political culture is established that facilitates the diffusion of a NIM ideology in response to the aggressive annexation tactics of neighboring cities.

Secondly, an examination of socio-economic differences between NIMs and their Cohort Cities largely confirmed the existing literature on municipal incorporation. Through the use of a T-test and ANOVA procedures it was determined that NIMs have statistically significantly smaller populations, lower population densities, higher percentages of white residents, higher median

household incomes, lower percentages of poverty and larger percentages of residents employed in management occupations compared to existing municipalities. Interestingly, spatial variability by Census Region and Metropolitan designation had little impact on the statistically significant socioeconomic variables.

Finally, three NIM typologies where identified based on socio-economic variation among NIMs utilizing Principal Component Analysis and Cluster Analysis techniques. These three National NIM Types include Exclusive Enclaves, Suburban Settlements, and Peripheral Communities that deviated based on skills/affluence, age, political affiliation, and race to name a few. The National NIM Typology can serve as a theoretical framework in which scholars can discuss NIMs. Additionally, the typology will assist public policy makers focused on balancing the rights of individual communities with larger concerns of regional economies of scale and efficient use of tax revenues.

# NEWLY INCORPORATED MUNICIPALITIES (NIMS) IN THE UNITED STATES 1990-2000: SOCIOECONOMIC DIFFERENCES BETWEEN NIMS AND COHORT CITIES

by

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Approved by

<u>Dr. Keith G. Debbage</u> Committee Chair

To my loving family whose su	upport never wavered through this incredible journey.

## APPROVAL PAGE

This dissertation has been approved by the following committee of the Faculty of The Graduate School at The University of North Carolina at Greensboro.

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## CHAPTER I

#### INTRODUCTION

The appropriate structure and size of local government in the United States has been the subject of much discussion among urban scholars for decades (Ostrom et. al. 1961; Schneider 1986; Downs 1994; Orfield 1997; Rusk 2003). Much of this national dialogue focuses on the fragmentation of metropolitan regions into smaller-scale, more responsive units of government that have effectively decentralized political power. The end result is a Jeffersonian-style grass-roots revolution as small communities across America incorporated in part to control their own destinies.

The purpose of this dissertation is to conduct one of the first systematic examinations of incorporation on a national scale - most prior studies were conducted at a local or state scale. This dissertation will not attempt to solve why communities incorporate but rather examine the socio-economic characteristics of NIMs. During the 1990s, 263 newly incorporated municipalities were established, serving over 1.65 million people (U.S. Census Bureau, 2000). Newly incorporated municipalities (NIMs) are defined as

legally in existence on January 1, 2000, under the laws of their

respective states, as cities, boroughs, city and boroughs, municipalities, towns, and villages, with the following exceptions: the towns in the New England states, New York, and Wisconsin, and the boroughs in New York are recognized as minor civil divisions for decennial census purposes; the boroughs, city and boroughs (as in Juneau City and Borough), and municipality (Anchorage) in Alaska are county equivalents for decennial census statistical presentation purposes. In four states (Maryland, Missouri, Nevada, and Virginia), there are one or more incorporated places known as "independent cities" that are primary divisions of a state and legally not part of any county. For data presentation purposes, the U.S. Census Bureau may treat an independent city as a county equivalent, county subdivision, and place.

There are a few incorporated places that do not have a legal description. An incorporated place is established to provide governmental functions for a concentration of people as opposed to a minor civil division, which generally is created to provide services or administer an area without regard, necessarily, to population (US Census Bureau, 2003, A-19).

The vast majority of these newly incorporated municipalities (NIMs) are small towns with populations under 1,000.

An extensive review of the limited literature on municipal incorporation suggests that newly incorporated cities are socially and economically different from nearby communities (Miller, 1981; Hoch, 1985; Burns, 1994; Blakely and Snyder, 1997; Musso, 2001). Part of the explanation for this finding is that many NIMs first emerge as 'defensive incorporations' (Rigos and Spindler, 1991) in an effort to defend their geographic area against the annexation efforts of other nearby municipalities (Miller, 1981; Hoch, 1984). Musso's (2001) study of 71 municipal incorporation efforts in California determined that "the communities that

sought incorporation tended to be older and more educated, to have higher incomes and more valuable homes" (150). According to Teaford (1997),

a more common motive for incorporation was to protect and preserve the small-scale, homogeneous community life style of the villages. Suburbanites did not opt for incorporation as a mean of fashioning the public infrastructure for a future great city. They chose municipal status to protect the existing suburban environment and to ensure a way of life different from that of a city. Municipal incorporation was, then, a wall designed to preserve and protect and not an avenue to facilitate change and urbanization (Teaford, 1997, 15-16).

Likewise, Miller (1981) found that of the 32 new municipalities created between 1950 and 1970 in California, 28 of them contained black populations of less than one percent.

Left unanswered in these discussions is a national empirical analysis of NIMs and whether or not statistically significant differences exist between NIMs and nearby annexing municipalities across the county. Additionally, despite the profound changes that NIMs have on urban structure, relatively few studies have been conducted that focus on municipal incorporation patterns. Specifically, there is a lack of geographical based research on NIMs. A recent article on political geography research in the South stated that "very few studies have appeared on the efficacy of governmental structures in the South" (Webster, et al. 2007, 7) or the nation for that matter.

This dissertation will focus on examining the differences between NIMs and Cohort Cities (existing municipalities) along a range of socio-economic variables in an effort to better understand the particular composition and differentiating variables of NIMs. Prior to undertaking any statistical analysis to determine if there are differences between NIMs and Cohort Cities, a geographical analysis of NIMs will be conducted to determine the essential spatial attributes of newly incorporated municipalities (i.e., where they are located, how they might cluster near each other, whether they more prevalent in some states than others).

Secondly, this dissertation examines a select group of socio-economic variables in an effort to determine if NIMs exhibit statistically significant differences from their Cohort cities. A review of the literature on municipal incorporation has suggested that many NIMs are formed as defensive incorporations (Miller, 1981; Hoch; 1984; Rigos and Spindler, 1991; Burns, 1994). These defensive incorporations result in the creation of small, wealthy, homogeneous communities that wish to insulate themselves from their more diverse neighbors (Blakely and Snyder 1997; Teaford 1997; Musso 2001). As a result, it is hypothesized that NIMs and NIM Cohort Municipalities will differentiate along a specific range of socio-economic variables. Some of these differentiating variables are hypothesized to include population, race, median household income, poverty, amongst others. Furthermore, it is hypothesized that the key differentiating socio-economic variables will not deviate by regional

geography (i.e. U.S. Census Region and Metropolitan/Micropolitan Statistical Area designation), but rather that a more provincial and intimate geography will play a significant role as specific communities across the country witness a clustering of NIMs within their locality.

Finally, a cluster analysis will group the NIMs according to a variety of chosen geographic and socioeconomic variables. For the 263 NIMs established in the 1990s, it is hypothesized that an explicit National NIM typology exists that is differentiated based on skill/affluence levels, racial composition, political affiliation, residency patterns, and urbanity (i.e., population and density). The hypothesized National NIM Typology is expected to consist of three NIM types: 1. Exclusive Enclaves, 2. Suburban Settlements, and 3. Peripheral Communities and each of these typologies possess unique geographic and socio-economic characteristics. The National NIM Typology may help create a theoretical framework in which future discussions and research on municipal incorporations can be evaluated. Specifically, the typology should reveal that not all NIMs are homogenous. Additionally, the creation of a national NIM typology may be useful for urban planners and policymakers that must confront the reality of an evergrowing balkanized metropolitan landscape.

The growth in the number of NIMs has numerous positive and negative implications for communities. Proponents of NIMs point out that they foster a stronger sense of community for local residents, are a form of democracy in action (i.e., the creation of a new government entity to service residents), allow

for more choice and competition for the provision of services, and produce more efficient delivery of public services overall in metropolitan areas (Tiebout, 1956). Competition among existing and new municipalities may also result in a more efficient provision of governmental services (Ostrom, 1994). NIM critics assert that the growth in new government entities results in metropolitan fragmentation (Jonas, 1991; Cox and Jonas, 1993; Foster, 1993; Orfield, 1997; Rusk, 2003), economic and racial segregation (Hill, 1974; Weiher, 1991; Teaford, 1993), the duplication of services by multiple governments operating within an area (Marando, 1979; Lyons and Lowery, 1989), and confusion about service responsibilities among residents which may lead to a lack of accountability.

The formation of new government entities (i.e., NIMs) has drastic consequences for the urban landscape of America. New cities result in new boundaries that influence tax rates, land use patterns, school districts and the provision of services (e.g., police, fire, garbage collection). The research conducted in this dissertation constitutes a first step in disentangling the complex socio-economic factors and the key geographic attributes that define newly incorporated municipalities at a national scale. By doing so, it becomes possible to develop a national typology of NIMs that can assist public policy makers focused on balancing the rights of individual communities to cultivate grass-roots democracies with larger concerns about regional economies of scale and metropolitan level competitive advantage in regards to economies of scale and efficient use of tax revenues.

#### CHAPTER II

#### **REVIEW OF THE LITERATURE**

This literature review investigates the scholarly research conducted by geographers, political scientists, public administrationists, economists, and others on the subject of municipal incorporation. Section 1 draws attention to the basic research problem of the dissertation. Newly incorporated municipalities (NIMs) continue to be created throughout metropolitan America, although relatively few studies examine why NIMs are being created and even fewer studies examine if significant socio-economic differences exist between NIMs and other cities.

Section 2 provides a historical overview on the origins of cities. Attention will be given to the changing factors that have influenced the formation of municipalities throughout history. Section 3 explores the decades-old debate between metropolitan reformers and public choice advocates regarding the optimal organizational structure for metropolitan America relating to governance and the allocation of scarce resources.

Surprisingly, the debate over governmental structure has produced little research that specifically examines how boundary change and the creation of NIMs contribute to the problems of metropolitan fragmentation. As a result, Section 4 examines the scholarly work recently completed on boundary change (i.e., incorporation, annexation, secession, unification and special government

districts). Particular attention falls on research focused on better understanding the complex relationships that exist between municipal incorporation and various alternative forms of boundary change. Section 5 reviews the recent literature on municipal incorporation, providing a detailed discussion of the outcomes of municipal incorporation. Finally, the research hypotheses are enumerated and discussed in light of the lack of research reported in the existing literature on municipal incorporation.

## The Geography of Newly Incorporated Municipalities (NIMs)

The study of newly incorporated municipalities is largely absent from scholarly work. A few studies on metropolitan fragmentation allude to municipal incorporation (Cox and Jonas, 1993; Foster, 1993; Purcell, 2001) and even fewer studies deal specifically with incorporation (Martin and Wagner, 1978; Miller, 1981; Hoch, 1985; Rigos and Spindler, 1991; Burns, 1994; Musso, 2001). This dissertation develops a better understanding of municipal incorporation through a systematic examination of key locational and socio-economic attributes of each NIM created in the United States between 1990 and 2000. The research by Rigos and Spindler (1991) constitutes one of the few scholarly works that examine municipal incorporation at a national scale, although even they state that their research on municipal incorporation could not begin to examine all the factors that influence the development of new municipalities. They point out the

"dearth of socioeconomic or budgetary data on small and new communities" (Rigos and Spindler, 1991, 76) as a reason for the lack of research in this area.

## Why Geographers seldom focus on incorporation efforts

Many factors appear to contribute to the limited amount of incorporation research by geographers. The preconceived notion that the creation of a new city is a strictly political process and should be left to the political scientists and public administration scholars is a contributing factor. Historically, political scientists and scholars of public administration studied the politics of cities, and much of the existing incorporation literature is authored by political scientists.

Boundary change research is also largely conducted by public administration scholars and tends to be published in journals like *State and Local Government Review*, *Urban Affairs Review*, and the *Journal of Politics*. Most of these journals are not traditional outlets for research by geographers.

Additionally, the creation of a municipality is a complex event that has the potential to make any large-scale geographically based research challenging.

For example, state and regional differences make it difficult to analyze municipalities across the country as a coherent group. Every state has different standards for incorporation that vary in terms of minimum population requirements, minimum distances from existing cities, population density standards and the minimum provision of services required to incorporate. These state by state differences combined with the fact that each municipality is created

for a wide variety of reasons (e.g. defensive incorporation to avoid annexation, provision of services, local control, etc.) make the study of NIMs that much more difficult.

Despite these problems, it is still surprising that so few geographers have studied municipal incorporation given the potentially substantive impacts of NIMs on the geography of tax rates, land use patterns, and the provision of public services. Furthermore, the division of space into political sub-units at the local scale has long been part of the political geographer's sphere of influence.

Political and urban geographers have a well-established tradition of studying the political geography of cities as well as metropolitan areas. Consequently, it is well within geography's purview to thoroughly examine the spatial effects of municipal boundary creation and to analyze the geographic variation of NIMs.

More importantly, since 1972 a national clearinghouse of data lists all the incorporations occurring in the United States by state. The Boundary and Annexation Survey (BAS) administered by the U.S. Census Bureau provides that information through yearly updates of boundary changes for all jurisdictions in the nation. The BAS is employed annually by the U.S. Census Bureau

to collect information about selected legally defined geographic areas. The BAS is used to update information about the legal boundaries and names of all governmental units in the United States. The Census Bureau uses the boundary information collected in the BAS to tabulate data for various censuses and surveys, such as the American Community Survey and other Census Bureau programs, such as population estimates (U.S. Census Bureau, Boundary and Annexation Survey, retrieved from http://www.census.gov/geo/www/bas/bashome.html on May 4, 2007).

Although the BAS is a self-reported survey that may not include all the new recently incorporated municipalities in the United States, response rates typically exceed 95 percent (Miller, 1988). Response rates remain high because the Census Bureau and other federal agencies utilize the BAS data in allocating federal monies.

## 2.1 Origin of Cities: Reasons for Municipal Incorporation

The first cities appeared approximately 5,500 years ago and continue to constantly evolve (Knox and McCarthy, 2005). Carter (1983) identified four factors that aided the creation of the first cities: agricultural surpluses, religious causes, defensive needs, and trading requirements.

Agricultural surpluses enabled populations to evolve away from subsistence agricultural production and nomadic wandering and begin the world's first settlement structures. Surplus agricultural production began the "simple division of labor between farmers and nonagricultural specialists" (Kaplan, Wheeler, and Holloway, 2004, 28). Childe (1950) and Woolley (1963) speculated that the production of excess food necessitated the need for an organizational structure to administer the surplus, resulting in an early form of local government.

The emergence of religious causes permitted the creation of central places of worship reinforcing agglomerations of residents near these sites. "One of the common features of all early cities was the existence of a temple" (Kaplan,

Wheeler, and Holloway, 2004, 28). As a result of the importance placed on religious structures it is easy to conclude that religious leaders also wielded considerable power (Sjoberg, 1960; Wheatley, 1971). The emergence of a religious class further enhanced the division of labor and reinforced the importance of the city.

Defensive fortifications provided protection for residents from invading armies and a place to safely store agricultural overstock. Additionally, defensive enclaves forced an agglomeration of population within a set boundary. The defensive walls of a settlement often doubled as city limit lines. Wheatley (1971, xviii) believed that "warfare may often have made a significant contribution to the intensification of urban development by inducing a concentration of settlement for purposes of defense and by stimulating craft specialization".

Finally, commercial activity facilitated the need for organized centers of commerce. The growth in the trade of goods facilitated the need for an organized structure to administer this system. The organization and administration of trade often took place in marketplaces that were present in cities (Jacobs, 1969). What is unclear is if trade was a cause or consequence associated with cities. While none of these explanations fully explain why the earliest cities were developed, each offers some insight into the elements that impacted early urban developments.

Influences on Municipal Incorporation in the United States: 1630 to 1950

The development of municipalities in the United States covers a relatively short history when compared to other parts of the world. Cities in the United States only developed over the last three centuries. Factors influencing municipal incorporation in the United States changed over time. Initially, the creation of new municipalities was primarily the result of security concerns. "In the 1660s, the proprietors of South Carolina told their colonists: 'You and your council...are to choose some fitting place whereon to build a fort under the protection of which is to be your first town'" (Burns, 1994, 45). As the country developed and began to be populated, additional factors influenced the development of new municipalities.

Later, cities were created as a result of the combination of several important elements. Burns (1994) states that "citizens created towns in order to improve land, create spaces for commercial development, and control the entrance of unwanted others with access to settlement laws" (46). The development of land and the need for commercial or trading areas are factors that have continued to contribute to the creation of cities from the earliest of times. "Town founding and speculation were exercises in geographical prediction: which locations would become main centers within the developing commercial networks of the region and nation?" (Meinig, 1986). Developers and land speculators determined municipal incorporation to be an excellent tool for financial gain. The notion that the American West was a place in which all

people could find prosperity helped the developers sell their property (Meinig, 1986).

The dawn of the 20<sup>th</sup> century brought with it new technological influences on municipal incorporation activity. The public's desire for water, sewer, fire protection, public health initiatives, streetcars and electricity resulted in the development of cities as the primary providers of these services (Teaford, 1984; Burns, 1994). "During the last half of the 19<sup>th</sup> century American city governments sponsored feats of engineering never before attempted, provided comforts and conveniences previously unknown to urban dwellers and initiated a range of municipal services of unprecedented breadth" (Teaford, 1984, 217). The provision of these services "increased citizens' interest in creating new local governments" (Burns, 1994, 47). A city's ability to finance the development of technological advancements greatly contributed to municipal incorporation activity after the turn of the 20<sup>th</sup> century.

Municipal incorporation efforts from 1920 to 1940 were often shrouded in exclusionary ambitions (Teaford, 1979, 1997; Burns, 1994). Traditionally, a policy of exclusion could have been carried out through the placement of restrictive deed covenants on property. However, this practice was abolished in 1948 and many areas turned to zoning as a potential way to exclude minorities. The ability to zone property within cities and towns offered a legal mechanism through which municipalities excluded minorities and low income residents. Through the use of

minimum lot sizes and restrictions on multi-family zoning availability, cities could attempt to exclude minorities legally. Zoning could be used to protect property values and protect citizens from undesirable neighbors (Teaford, 1979, 1997; Burns, 1994).

Influences on Municipal Incorporation in the United States: 1950 – Present

The rapid suburbanization of the post WWII years dramatically affected municipal incorporation. The development of a federally funded interstate system and federally guaranteed low interest mortgages from the Federal Housing Administration and Veterans Administration opened up land further away from the core of existing cities and allowed for the beginnings of a new settlement pattern (Jackson, 1985). However, these new suburban residents still expected to receive the services they grew accustomed to in the older cities. As a result new municipalities began to emerge in order to provide primary services such as water and sewer, and local zoning.

Security and exclusion continued to influence municipal incorporation in the post WWII years (Miller, 1981; Blakely and Synder, 1997; Musso, 2001). The rising number of gated communities across the country may be the ultimate expression of these exclusionary tendencies. Blakely and Snyder (1997) state that "Gated Communities, one of the more dramatic forms of residential boundaries, have been springing up around the country since the early 1980s. Millions of Americans have chosen to live in walled and fenced communal

residential space that was previously integrated with the larger shared civic space" (1). While not all gated communities incorporate and become cities, Blakey and Snyder (1997) provide some examples including Canyon Lake, California and Weston, Florida. Bermuda Run, NC provides an example of a gated incorporated community in Davie County. Incorporated in 1999, Bermuda Run is 99 percent white with a median household income of more than \$84,000 according to U.S. Census data. Access to the town is limited by controlled access entry points and a contiguous fence that divides the town residents from the rest of Davie County.

Miller (1981) also outlined a movement towards what he called "minimal cities". Miller characterized these cities as incorporating in an effort to keep taxes low, keep out tract builders, and limit bureaucracy (1981). In comparison to the early 20<sup>th</sup> century when cities were formed to provide services, Miller's "minimal cities" offer a dramatic departure from the traditional factors that influence municipal incorporation.

Finally, new cities are incorporating in attempts to capture fiscal gains. The potential of collecting shared revenues from state and county governments (e.g., sales tax) is a large incentive for many communities. Collecting and spending property taxes locally is also a major issue in many communities that incorporate. Control over local tax dollars is seen as a benefit when incorporation is discussed.

As Miller (1981) discusses in his research financial considerations played a prominent role in municipal incorporation in California. The Lakewood Plan, which paved the way for incorporation activity in Los Angeles County, was centered on LA County contracting services out to new municipalities and as a result continuing to receive money. This is a slightly different spin on the role money plays in city creation. However, in this case LA County did not want to lose any money as a result of potential incorporations. Additionally, the new municipalities could realize cost savings by not providing duplicate services directly to residents but rather through utilizing the existing county services.

## 2.2 Theories of Metropolitan Fragmentation

Municipal incorporation is a contributing factor to metropolitan fragmentation. The proliferation of new government units increasingly divides the metropolitan landscape by adding new layers, players and services to an already complicated system of urban governance. As a result, the theory behind why urban regions are increasingly being divided into smaller pieces is of importance in any discussion of municipal incorporation. Rigos and Spindler (1991) argue that "the issue of metropolitan governance has fascinated urban scholars since the great suburban explosion of the post war years" (76). This fascination resulted in the creation of two competing theories on metropolitan fragmentation, pitting public choice advocates against metropolitan reformers. Each of these

theories offers an explanation of both metropolitan fragmentation and potentially the proliferation of municipalities.

For decades urban scholars depended upon the theory of collective consumption to explain metropolitan fragmentation. The theory of collective consumption is a "bottom-up" or "grass-roots" explanation for metropolitan fragmentation that views residents as consumers of public services in a complex metropolitan arena (Tiebout, 1956; Ostrom, Tiebout, Warren, 1961). The division within collective consumption theory places public choice proponents at odds with the metropolitan reformers, or the liberal view. Public choice proponents argue that residents should be afforded a multitude of residential options within a metropolitan region in order to rationally decide which level of services and taxes are the most desirable. Meanwhile, metropolitan reformers believe that the proliferation of service providers within a metropolitan area can lead to an inefficient bureaucracy, the duplication of services, and the segregation of the population. Finally, the proliferation of service providers does not allow for some redistribution of resources.

## Public Choice Proponents

The public choice proponents favor the establishment of numerous smaller units of government (i.e. incorporation and secession) that offer a "choice" of services from which citizens can choose (Lyons, Lowery, DeHoog, 1992). The role of "choice" or "voting with your feet" in deciding the outcome of

the metropolitan structure can be traced back to Tiebout's (1956) seminal work. Public choice proponents "argue that a more politically fragmented metropolis promotes efficiency because residents, functioning as municipal consumers, choose from among different bundles of services and tax rates that the various municipalities offer" (Purcell, 2001, 616). Public choice proponents focused their attention on studying the efficiency of service and the provision of services (Buchanan, 1970; Peterson, 1981; Schneider, 1986; Stein, 1987; Lowery & Lyons, 1989). The fragmentation caused by incorporation also allows for local control by residents and facilitates the formation of governments based on the most efficient size. The research on public choice highlights the role that providing needed public service as well as efficiency may have on understanding why places incorporate.

#### Metropolitan Reform Advocates

Metropolitan reformers support the consolidation of government (i.e. annexation and consolidation/unification) entities to help cities grow and become more efficient providers of services (Rusk, 2005). However, "the institutional reform logic stresses the concept of administrative efficiency rather than competitive efficiency" (Foster, 1993, 527). Metropolitan reform "suggests that reorganization [metropolitan fragmentation added for clarity] is a strategy used by the 'haves' to avoid their obligations to the 'have-nots'" (Purcell, 2001, 616). Metropolitan reform advocates have spent considerable time researching

segregation and inequality, both of which have been associated with metropolitan fragmentation and are very pertinent to this dissertation (Hill, 1974; Weiher, 1991; Morgan and Mareschal, 1999; Rusk, 2005). Additionally, regionalism allows for improved delivery of service and better coordination of planning in a metropolitan government.

These studies all examined the impact of fragmentation on segregation and inequality within the metropolitan area. Hill (1974) determined that "the political incorporation and municipal segregation of classes and status groups in the metropolis tend to divorce fiscal resources from public needs and serve to create and perpetuate inequality among urban residents in the United States" (1567). Rusk (2005) further exposed the financial problems of "inelastic" and "elastic" cities and how metropolitan fragmentation hems in existing cities from future expansions and growth. This in turn traps central existing cities from capturing fleeing tax revenue and increases the financial inequality between center cities and suburbs. Finally, Morgan and Mareschal (1999) determined that metropolitan fragmentation posed racial consequences which include spatial mismatch and issues of political representation. Each of these studies highlights the importance of inequality and segregation on the metropolitan landscape and municipal incorporation efforts.

2.3 Investigations into Boundary Change Research: Annexation, Secession, Consolidation/Merger, Special Districts, and Incorporation

The scholarly work completed on boundary changes includes research focused on annexations, secessions, consolidations/mergers, the formation of special districts, and incorporations. Each of these types of boundary change can have dramatic impacts on the urban and political geography of cities regarding tax rates, land use patterns, school districts and the provision of other municipal services. However, as Meligrana (2004) states, "To date, the procedures used to redraw local political jurisdictions have been given little serious attention by either, scholars, policy makers, or lawmakers. Theory is weak in explaining and understanding the various procedures used to redraw local government boundaries. As a result, the redrawing of municipal boundaries in many nations has been ad hoc" (1). The following section reviews the recent literature in each of these sub-fields.

#### Annexation

Annexation is the most common form of boundary change. "Literally, thousands of municipal annexations occur each year" (Feiock and Carr 2001, 384). Annexation is a process by which a city can add territory to its existing city limits. "Procedures for annexation are established by state statute, and no two states provide for precisely the same procedures" (Palmer and Lindsey 2001, 60). For example, several states in the Northeast only allow annexations to

occur through a state legislative approval process. Some states require the area being annexed to approve the annexation (popular determination) and only a few States allow municipalities to annex unilaterally (municipal method) (Palmer and Lindsey 2001). Annexation is an important tool for municipalities to capture tax revenue (Rusk 2003) as well as a tool for extending public services into unincorporated areas.

Recently, Smirnova and Ingalls (2007) examined the effects of annexation laws on central city growth. Their study focused on the influence of state annexation laws on the growth of a group of selected southern cities. The results of this study revealed that more restrictive annexation requirements led to increased levels of political fragmentation and as a result less tax revenue for central cities. On the other hand, looser annexation standards in some parts of the Southeast allowed for increased central city growth and with it the ability to collect additional tax dollars (Smirnova and Ingalls 2007).

Historically, annexation research takes two primary forms: classification studies and the analysis of annexation activity. Research attempts to classify state laws concerning annexation (Sengstock 1960; Hill 1978; Southern Growth Policies Board 1980; USACIR 1993; Palmer and Lindsey 2001). These studies classified legislation according to each state's general statutes on annexation. These classification efforts summarize the different hurdles a municipality can face when expanding their boundaries. The second primary area of research examines the effects of various types of annexation requirements on overall

annexation activity (Dye 1964; Wheeler 1965, McManus and Thomas 1979; Southern Growth Policies Board 1980; Galloway and Landis 1986; Liner 1993; Carr and Feiock 2001). Both broad research areas focus on determining the relationship between the type of annexation available to municipalities and the frequency of annexation.

#### Secession

The process of secession involves the separation of a part of the city from the rest of the municipality. Secession efforts are important to the study of municipal incorporation because they may lead to the incorporation of a new municipality. Additionally, secession offers residents the opportunity to "exit" a municipality without having to relocate their place of residence (Hogen-Esch 2001).

Numerous studies by urban scholars examine secession as a form of boundary change. Secession efforts can be the antithesis of incorporation as many secession initiatives simply involve an area becoming unincorporated.

However, some secession initiatives led to the incorporation of new cities.

Secession research has primarily focused on the Los Angeles region (Keil 2000; Purcell 2001; Boudreau and Keil 2001; Hogen-Esch 2001; Hasselhoff 2002). Los Angeles is the epicenter of secession research partly because of the significant interest in the recent *failed* efforts by San Fernando Valley residents to secede from Los Angeles. The LA secession studies specifically investigated the efforts

of the Valley Voters Organized Toward Empowerment (Valley Vote) lobby group and the political implications of the San Fernando Valley seceding from the City of Los Angeles.

## Consolidation/Merger

Boundary change also occurs through the amalgamation of existing governments. "Merger refers to the joining of two or more incorporated governmental units of the same level. Consolidations involve the merging of two or more governments of different levels, often combining cities and a county government" (Feiock and Carr 2001, 384). The merging of two cities is more common than the consolidation of a city and a county. Interestingly, considerable research has focused on consolidation and merger activities around the country even though they occur relatively infrequently.

Scholarly research on consolidations and mergers has focused on a variety of different issues. Felock and Carr (1997) and Carr and Felock (1999) examined the impact that city and county consolidations had on economic development efforts. Other studies looked at individual consolidation efforts around the country (Durning 1995; Lyons and Scheb 1998). Additionally, Marando (1979) completed one of the first national examinations of consolidation. Finally, Lyons and Lowery (1989) surveyed residents of two metropolitan areas (a consolidated government structure and a fragmented

metropolitan region) to determine levels of satisfaction with governmental services.

## Special Districts

Boundary change also takes the form of the creation of a special district government. Special district governments "provide specific services not currently provided by an existing general-purpose government or (seek) to replace service provision by an existing jurisdiction" (Feiock and Carr 2001, 384). The definition of a special district government varies substantially across the country. Some significant differences include the size of the special district government, how it is formed and its ability to generate revenue. Additionally, special district governments are formed for a multitude of reasons including the provision of water and sewer service, fire protection, police protection, and airports or hospitals. Special district governments are important because they are a rapidly growing geographic phenomena (Burns 1994).

Research conducted on special district governments has been of growing interest to scholars in recent years. Work on the topic has focused on the spatial distribution of special district governments and the types of state policies that impact their creation and development (Bollens 1986; McCabe 2000).

Additionally, Burns (1994) found that many special districts are formed in response to citizen demands for public services. The growth in private or alternative special district governments (e.g. Business Improvement Districts and

Community Benefit Districts) were also recently examined (Baer and Marando 2001; Baer and Feiock 2005). Finally, some scholarly work has linked stricter state municipal incorporation laws with a rise in the formation of special district governments (MacManus 1981; Bollens 1986; Nelson 1990; Feiock and Carr 1999).

# Incorporation

Incorporation is the legal process established by state statutes through which a new city is created. The U.S. Advisory Commission on Intergovernmental Relations concluded that

Procedures for incorporation typically include: (1) presentation of a petition from the community describing the boundaries and the population of the proposed municipality, (2) an election to ascertain popular support for the incorporation, and (3) certification by the secretary of state that the election results support creation of the municipality and that all legal requirements for incorporation have been met (U.S. Advisory Commission on Intergovernmental Relations (USACIR 1993, 12)).

Incorporation fundamentally impacts the urban geography of regions. The creation of a new city can result in the redistribution of wealth in a given locale, due to the potential changes in the amount of taxes paid by residents and it can shape the level of public services provided to residents (e.g. water, sewer, fire and police services).

Scholarly research on municipal incorporations primarily focuses on either the frequency of incorporation (Rigos and Spindler 1991; Burns, 1994) or attempted to explain why specific communities attempt to incorporate (Martin and Wagner 1978; Miller 1981; Hoch 1985; Rigos and Spindler 1991; Lazega and Fletcher 1997; Musso, 2001). These studies have been carried out at either the national or state level. Rigos and Spindler pointed out that "incorporation has yet to be studied in any systematic fashion" (1991, 76) and little has changed since this 1991 publication.

# 2.4 Municipal Incorporation Research Since 1950

Recent scholarly work on municipal incorporation is limited. The following section discusses the research that has been focused on municipal incorporation since 1950. Additionally, some major themes that emerge from the literature are discussed at the conclusion of the section.

Burns's (1994) study is one of the few national examinations of incorporation. Burns discusses the growing number of municipalities and special districts. Between 1942 and 1987 the United States added 2,980 municipalities (Burns, 1994). Burns's research examines the relationship between services, taxes, race, supply and entrepreneurs and incorporation activity.

According to Burns's research, local government formation in America has taken on new characteristics. Local governments, she asserts, are being created to protect private interests, foster racial segregation, keep taxes low, and protect

communities from annexation efforts initiated by existing municipalities (Burns, 1994). Burns believes that a fundamental shift occurred in why communities incorporate that has more to do with low taxes and exclusion than with providing needed public services.

The results of Burns's (1994) study indicate that taxes, race, legal structure and collective action all influenced the number of municipal incorporations. The effect taxes had on incorporation was measured "by how difficult it is for a municipality to annex" (Burns, 1994, 127). Burns discovered that

where annexation was legal, and citizens thus had reason to worry about being annexed to existing cities with higher taxes, citizens formed over one-tenth of a new city more than did citizens in counties where annexation was illegal. In the 1970's, these effects were smaller but still substantial. And in the 1980's, the effect was tiny but was the largest of the small influences in the 1980's (Burns, 1994, 80).

Burns uses annexation as a surrogate for taxes because "when citizens feared annexation, the operative part of this fear was concern about higher taxes" (Burns, 1994, 127).

The race of the residents of the county in which the municipality was located was also determined to be important in understanding incorporation activity. Burns measured "race and ethnicity by the number of nonwhite, African-Americans, or Latino residents in a county at the beginning of the decade" (Burns, 1994, 128). According to Burns's study, race had the largest impact on

municipal incorporation activity in the 1950s. In conclusion, Burns states that "along with providing effective mechanisms for class segregation, new cities have provided effective barriers to racial integration" (Burns, 1994, 81).

The supply variable Burns employs references the supply limits that are placed on municipal incorporation activities by state and federal laws. Burns believes that fewer cities will be incorporated where legislation makes it harder to incorporate (Burns, 1994). The results of the study showed that "in the 1950's and the 1980's, citizens in counties where municipalities could be formed only by special act of the legislature formed slightly fewer cities than did citizens of other counties" (Burns, 1994, 97).

Entrepreneurs influence the formation of municipalities. The entrepreneurial variable is composed of "three measures to indicate incentives for entrepreneurial involvement in municipal formation: (1) whether there is a manufacturer in the county, (2) the rate of state corporate income taxation for corporate incomes of \$25,000 or more, and (3) whether there are state-imposed taxation limits for municipalities that would decrease the incentives for manufacturers to form new municipalities" (Burns, 1994, 126). Burns concludes that in all but one case "where there were no manufacturers, there were no municipal incorporations" (Burns, 1994, 101).

Burns determined that the provision of new services (a primary reason for incorporation at the turn of the twentieth century) did not impact municipal incorporation activity between 1950 and 1980. "Citizens' desire for new services

– as indicated by the effects of population pressures and high incomes – did not contribute heavily to the formation of municipalities in the 1950s" (Burns, 1994, 80). As Burns explains early in American history local governments were created by the will of the people to provide needed services such as fire protection, police protection, and roads (Burns, 1994). However, Burns' results show that the provision of services was replaced by the desire for low taxes and exclusion as reasons for incorporating (Burns, 1994).

Rigos and Spindler's (1991) national examination of incorporation focused on why new cities are formed and what conditions and/or laws help city formation. The authors hoped to enhance the understanding of the structural changes occurring in urbanizing areas due to municipal incorporation. Their study attempted to establish a link between the frequency of incorporation, urbanization, and population growth. Results of their study indicated, "that the frequency of incorporation is not dependent on urbanization and population growth, or even on the pace of urbanization" (Rigos and Spindler, 1991, 80).

Rigos and Spindler's methodology utilized data from the Census of Governments, the ICMA Municipal Yearbook and Hill's 1978 report on state incorporation and annexation laws (Hill, 1978). The dependent variables tested included the number of incorporations that occurred in each state in the United States between 1970-79 and 1980-86. The two time periods were utilized and separated because of the many new laws governing incorporation enacted in the 1980s. A regression analysis examined the relationship between incorporation

laws, population in annexing cities, annexation laws, a township variable, number of cities (1972), urbanization growth rate for 1970 – 1980, property tax limitation, and county and state service provisions.

Study results generally showed that incorporations occurred more often in the Southwest and less frequently in New England. This is primarily the result of the large number of existing government entities already located within New England. Additionally, higher population states also tended to have more incorporations than smaller states. The rate of urbanization and population growth rate did not impact incorporation activity. The study did identify that a state's annexation laws have an indirect effect on the frequency of incorporation (Rigos and Spindler, 1991). Finally, those areas with strong state and county governments that provide services were also shown to aid incorporation activity (Rigos and Spindler, 1991). Rigos and Spindler attributed this result to the ability of other government agencies to provide needed public services. For example, a county wide water and sewer authority would enable a new municipality to offer its residents water and sewer service without any additional tax burden. However, Rigos and Spindler didn't examine incorporation activity at the municipal level due to "the dearth of socioeconomic or budgetary data on small and new communities" (Rigos and Spindler, 1991, 76).

Efforts to examine municipal incorporations in more detail have resulted in several state specific studies. Studies on municipal incorporation in California have been especially popular (Martin and Wagner, 1978; Miller, 1981; Hoch,

1985). Gary Miller, in his book *Cities by Contract: The Politics of Municipal Incorporation (1981)*, analyzes many of the municipal incorporations that occurred in Los Angeles County in the 1950's under what is known as the Lakewood Plan. This plan allowed for the incorporation of municipalities in Los Angeles County by contracting for services through the County of Los Angeles and competing directly with the City of Los Angeles. Miller's analysis determined that many of these new incorporations were the result of a desire to keep taxes low, limit government bureaucracies and limit social welfare programs (Miller, 1981). "The Lakewood Plan incorporations were motivated, for the most part, by different kinds of redistributional considerations" (Miller, 1981, 131).

The rash of incorporations in Los Angeles County had a negative effect on older cities such as Compton. The new suburban municipalities robbed older cities of tax revenue and growth. Miller argues that the creation of new municipalities around existing cities prevented their growth and their ability to chase revenue that was being moved further away from the urban core. Rusk (2003) makes similar arguments in his book *Cities Without Suburbs*. As a result of being "boxed in" existing, older municipalities could not capture fleeing revenue and began a period of disinvestment in older inner cities.

The multiple incorporations that occurred around Los Angeles County also began a movement towards "minimal cities" that only provided the most basic services. These basic services include police, fire, garbage collection and public water. Miller (1981) found that the majority of the "minimal cities" services were

contracted out to large jurisdictions (i.e., the county) or private service providers.

This result echoes the findings of Rigos and Spindler (1991) and their determination of the importance of strong state or county government on municipal incorporation activity.

Martin and Wagner (1978) also conducted a California based municipal incorporation study. Their research examined the impact of new incorporation legislation on California's municipal incorporation activity and fiscal spending. The authors were interested in determining the optimal structure of government (monocentric urban form or polycentric urban form) from an economic viewpoint. The authors used the impact of the new incorporation legislation as a tool for studying which urban form was more economically efficient.

The purpose of the new legislation was to restrict the entry of new municipalities by creating a Local Agency Formation Commission (LAFCO) for each county that regulated municipal incorporation. LAFCO was the result of the Knox-Nisbet Act passed by the California Legislature in 1963. Martin and Wagner's hypothesis was that LAFCO would act as a limiting factor for future municipal incorporations and reinforce the monopolistic tendencies of existing jurisdictions. They argued this would lead to an increase in government spending by the existing government monopolies due to the lack of competition from future incorporated municipalities. "It would seem, in other words, quite likely that the Knox-Nisbet Act made a significant contribution to increasing the expansion in local government spending" (Martin and Wagner, 1978, 422).

According to the authors' analysis, the increases in local government spending could be traced to the lack of competition for municipal services as a result of the implementation of LAFCO. Indirectly, the incorporation legislation resulted in limiting the number of municipal incorporations.

The authors attempted to take their research a step further by predicting the number of municipalities that would have been incorporated had the Knox-Nisbet Act been in effect during a previous period. Martin and Wagner's results showed that the new legislation "can be credited with a 42 percent reduction on the formation of municipal incorporations" (Martin and Wagner, 1978, 425). The authors assume that this reduction in incorporation activity is attributable to the new legislation passed as a result of a wave of incorporation activity in the 1950's.

It may be misleading to attribute all of the authors' findings to the passage of the Knox-Nisbet Act. The dilemma is whether the numerous incorporations of the 1950's reduced pressure to incorporate or did the legislation truly have a profound impact on incorporations. Rigos and Spindler's study on incorporation activity at the national level contradicted the conclusion of Martin and Wagner's work. Rigos and Spindler found that incorporation laws (i.e., Knox-Nisbet Act) were not of significance when they conducted their national study of incorporation activity.

Hoch's (1985) research focused on understanding municipal incorporation efforts within one region of California. Hoch studied the actors that proposed

incorporation in the forty-six municipal incorporation efforts attempted in the San Gabriel region of Los Angeles between 1955 and 1970 (Hoch, 1985). This area was chosen due to the dramatic increase in population (between 832% to 1,108,572%) and the large number of incorporations (60% of all incorporations in California) that were attempted despite its relatively small percent of total population (12%) when compared to Los Angeles County as a whole.

Hoch's analysis determined that of the 46 incorporation attempts between 1950 and 1970, 4 were "sponsored by industrial organizations, 21 by chambers of commerce, and 21 by homeowner's associations" (Hoch, 1985, 309). Industrial organizations consisted of regional capitalists "who own geographically concentrated and physically immobile investments upon which they depend for economic survival" (Hoch, 1985, 312-13). This group would include manufacturers, railroads, agricultural and mining interests and financial organizations. The chambers of commerce group included in the analysis was composed of "middle-class merchants, professionals, landowners, and realtors" (Hoch, 1985, 316). Finally, homeowner's associations included property owners of specific neighborhoods or subdivisions that looked to incorporate.

The results of these incorporation efforts found that the industrial organizations never failed incorporating, chamber of commerce's only failed occasionally, and all but one homeowner's association efforts were defeated.

Armed with this empirical data Hoch offers an explanation for why industrial

organizations and chambers of commerce had been able to incorporate more successfully.

According to Hoch, "homeowner associations, without the organizational focus and resources of industrial organizations and chambers of commerce, found the petition phase (of incorporation) to be an insurmountable barrier" (Hoch, 1985, 309-10). Industrial organizations were able to meet the petition requirements of incorporation due to the large amounts of land that they owned. Through careful boundary delineation a new municipality being formed by industrial interests may need only 50 signatures, while a new municipality being backed by a homeowner's association may need thousands of signatures to meet minimum state requirements (Hoch, 1985). "Because a relatively small number of owners possessed large and valuable land holdings, soliciting or withholding approval was easy to organize" (Hoch, 1985, 309) for industrial organizations. In each of these incorporating cities, Industry, Irwindale and Sante Fe Springs, only five property owners' signatures were able to account for more than 35% of the assessed value of the land within the corporate limits (Hoch, 1985).

If a proposed municipality was able to negotiate its way through the petition phase of the incorporation standards, the chance of incorporation was much greater (45% of the 46 incorporation attempts were defeated at the petition phase). As a result, Hoch determined that when incorporation efforts were broken down by sponsoring organization, the failure rate of incorporation

"provides evidence of class bias in the process of creating suburban municipalities" (Hoch, 1985, 312). As discussed above, the impact of a few industrial property owners on influencing the petition phase of incorporation was much larger than the impact of the chambers of commerce and homeowner associations on incorporation.

While based on qualitative analysis, Hoch's work provides needed insight into the actors that are involved in incorporation efforts. His examination of industrial organizations, chambers of commerce and homeowner associations highlights the inequalities inherent in the state statutes of California that regulate municipal incorporations. Hoch's findings show that an important variable involved in municipal incorporation efforts in California is the entity proposing the incorporation.

Municipal incorporation in Florida recently attracted additional study.

Lazega and Fletcher's (1997) analysis of Florida discusses why many places are incorporating, analyzes standards for incorporation, and presents legislative solutions to be considered. The authors argue that incorporation efforts result in a dramatic redistribution of local revenues, which ultimately negatively affects the county. They conclude "that no perfect solution exists to increase local autonomy and reduce taxes, thus incorporation is likely to remain a tempting option" (Lazega and Fletcher, 1997, 4).

Finally, Musso (2001) "analyzes the degree to which voter behavior in city formation elections supports Tiebout's (1956) hypothesis that residential sorting

facilitates efficiency of local service provision" (Musso, 2001, 139). Musso explains that Miller (1981) links city formation to avoiding high property taxes by annexing cities and Burns's (1994) book also links higher taxes and racial segregation to city formation (Musso, 2001). The results of Musso's study shows that the wealth of a community and the homogeneity of the population have a direct impact on voting behavior (i.e., the wealthier communities and more homogeneous places have a greater chance of proposing a new city). The results of the paper support Tiebout's hypothesis that residents will sort around service preferences. Occasionally, the sorting will result in the formation of new municipalities.

In conclusion, the majority of the academic work conducted on municipal incorporation has focused on one state: California (Martin and Wagner, 1978; Miller, 1981; Hoch, 1984; Musso, 2001). Burns (1994) and Rigos and Spindler (1991) conducted limited national examinations of municipal incorporation. This limited work reveals several patterns that help to unravel the complex world of municipal incorporation.

First, most studies suggest that cities are incorporating *to protect* themselves from potential or perceived annexation threats. "The fear of impending annexation is one of the most powerful stimuli for the creation of new cities" (Rigos and Spindler, 1991, 80). Burns (1994) stated similar findings. Local governments are being created to protect communities from annexation efforts initiated by existing municipalities. Miller (1981) and Hoch (1984) also

determined that incorporation is frequently the response to a perceived annexation threat.

A byproduct of these "defensive incorporations" that seek to thwart the expansionist plans of nearby municipalities lies in the creation of certain socio-economic characteristics that differentiate the NIM. The NIM is usually smaller in population size and less diverse socio-economically that the nearby, pre-existing municipality. Musso's (2001) examination of municipal incorporation in California determined that "communities seeking incorporation typically were smaller, that their residents were on average older, better educated, and wealthier, and that average housing values were higher. These communities also were more homogeneous than communities that did not seek incorporation" (145). Miller (1981) also found incorporating cities to be increasingly homogeneous along racial and income lines. Left unanswered is whether or not the California experience can be applied nationally. As a result, this dissertation will examine NIMs at a national scale and help to add to the limited research conducted on municipal incorporation.

Racial segregation within newly incorporated municipalities is another reoccurring theme in the municipal incorporation literature. Burns's (1994) study indicated that newly incorporated municipalities were racially segregated. Burns stated that "along with providing effective mechanisms for class segregation, new cities have provided effective barriers to racial integration" (Burns, 1994, 81).

Miller (1981) found a similar pattern in the racial composition of newly incorporated municipalities. He argued that in California,

Of the 32 (new cities) created between 1950 and 1970, 29 contained less than 1 percent black populations. Thus, the Lakewood Plan cities were essentially white political movements. Further advancing this trend was the creation of the segregated cities of Rancho Palos Verdas, La Canada-Flintridge, and La Habra Heights, all incorporated since 1970 with almost totally white populations (135).

Musso (2001) also noted that the process of incorporation resulted in the creation of cities with larger proportions of white residents.

The literature suggested that many NIMs form as defensive incorporations to thwart the expansionist strategies of a nearby larger city (Miller, 1981; Hoch, 1984; Rigos and Spindler 1991; Burns 1994). The end result is the creation of homogeneous enclaves of largely white, upper-income residents that wish to 'slam the door shut' on their more diverse, big-city neighbors (Blakely and Snyder 1997; Teaford 1997; Musso 2001). By testing for the socio-economic differences between NIMs and a group of carefully selected cohort cities it may be possible to determine if this hypothesis is valid at a national scale.

## 2.5 Conclusions

Even though more than 1.65 million citizens were directly impacted by municipal incorporation efforts during the 1990's relative little research has been

conducted. The research proposed in this dissertation will provide the first national examination of NIMs at an individual municipal level. This will provide a new level of understanding of the complex world of local government. More specifically, this research will examine if there are statistically significant differences between NIMs and NIM Cohort Cities along several socioeconomic variables that have been identified in previous studies. This dissertation will also provide a general overview of the national trends in new municipal incorporation and create a typology that will group NIMs by socioeconomic status.

#### CHAPTER III

#### RESEARCH DESIGN

The primary objectives of this dissertation are threefold: first, a geographical analysis of NIMs will be conducted to determine the essential spatial attributes of newly incorporated municipalities (i.e., where they are located, whether they cluster near each other, whether they are more prevalent in some states than others). Secondly, this dissertation will conduct a national examination of new municipalities to determine if there are statistically significant socio-economic differences between NIMs and their Cohort cities. Finally, a National NIM Typology will be developed through the use of cluster analysis.

# 3.1 Research Hypotheses

My first hypothesis is that an explicit dichotomy of NIM formation existed during the 1990s. The geography of some NIMs can be partially explained by a "herd mentality" where a local political culture is established that facilitates the diffusion of a NIM ideology in response to the aggressive annexation tactics of neighboring cities. This may encourage other unincorporated territories to consider incorporation strategies. By contrast, other NIMs are formed for fairly unique reasons that are largely unrelated to competing jurisdictional pressures

and are more likely the product of local political conditions (i.e., the need for services). The dichotomy manifests itself spatially by a clustering of NIMs in close proximity with one another in some instances or through the creation of NIMs that are formed in relative isolation of other NIMs.

Secondly, it is hypothesized that NIMs and NIM Cohort Municipalities will differentiate along a specific range of socio-economic variables. It is assumed that some of these differentiating variables include: population, race, median household income, and percent poverty, amongst others. Based on the limited literature on municipal incorporation it is theorized that new municipalities are relatively homogeneous enclaves that are looking to escape annexation by larger nearby heterogeneous cities.

Furthermore, it is hypothesized that the key differentiating socio-economic variables will not deviate by geography (i.e., U.S. Census region and Metropolitan/Micropolitan status). It will be argued that Census region and Metropolitan/Micropolitan designation do not play a pivotal role in determining the statistically significant socio-economic variables that separate NIMs from Cohort Municipalities but rather the NIM and Cohort differences will be similar across the country.

Finally, for the 263 NIMs created in the 1990s it is hypothesized that an explicit national NIM typology exists that is differentiated based on skill/affluence levels, racial composition, political affiliation, residency patterns, and urbanity (i.e., population and density). The hypothesized National NIM Typology is

expected to consist of three NIM types: 1. Exclusive Enclaves, 2. Suburban Settlements, 3. Peripheral Communities, where each of these has unique geographic and socio-economic characteristics. (See Table 1 for further details) The National NIM Typology may help build a conceptual framework from which more fruitful discussions may occur regarding municipal incorporation. Likewise, the typology may also reinforce the idea that not all NIMs are the same, but rather the incorporation process can yield a variety of results. Finally, the creation of a national NIM typology may be useful for urban planners and policymakers who work on municipal incorporation issues.

The literature on municipal incorporation reveals that NIMs are largely the byproduct of defensive incorporations that are attempting to maintain the unique elements of their existing community (Rusk, 2003; Musso, 2001; Teaford, 1997; Burns, 1994; Rigos and Spindler, 1991; Hoch, 1984; Miller, 1981). In order to accomplish the national examination of NIMs proposed in this dissertation, data will be gathered and analyzed from the U.S. Census Bureau Boundary and Annexation Survey (January 1, 1990 – December 31, 1999) and a variety of Census data sets.

The variables that will be tested between the NIMs and their NIM cohort cities include:

- 1.1. Population
  - 1.1.1. Total Population
  - 1.1.2. Population Density
- 1.2. Race
  - 1.2.1. Percent White Residents
  - 1.2.2. Percent Black Residents

- 1.2.3. Percent Hispanic or Latino Residents
- 1.3. Age
  - 1.3.1. Median Age
  - 1.3.2. Percent Population 65 and Older
- 1.4. Education
  - 1.4.1. Percent College Graduates Age 25 and Older
- 1.5. Housing
  - 1.5.1. Median Value of Owner Occupied Units
  - 1.5.2. Median Year Structure Built
  - 1.5.3. Median Year Householder Moved into Unit
- 1.6. Income
  - 1.6.1. Median Household Income
  - 1.6.2. Percent Persons in Poverty
- 1.7. Employment
  - 1.7.1. Percent of Residents Employed in NIM or NIM Cohort City
  - 1.7.2. Occupation
  - 1.7.3. Mean Travel Time to Work
- 1.8. Government Finances
  - 1.8.1. Government Revenues Per Capita
  - 1.8.2. Government Expenditures Per Capita

## 3.2 Data Sources and Definitions

As has been stated, some of the literature on municipal incorporation highlights the role of existing cities in the creation of new municipalities. Some NIMs maybe the byproduct of existing municipal annexation activity. These NIMs may be incorporating if an effort to protect themselves from existing cities rather than proactively incorporating to provide a public service. As a result, NIMs will be compared with existing Cohort cities to determine if there are significant differences between existing and new cities.

Newly Incorporated Municipalities (NIMs)

During the 1990's, 263 newly incorporated municipalities (NIMs) were identified by utilizing the U.S. Census Bureau Boundary and Annexation Survey

data. The Boundary and Annexation Survey (BAS) takes place annually between decennial censuses. The survey questions municipalities about information concerning possible boundary changes. The U.S. Census is particularly interested in boundary change as it may immediately impact the population of a municipality. Specifically, the BAS collects and maintains "information about the inventory of the legal boundaries for and the legal actions affecting the boundaries of counties and equivalent governments, incorporated places, minor civil divisions, Census Areas of Alaska, Hawaiian Homelands, and federally recognized legal American Indian and Alaska Native areas" (Federal Register, 2006, 75499-75500). The information collected during the annual BAS is used in the decennial and economic censuses, ongoing surveys, preparing population estimates, supporting other endeavors of the Census Bureau, and for legislative programs of the federal government.

The BAS is conducted annually, but only selected municipalities are surveyed each year. The Census Bureau has a detailed schedule for conducting the BAS. The Census Schedule is as follows:

- 1. Counties and American Indian reservations are included in every survey.
- 2. In the years ending in 8,9, and 0, the BAS also includes all incorporated places. These three years coincide with the Census Bureau's preparation for the decennial census.
- 3. In the years ending in 1, 3, 4, and 6, the BAS includes only incorporated places that have a population of 5,000 or greater.

4. In the years ending with 2 and 7, the BAS includes incorporated places that have a population of 2,500 or greater (University of Alabama Center for Business and Economic Research, 2004, retrieved from http://cber.cba.ua.edu/rbriefs/basexplanation.html on May 4, 2007).

This schedule potentially impacts the reporting of new municipalities on a yearly basis. However, in addition to following this schedule "the Census Bureau includes each newly incorporated place in the year following notification of its incorporation" (Federal Register, 2006, 75500). This provision enabled the research in this dissertation to move ahead.

#### NIM Cohort Cities

Two hundred and thirty four (234) NIM Cohort Cities have been identified through the examination of U.S. Census Data and the use of ArcMap, a geographic information system software. These municipalities will be compared to the 263 NIMs that were created in the 1990s to determine if any statistically significant differences are present on a range of socio-economic variables. The NIM Cohort Cities database was developed through a careful analysis of all municipalities that existed in 2000 according to the U.S. Census Bureau. Specifically, the NIM Cohort Cities have been identified utilizing ArcMap to thoroughly examine the municipalities that surrounded each of the 263 NIMs. After investigating each individual NIM, a three step process identified the cohort cities from the more than 20,000 places that existed in 2000.

First, the U.S. Census Bureau's Places Cartographic Boundary Files for 1990 and 2000 were examined to determine if any annexation activity had occurred near the 263 NIMs. Rigos and Spindler (2001), Hoch (1984) and Miller (1981) all identified the threat of annexation and the growth of existing municipalities as a primary factor influencing a community's effort to incorporate. Municipalities that experienced boundary growth between 1990 and 2000 were included in a group for further analysis.

Figure 1 illustrates how the 1990 and 2000 U.S. Census Bureau's Places Cartographic Boundary Files for 1990 and 2000 were compared to determine if an annexation activity occurred. In Figure 1, Warrenton, MO clearly has experienced growth through annexation while Truesdale, Wright City, Foristell and Wentzville's city limits are unchanged through the 1990's. As a result, Warrenton, MO was selected as the NIM Cohort City for Innsbrook, MO (NIM). Second, after identifying the surrounding municipalities that had annexed during the 1990's, a distance measurement was taken between the NIM and the potential NIM cohort city. If a NIM had multiple candidates for inclusion in the NIM cohort cities group, the municipality that was the closest to the NIM was chosen. The logic here is that typically the closest municipality to the NIM that was actively engaged in annexation during the 1990's will be the 'perceived threat' that caused the incorporation.

Figure 2 illustrates the distance analysis process. In this illustration the NIM (Irena, MO) located in the center of Figure 2 is surrounded by numerous

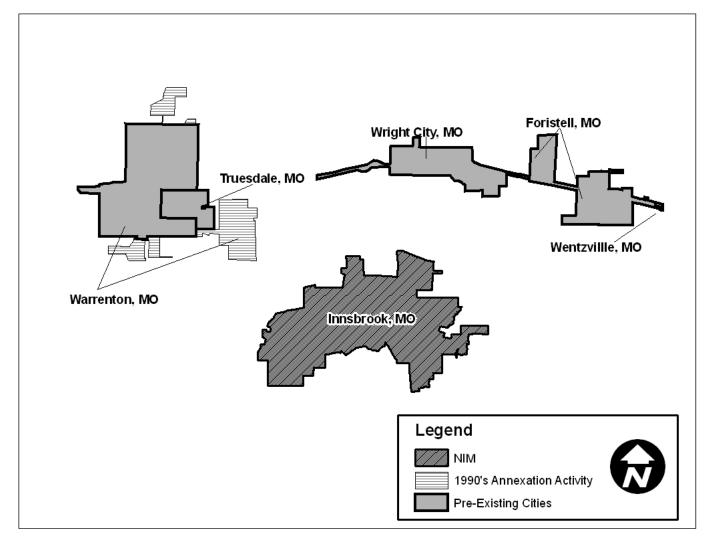


Figure 1. Illustration of Cohort City Annexation Activity

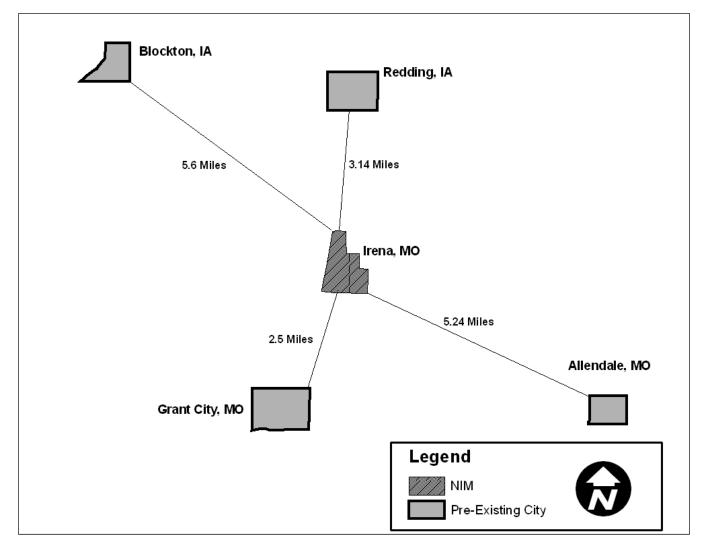


Figure 2. Illustration of Cohort City Distance Analysis

existing municipalities, none of which annexed property between 1990 and 2000. As a result, a distance measurement was taken to determine which city should be included in the NIM Cohort City group. In this example, the municipality of Grant City, MO which was located 2.5 miles away from Irena, MO was chosen as the NIM Cohort City based on the distance analysis.

Finally, the population of the potential NIM cohort municipalities was examined. If multiple NIM cohort cities experienced annexation activity and were located equidistant from the NIM being examined, then the population of the potential NIM cohort cities was taken into consideration for determining the final NIM cohort cities group. The potential NIM cohort city with the largest population was chosen in these cases. Rigos and Spindler (1991) state that "annexations involving large populations in the initiating municipalities spur more incorporations because they will be more noticed by communities that seek to avoid being engulfed by other aggressive cities" (80). This three-step process yielded 234 cohort cities that will be utilized to test for statistically significant differences with the NIMs. The database has fewer cohort cities than NIMs because in some cases a single cohort city was located adjacent to multiple NIMs formed during the 1990's.

The three step process outlined above placed a greater emphasis on annexation activity over distance, and distance over population size. As a general rule, the examination of annexation activity was utilized to identify the majority of NIM Cohort City's. Only 13.7% of the NIM cohort cities identified

through this three step process did not experience any annexation activity in the 1990's. As a result these 32 cohort cities were identified through the remaining two steps of the process – distance analysis and population size consideration. In reality, 66% of NIM cohort cities either shared a common boundary with a NIM or were located within 1 mile of the NIM boundary.

## 3.2.1 The Variables

A review of the existing literature on municipal incorporation formed the basis for choosing the majority of these variables. Upon completion of the collection of the data, SAS v9.1 will be utilized to conduct a t-test and analysis of variance (ANOVA)/GLM procedure to examine if there is a statistically significant difference between the NIMs and NIM Cohort Cities. A paired t-test will be utilized to examine the relationship between the NIMs and NIM Cohort Cities at the national level. ANOVA procedures will be conducted for the remainder of the tests of statistical significance. These include determining if there are any statistically significant differences between Census Regions (4 regions) and Metropolitan/Micropolitan Statistical Area Designation. These tests are being utilized because they will allow for some assurance (significance levels) that these findings are not based on chance. Additionally, these tests are widely used in social science research (Henkel, 1976).

# Total Population

Population count reflects all persons living in a given geographic area on April 1<sup>st</sup> of the Census year (US Census Bureau, Decennial Bureau Management Glossary, 2006). The 2000 Census population for each NIM and NIM Cohort City will be compared to determine if there are any statistically significant differences between them. Musso (2001) determined that "the process of incorporation promoted small cities" (151). Teaford (1997) stated a similar finding and believed that smaller populations would help to ensure homogeneity.

# Population Density

The population density will be collected for each NIM and the NIM Cohort City from the 2000 US Census. The US Census Bureau defines population density as the total population within a geographic entity (i.e., municipality) divided by the land area of that entity. Population density is often expressed in square kilometers or square miles (US Census Bureau, Decennial Bureau Management Glossary, 2006). Population density is utilized because a community's density level often is an indicator of urbanity. The lower the density level, the more rural or suburban a community is and the higher the density level the more likely the community is more urban. Teaford (1997) stated that communities choose incorporation as a means of protecting "the existing suburban environment and to ensure a way of life different from that of a city. Municipal incorporation was, then, a wall designed to preserve and protect and not an avenue to facilitate change and urbanization" (15-16). As a result,

population density will be examined to determine if NIMs have lower population densities than NIM Cohort Cities as the literature implies.

# Median Age

The median age of the residents of each NIM and NIM Cohort City will be collected from the 2000 US Census to determine if there are statistically significant differences. The median age "measure divides the age distribution into two equal parts: one-half of the cases falling below the median value and one-half above the value. Median age is computed on the basis of a single year of age distribution" (US Census Bureau, 2000 Census, Definitions of Subject Characteristics, 2003, B-4). Musso's (2001) study of municipal incorporation in California determined that incorporating municipalities where older than their cohort communities. This research will examine if these findings are applicable to the entire nation.

## Percent Population 65 and Older

The percentage of NIM and NIM Cohort City Group residents aged 65 and older will be collected from the 2000 US Census to test if any statistically significant differences exist between the two. "The age classification is based on the age of the person in complete years as of April 1, 2000. The age of the person usually was derived from their date of birth information. Their reported age was used only when date of birth information was unavailable" (US Census Bureau, 2000 Census, Definitions of Subject Characteristics, 2003, B-4). The percent of the population aged 65 and older will offer some insight into the age

distribution of NIMs compared to Cohort Cities. Additionally, this variable will also help to identify the NIMs that were created as retirement communities.

# Race

This study will examine the variable of race to determine if there are any statistically sgnificant differences between NIMs and NIM Cohort Cities as the literature implies their should be. "The concept of race, as used by the Census Bureau reflects self-identification by people according to the race or races with which they most closely identify. These categories are socio-political constructs and should not be interpreted as being scientific or anthropological in nature. Furthermore, the race categories include both racial and national-origin groups" (US Census Bureau, 2000 Census, Definitions of Subject Characteristics, 2003, B-38) for the first time. Initial review of the literature and the data collected to support this research highlighted the potential importance of race as a variable. Additionally, many of the NIMs created have extremely high percentages of white or black populations. Burns (1994), Rigos and Spindler (1991), Hoch (1984) and Miller (1981) all discussed the role that segregation played in the development of new cities in their research. Specifically, the percent of white, black and Hispanic or Latino resident will be examined.

## Percent White Residents

Data will be collected from the US Census Bureau to determine the percentage of white residents within a NIM and NIM Cohort City. According to the US Census Bureau a person is classified as white if they have "origins in any

of the original peoples of Europe, the Middle East, or North Africa. It includes people who indicate their race as "White" or report entries such as Irish, German, Italian, Lebanese, Near Easterner, Arab, or Polish" (US Census Bureau, 2000 Census, Definitions of Subject Characteristics, 2003, B-38). Data included in this dissertation shows only respondents who listed "white" as their race in the 2000 US Census.

# Percent Black Residents

Data will be collected from the US Census Bureau to determine the percentage of black residents within a NIM and NIM Cohort City. According to the US Census Bureau, a person is considered "black" if they have "origins in any of the Black racial groups of Africa. It includes people who indicate their race as "Black, African American, or Negro," or provide written entries such as African American, Afro-American, Kenyan, Nigerian, or Haitian" (US Census Bureau, 2000 Census, Definitions of Subject Characteristics, 2003, B-38). Data included in this dissertation shows only respondents who listed "black or African American only" as their race in the 2000 US Census.

# Percent Hispanic or Latino Residents

Data will be collected from the US Census Bureau to determine the percentage of Hispanic or Latino residents within a NIM and NIM Cohort City.

According to the US Census Bureau a person is considered to be "Hispanic or Latino" if they have classified themselves in one of the specific Hispanic or Latino categories listed on the Census 2000. These categories include Mexican, Puerto

Rican or Cuban as well as those who indicate that they are other Spanish,
Hispanic, or Latino. Origin can be viewed as the heritage, nationality group,
lineage, of country of birth of the person or person's parents or ancestors before
their arrival in the United States (US Census Bureau, 2000 Census, Definitions of
Subject Characteristics, 2003). The literature on municipal incorporation has
traditionally discussed race in terms of black and white residents (Burns, 1994;
Miller, 1981). However, this research will examine Hispanic or Latino populations
due to the recent increase in these populations throughout the nation.

# Percent College Graduates 25 and Older

This dissertation will analyze if there are statistically significant differences between the education level of resident of a new municipality in the United States and the NIM Cohort City. Specifically, data will be collected on the percentage of College Graduates within a NIM and a NIM Cohort City that are 25 years and older. This data will be collected from the US Census Bureau. College graduates 25 and older is defined by the US Census Bureau as persons aged 25 years and older who have completed 4 years or more of college (US Census Bureau, 2000 Census, Definitions of Subject Characteristics, 2003). Musso's (2001) examination of incorporation efforts in California found that the residents of newly incorporated municipalities were better educated than a group of cohort communities. This research will determine if these findings are applicable to the nation.

# Median Value of Owner Occupied Units

The Median Value of Owner Occupied Units will be collected from the 2000 US Census for each NIM. This variable is a derived figure based on the value of the owner occupied units reported within the NIM. The Median Value of Owner Occupied Units divides the value distribution into two equal parts. The value of each owner occupied unit is determined from the

respondent's estimate of how much the property (house and lot, mobile home and lot, or condominium unit) would sell for if it were for sale. If the house or mobile home was owned or being bought, but the land on which it sits was not, the respondent was asked to estimate the combined value of the house or mobile home and the land. For vacant units, value was the price asked for the property. Value was tabulated separately for all owner-occupied and vacant-for-sale housing units, owner-occupied and vacant-for-sale mobile homes, and specified owner-occupied and specified vacant-for-sale housing units. Specified owner-occupied and specified vacant-for-sale housing units include only 1-family houses on less than 10 acres without a business or medical office on the property. The data for "specified units" exclude mobile homes, houses with a business or medical office, houses on 10 or more acres, and housing units in multiunit buildings (US Census Bureau, 2000 Census, Definitions of Subject Characteristics, 2003, B-66).

The Median Value of Owner Occupied Units will be examined to determine if there are any statistically significant differences in the cost of the homes within the newly incorporated municipalities and the NIM Cohort Cities. More expensive housing was a characteristic of newly incorporated municipalities identified by Musso (2001) in her study on California incorporation efforts.

## Median Year Structure Built

The median year structure built will be collected for each NIM and NIM

Cohort City from the 2000 US Census. The median year structure built is derived from the data collected on the year structure built. "Year structure built refers to when the building was first constructed, not when it was remodeled, added to, or converted" (US Census Bureau, 2000 Census, Definitions of Subject

Characteristics, 2003, B-68). Specifically, the "median year structure built divides the distribution into two equal parts: one-half of the cases falling below the median year structure built and one-half above the median. Median year structure built is computed on the basis of a standard distribution" (US Census Bureau, 2000 Census SF3, Definitions of Subject Characteristics, 2003, B-68).

This data will provide a frame of reference as to the overall age of the housing stock in the NIM and NIM Cohort City.

## Median Year Householder Moved into Unit

The median year householder moved into the housing unit will be gathered for each NIM and NIM Cohort City from the 2000 US Census. "Median year householder moved into unit divides the distribution into two equal parts: one-half of the cases falling below the median year householder moved into unit and one-half above the median" (US Census Bureau, 2000 Census SF3, Definitions of Subject Characteristics, 2003, B-67).

The median year householder moved into unit is derived from the year householder moved into unit data. "These data refer to the year of the latest

move by the householder. If the householder moved back into a housing unit he or she previously occupied, the year of the latest move was reported. If the householder moved from one apartment to another within the same building, the year the householder moved into the present apartment was reported. The intent is to establish the year the present occupancy by the householder began. The year that the householder moved in is not necessarily the same year other members of the household moved in, although in the great majority of cases an entire household moves at the same time" (US Census Bureau, 2000 Census SF3, Definitions of Subject Characteristics, 2003, B-67). This data will be analyzed to determine if there are any statistically significant differences between the median year householder moved into unit between NIMs and NIM Cohort Cities. This variable will examine if NIMs contain relatively newer residents than existing older cities.

## Median Household Income

The median household income of each NIM and NIM Cohort City will be collected from the 2000 US Census. "Household income consists of total money income received in the prior calendar year by all household members 15 years old and over (14 in 1970), tabulated for all households. Median household income figures are derived from the entire distribution of household incomes" (US Census Bureau, 2000 Census SF3, Definitions of Subject Characteristics, 2003, B-19). The median household income divides the household income value into two equal parts. The median household income will be examined to determine if

there is a statistically significant difference between the incomes of NIMs and NIM Cohort Cities. Musso (2001) determined higher income was a primary component of new municipalities when compared to a group of cohort communities.

# Percent of Persons in Poverty

The percent of persons in poverty will be amassed for all NIMs and NIM Cohort Cities from the 2000 US Census. The percent of persons in poverty variable is based on data reported to the Census for the prior calendar year for whom poverty status is determined. Specifically, percent of persons in poverty is derived from dividing Persons for Whom Poverty Status is Determined by the Total Population of each municipality (US Census Bureau, Glossary, 2006). Examining the percent of persons in poverty for each NIM and NIM Cohort City will provide additional tool to measure the wealth of the communities.

## Percent of Residents Employed in NIM or NIM Cohort City

This data will be collected for each NIM and NIM Cohort City from the 2000 US Census. The Place of Work-Place Level data will be examined to determine the percentage of residents that work in the city they reside. "Data on place of work refer to the geographic location at which workers carried out their occupational activities during the reference week. The exact address (number and street name) of the place of work was asked, as well as the place (city, town, or post office); whether or not the place of work was inside or outside the limits of that city or town; and the county, state or foreign country, and ZIP Code. If the

person's employer operated in more than one location, the exact address of the location or branch where the respondent worked was requested. When the number and street name were unknown, a description of the location, such as the building name or nearest street or intersection, was to be entered" (US Census Bureau, 2000 Census SF3, Definitions of Subject Characteristics, 2003, B-26). The percentage of residents employed will be examined to determine if the percentage of people employed within the place they reside are significantly different for NIMs and their cohort cities. This will provide a measure of the overall employment with each municipality. The literature suggests that many NIMs are bedroom communities that lack employment opportunities.

#### Mean Travel Time to Work

The Mean Travel Time to Work will be collected for each of the 263 NIMs and associated NIM Cohort Cities from the 2000 US Census. "Mean travel time to work is the average travel time in minutes that workers usually took to get from home to work (one way) during the reference week. This measure is obtained by dividing the total number of minutes taken to get from home to work by the number of workers 16 years old and over who did not work at home. The travel time includes time spent waiting for public transportation, picking up passengers in carpools, and time spent in other activities related to getting to work" (US Census Bureau, 2000 Census, Definitions of Subject Characteristics, 2003, B-29). The mean travel time to work will be examined to determine if the commute times are significantly different for NIMs and their cohort cities. Examining the

mean travel times will provide a measure of the commuting patterns within the NIMs and their associated cohort cities.

Occupation (employed civilian population 16 years and over)

The percentage of residents of a NIM and NIM Cohort City employed in a given occupation will be collected from the 2000 US Census. The Census divides all employment into one of six categories at the macro scale. These categories include:

- 1. Managerial, Professional and Related Occupations
- 2. Service Occupations
- 3. Sales and Office Occupations
- 4. Farming, Fishing, and Forestry Occupations
- 5. Construction, Extraction, and Maintenance Occupations
- 6. Production, Transportation, and Material Moving Occupations

According to the US Census Bureau "occupation describes the kind of work the person does on the job. For employed people, the data refer to the person's job during the reference week. For those who worked at two or more jobs, the data refer to the job at which the person worked the greatest number of hours" (US Census Bureau, Glossary, 2006). The occupation of the residents of NIMs and Cohort Cities will be examined to determine if there are statistically significant differences between the two groups. The occupation of residents may be related to income, education, and housing values. All of these characteristics were determined to be statistically significant according to Musso's (2001) study of municipal incorporation in California.

#### Government Finances

The Government Revenue and Government Expenditure data of each NIM and NIM Cohort City will be obtained from the 2002 Census of Governments to provide a glimpse into the finances of each municipality. These figures will be divided by the 2000 Population of each municipality to derive a Government Revenue and Government Expenditure Per Capita figure for each NIM. Several studies have identified government finances and specifically taxes (Burns, 1994; Miller, 1981) as a potential factor in incorporation. As a result, this research will go a step further by examine government revenue and government expenditures for each NIM and NIM Cohort City to determine if there are statistically significant differences between the municipalities.

## Government Revenue Per Capita

According to the United States Census of Governments revenue is defined as "all money received by a government from external sources – net of refunds and other correcting transactions – other than from issuance of debt, liquidation of investments, and as agency and private trust transactions. Note that revenue excludes noncash transactions such as receipt of services, commodities, or other 'receipts in kind'" (US Census Bureau, Census of Governments, Definitions of Selected Terms, 2002). Revenue specifically includes money generated from taxes as well as intergovernmental exchanges from the federal and/or state government.

# Government Expenditure Per Capita

The 2002 Census of Governments defines expenditure as "All amounts of money paid out by the government – net of recoveries and other correcting transactions – other than for retirement of debt, investment in securities, extension of credit, or as agency transactions. Note that expenditure includes only external transactions of a government and excludes noncash transactions such as the provision of perquisites or other payments in kind" (US Census Bureau, Census of Governments, Definitions of Selected Terms, 2002). Expenditures can be divided into two categories: General Expenditures and Utility, liquor store and employee retirement expenditures. General Expenditures specifically includes money spent on Capital outlay, Education, Public welfare, Health and hospitals, Highways, Police protection, Fire protection, Parks and recreation, Housing and community development, Sewerage and solid waste management, and Interest on general debt.

## 3.3 Cluster Analysis

In addition to determining if there are statistically significant differences between NIMs and NIM Cohort Cities this dissertation research will develop a National NIM typology through the use of cluster analysis. Cluster analysis is a class of statistical techniques that can be applied to data that exhibits "natural" groupings. Cluster analysis sorts through the raw data and groups them into clusters. A cluster is a group of relatively homogeneous cases or observations.

Objects in a cluster are similar to each other. SAS version 9.1 will be utilized to run the cluster analysis. Prior to conducting the cluster analysis, a principal components analysis will be used to reduce the number of variables into a smaller number of broad based categories called principal components. This will allow for an easier interpretation of the results of the cluster analysis. The cluster analysis will be conducted on 255 NIMs and it is hypothesized that an explicit national NIM typology exists that is based on a NIMs skills/affluence level, racial composition, political affiliation, residency patterns, and urbanity. Eight NIM's are excluded from the cluster analysis because of missing data that could not be obtained. As a result, principal component scores could not be generated for these NIMs.

The following variables will be utilized during the cluster analysis to determine if this hypothesis is correct.

1. **Skills**/ Percent College Graduates Age 25 and Older

**Affluence:** Occupation: Percent Management

Median Household Income

Median Value of Owner Occupied Units

Occupation: Percent Production Occupation: Percent Service

**2. Elderly**: Percent of Residents 65 years of age and

Older

Median Age

Percent of Residents in the Workforce

**3. Political Affiliation:** Percent Kerry

Percent Bush

**4. Race:** Percent Black Residents

Percent White Residents

**5. Commuting Patterns:** Percent Employed in Place of Residence

Occupation: Percent Farming

Mean Travel Time

**6. Occupational** Occupation: Percent Sales

Characteristics: Located within Metropolitan or Micropolitan

Area

Occupation: Percent Construction

**7. Migration** Median Year Household Moved into Unit

Population

**8. Urbanity** Percent Poverty

Percent Hispanic or Latino

Density

**9. Growth** Percent County Growth 1990 - 2000

Median Year Structure Built

All of these variables have been previous discussed and defined except for the Political Party Affiliation and Percent County Growth Rate (1990-2000), which have been added to the cluster analysis in an effort to provide additional differentiating information on the NIMs of the 1990s. Specifically, it is hypothesized that Political Party Affiliation and the Percent County Growth Rate variables will vary considerably among NIMs.

# Political Party Affiliation

The 2004 Presidential Election data for each NIM was collected from local Board of Election Offices and aggregated up from the precinct level since election results at the municipal level are not widely available. The Presidential Election results from 2004 will serve as a surrogate variable for party affiliation. Specifically, the percentage of residents that voted for John Kerry, the

Democratic candidate for President and the percentage of residents that voted for George W. Bush, the Republican candidate from President were collected. Exit polls from the 2004 Presidential election "show that both parties succeeded in unifying their partisans, but with the Republicans more successful than the Democrats" (Weisberg, 2005, 779). In terms of percentages, Bush won 93% of the Republican vote, while Kerry won 89% of the Democrats (CNN Election, 2004). The 2000 Presidential Election between Bush and Gore witnessed Bush only carrying 91% of the Republican vote and Gore capturing 86% of the Democrats vote (CNN Election, 2000). As a result, the 2004 Presidential Election was chosen over the 2000 Election as a better representative variable for Political Party Affiliation.

Percent County Growth Rate (1990 – 2000)

The Percent County Growth Rate variable measures the percentage change in population for the host county of a NIM between the 1990 and 2000 U.S. Census. The Percent County Growth Rate (1990 – 2000) was developed by comparing the 1990 U.S. Census Population for a given county with the 2000 U.S. Census Population data.

The hypothesized NIM Typology will likely consist of three NIM types:

- 1. Exclusive Enclaves,
- 2. Suburban Settlements, and
- 3. Peripheral Communities

where each of these typologies has unique geographic and socio-economic characteristics (see Table 1 for further details). The proposed typology is similar to those generated by marketers developing lifestyle clusters. Claritas, Inc., a world leader in demographic data and analysis, has developed a list of lifestyle clusters that are categorized into 15 social groupings. "The use of socioeconomic data to identify these lifestyle clusters, of course, captures the continuing importance of the socioeconomic status dimension in residential differentiation" (Knox and McCarthy, 2005, 332). As a result NIMs will be clustered by utilizing socioeconomic variables.

Table 1. Newly Incorporated Municipalities (NIMs) Typology

NIM TYPE	Locational Requirements	General Description
Exclusive Enclave	Predominately located in beach, mountain, resort and suburbs surrounding large cities.	Extremely homogeneous population with very high income levels, expensive homes, elderly populations, and lower levels of poverty.
Suburban Settlements	Generally located in close proximity to larger cities and in or near Metropolitan or Micropolitan Statistical Area	Small to medium sized communities with mostly white populations, low percentages of poverty, moderately educated, high incomes and high home values.
Peripheral Communities	Mostly likely to be located outside of Metropolitan/Micropolitan Statistical Areas	Small isolated white communities with relatively young populations, low income levels, low education levels and higher levels of poverty.

#### 3.4 Research Limitations

This research project has limitations. The dissertation focuses on examining if there are statistically significant differences between newly incorporated municipalities and their cohort cities as suggested by the literature on municipal incorporation. The identification of a group of cohort cities is in itself a limitation. Some of the NIM Cohort Cities that have been identified may be inappropriate. However, the process that has been outlined in this dissertation to identify the group of NIM Cohort Cities was created after a careful examination of previous research. The three part process of NIM Cohort City identification combines many of the key elements identified by previous research on municipal incorporation including annexation activity, population size, and distance.

Another limitation of the research is the data gathered from the Census Bureau's Boundary and Annexation Survey (BAS). This survey was the primary tool for collecting the names of the 263 new municipalities created in the United States between the 1990 and 2000 decennial censuses. The BAS is a self-reported survey that may not include all the new recently incorporated municipalities in the United States. However, since the BAS data is utilized by the Census Bureau and other federal government agencies it is in the best interest of a new municipality to fill out and return the survey in order to receive their allocation of federal monies. Additionally, surrounding existing municipalities and the county in which a new municipality is located in also have the opportunity to report new incorporated places through their surveys.

Finally, the NIMs themselves are also a potential limitation. This research identified 263 NIMs that were created between the 1990 and 2000 US decennial census. While all of these new municipalities were created in this ten-year period they all were created at different times. As a result, the socio-economic characteristics of their populations may have changed over the entire decade while others have only been in existence for a year or less and have been more static. Even with this limitation the data is still the best available for trying to understand municipal incorporation in the United States.

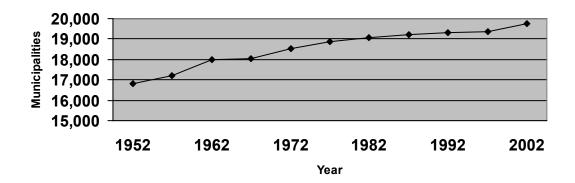
#### **CHAPTER IV**

#### **FINDINGS**

## 4.1 NIMs in the United States - General Observations

The latest Census of Governments revealed that 19,731 municipalities existed in the United States in 2002. Since the beginning of the Census of Governments in 1952, the United States witnessed a steady growth in the number of municipalities (see Figure 3), although since 1997 the number of new municipalities has significantly increased.

Figure 3: History of Municipal Growth, 1952 - 2002



The research conducted in this dissertation revealed that during the 1990s, 263 newly incorporated municipalities (NIMs) were created in the United States

(see Figure 4). These 263 new cities contained a combined population of more than 1.65 million in 2000. As Figure 4 indicates many of the NIMs created in the 1990s cluster together around major metropolitan areas. Nationally, ten NIM clusters can be identified starting with several clusters of NIMs along the Pacific coast, including the Seattle-Tacoma Cluster, the Northern California Cluster, and the Los Angeles-San Diego Cluster. Moving to the east the Salt Lake City Cluster, Texas Border Cluster, and St. Louis Cluster are easily identifiable. Finally, the East coast contains the remaining NIM Clusters starting with a Northern New Jersey Cluster, then continuing south to a Piedmont North Carolina Cluster and finishing with a Northeast Florida Cluster and South Florida Cluster.

#### 4.1.1 Socio-Economic Characteristics of NIMs

A preliminary examination of select socio-economic characteristics for those NIMs established from 1990 to 2000 can be useful for understanding the overall composition of NIMs. A comparison between the "average" NIM and the national U. S. and metropolitan averages helps to identify how NIMs deviate or mimic national trends before examining NIMs and Cohort cities in more detail later. This will be a useful comparison since many NIMs form within or near metropolitan areas (see Table 2). A comparison of racial composition reveals that NIMs are whiter and have a smaller percentage of African American and

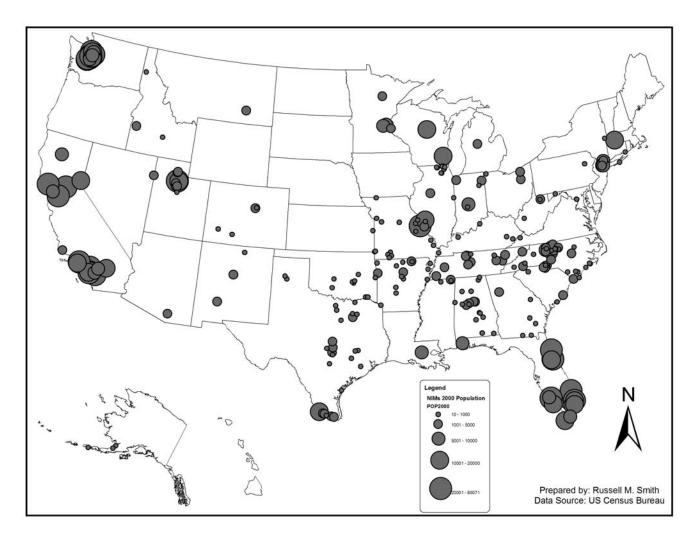


Figure 4. Spatial distribution of Newly Incorporated Municipalities in the United States, 2000

TABLE 2: Socio-economic Characteristics of NIMs, Compared to MSA and U.S. Trends, 2000

Variable	NIM Mean	MSA Mean	U.S. Mean
Percent White	86.2	72.8	75.1
Percent Black	7.1	13.2	12.3
Percent Hispanic or	7.0	14.2	12.5
Latino			
Median Age	38.4	34.9	35.2
Mean Travel Time	27.3	26.1	25.5
Median Household	\$48,529	\$44,755	\$41,994
Income			
Median Value of	\$148,376	\$131,600	\$119,600
Owner Occupied Units	φ140,570	\$131,000	\$119,000
Percent Poverty	11.1%	11.8%	12.4%
Percent College	22.4%	26.6%	24.4%
Degree			

Source: U.S. Census Bureau

Hispanics than do MSAs across the country and the U.S. as a whole. This finding is consistent with the traditional literature on municipal incorporation that has found that many new municipalities have incorporated in an effort to separate themselves from the rest of society. NIMs on average have a higher median age (38.4 years) than MSA's (34.9) or the US as a whole (35.3 years). Several factors may play a role in explaining this phenomenon. First, the literature on municipal incorporation suggests that many inhabitants of NIMs are wealthy professionals fleeing more urban environs. As a result, the median age within NIMs may be higher since it takes more time to accumulate the wealth necessary to move to richer areas on the outskirts of the urban periphery. Additionally, some NIMs are pseudo-retirement communities with a significant share of elderly residents that will act to inflate the median age of a NIM. Finally,

the community in which the NIM incorporates may have some older inhabitants that have been there for many decades prior to incorporation.

The average resident of a new municipality spends 27.3 minutes commuting to work, compared to a MSA mean travel time of 26.1 minutes, and a national mean travel time of 25.5 minutes. Typically, newly incorporated municipalities do not have large employment centers and are located on the periphery of urban areas.

As a result, the residents of NIMs tend to experience lengthier commutes. The "average" NIM also had a higher median household income (\$48,529) than the MSA average (\$44,755) and the US (\$41,994) as a whole. Additionally, the median value of owner occupied dwellings was also higher in the average NIM (\$148,376) than the average MSA (\$131,600) or the US (\$119,600). Finally, the average NIM had an 11% poverty rate compared to an 11.8% poverty rate among MSA's and 12.4% nationally. The literature on municipal incorporation constantly reminds us that NIMs are wealthier enclaves that seek homogeneity and seek to distance themselves from poorer populations. This is especially evident in NIMs that form on the edge of older, larger, more diverse urban metropolitan agglomerations.

However, there is one unique finding from this comparative that deviates significantly from the existing literature. Based on the findings in Table 1, the average NIM appears to be less well-educated than the 'typical' MSA population or the nation as a whole. Just over 22% of all NIM residents have earned a

college degree compared to 26.6% of MSA residents and 24.4% of the United States population. Based on the municipal incorporation literature and previously stated data (i.e., household income and median value of housing units within NIMs), it was expected that a higher percentage residents would have college degrees. The discrepancy in education may be the result of the "holdovers" or long-time older residents that were residents long before the NIM was even established. An additional explanation for this result may be the presence of older residents in gated NIMs or resort NIMs. As a result, the generational gap in education may account for this unusually finding. We now turn to a more explicit discussion of the essential geography of these NIMs by Census Region, State, Population Size, and County.

## 4.1.2 Spatial Distribution of NIMs

The new municipalities incorporated between 1990 and 2000 were not evenly distributed across the United States (see Table 3 and Figure 4). The South Census Region had by far the most NIMs established during the 1990's, with 151 new municipalities while the Northeast Region had the fewest with only 11 incorporations. Although simple population growth could offer a potential explanation for this geography, a comparison of 1990 and 2000 U.S. Census data reveals that while the South Region did have the greatest absolute increase in total population (14,790,890), the West Region experienced the greatest percent increase in population (19.72%).

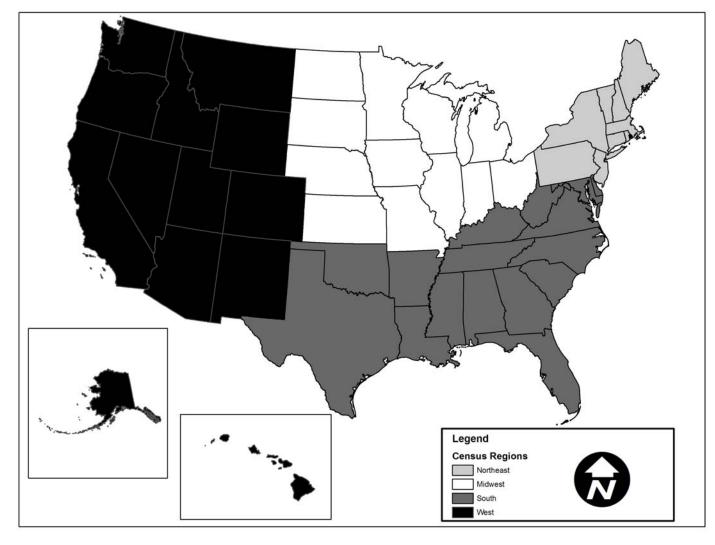


Figure 5. Census Regions in the United States, 2000

TABLE 3: NIMs by Census Region, 2000

CENSUS REGIONS	NUMBER OF NIMs
Northeast	11
Midwest	47
South	151
West	54

Secondly, it might be assumed that the Northeast and Midwest should have more incorporation activity due to the large urban agglomerations that are present in the regions and the multitude of suburban fringe area that would seek municipal services. However, the unique geographic reality of the Northeast and Midwest can partially be explained by the presence of township governments which in some cases offer municipal like services and act as a surrogate city. As Rigos and Spindler discussed in their 1991 paper, townships have always been more active (i.e. more numerous and provide more services) in the Northeast and Midwest. As a result, they argue that this may reduce the need for new incorporations within these regions. However, Bromley and Smith (1973) found a contrary finding. Their work revealed that townships in the Northeast and Midwest often evolved into municipalities.

Finally, it is important to revisit the definition of a NIM. They are defined as cities, towns, boroughs or villages in most states. As a result, the creation of new townships in the Northeast and Midwest are not included within the scope of this study. More research is needed in this field to gain a better understanding of the interaction between townships and NIMs.

Most of the NIM activity occurred in just a few states including North Carolina, Texas, Missouri, Alabama, and California (see Table 4). These five states accounted for more than 44% of all NIMs created during the 1990's. North Carolina had the most NIMs established during the 1990s, with 34 new municipalities. Six of the top ten states in the nation are located in the South region, while a dozen states did not see any incorporation activity at all (e.g. Delaware, Nebraska, and Oregon). Less clear is what explains the spatial concentration of NIM activity in particular states.

TABLE 4: NIMs by State, 2000

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State		Total Population of NIMs by State		
1. North Carolina	34	66,562		
2. Texas	27	35,397		
3. Missouri	20	39,594		
4. Alabama	18	18,951		
5. California	17	453,933		
6. Florida	14	346,818		
7. Arkansas	13	11,870		
8. Washington	13	388,599		
9. Tennessee	12	24,238		
10. Illinois	11	24,608		

A potential explanation for this geographic phenomenon may be the annexation standards of each state. A national review of annexation standards by Palmer and Lindsey (2001) identified 22 states that allow municipal annexation without the consent of the affected property owners. This type of unilateral annexation is viewed as the most aggressive form of annexation and is

available in Illinois, North Carolina, Tennessee, Texas, and Washington which may explain the plethora of incorporations within these states. Curiously, neither Alabama, Arkansas, California, Florida nor Missouri allows unilateral annexation even though each experienced a significant amount of NIM activity suggesting more research is needed if we are to fully understand the complex geographic patterns of municipal incorporation.

Better understanding the role of annexation regarding NIMs is important because Rigos and Spindler (1991) identified the threat of an annexation by a larger, nearby city as a leading factor in determining the frequency of new incorporations. They termed these NIMs "defensive incorporations" where the community is more focused on avoiding becoming part of a larger heterogeneous city than in establishing their own unique identity.

## 4.1.3 NIM Population Patterns

Overall, NIM population size varied greatly across the country. The mean population of the 263 NIMs was 6,300 although the median population was only 993 suggesting that the data is skewed and that many NIMS tend to be small, intimate communities. In fact, 203 of the 263 NIMs have a total population that is less than the overall mean. Table 5 highlights the mean and median NIM population by state and ranks these states according to the mean NIM population. Washington's 13 NIMs had the highest mean (29,892) and median

TABLE 5: NIMs Population Characteristics, 2000

State (# of NIMs)	Mean NIM Population	Median NIM Population	
Washington (13)	29,892	25,496	
California (17)	26,702	16,865	
Florida (14)	24,773	17,307	
Massachusetts (1)	15,994	15,994	
Wisconsin (2)	11,931	11,931	
Utah (8)	10,311	1,840	
New Jersey (4)	6,098	7,323	
Louisiana (1)	5,514	5,514	
Minnesota (4)	4,950	5,208	
Nevada (1)	4,721	4,721	
Arizona (1)	3,242	3,242	
New York (4)	2,924	1,944	
Indiana (5)	2,512	2,298	
Montana (1)	2,346	2,346	
Illinois (11)	2,237	471	
Tennessee (12)	2,020	1,934	
Missouri (20)	1,980	128	
North Carolina (34)	1,958	1,097	
Colorado (4)	1,800	862	
Texas (27)	1,311	459	
West Virginia (4)	1,310	775	
Ohio (3)	1,286	1,618	
Michigan (1)	1,243	1,243	
New Mexico (3)	1,113	1,390	
Alabama (18)	1,053	530	
Arkansas (13)	913	366	
Mississippi (3)	799	300	
Idaho (3)	791	513	
Georgia (6)	686	392	
Connecticut (1)	667	667	
Maryland (2)	664	664	
South Carolina (3)	603	478	
Kansas (1)	562	562	
Kentucky (4)	442	359	
Virginia (1)	424	424	
Oklahoma (9)	306	192	

Pennsylvania (1)	284	284
Alaska (3)	93	100
U.S. (263)	6,300	993

(25,496) NIM populations in the country followed by California and Florida. Not surprisingly, these three states also witnessed the incorporation of some of the largest NIMs in the 1990s. Of the 23 new municipalities that were created with populations greater than 20,000 (see Table 6), 91% of them were located in California (8), Washington (7), and Florida (6) collectively. Additionally, Utah and Missouri each had 1 large NIM created in the 1990s.

A potential explanation for the concentration of well populated NIMs in a few states is the key role of legislation in determining municipal population thresholds in these states. Both Florida and Washington required large minimum populations (5,000 residents and 3,000 residents respectively) in order to incorporate. These population threshold requirements are the largest in the country. California does not have a large minimum population threshold to qualify for incorporation (only 300 residents) but it does have a commission that must review potential incorporations. Local Agency Formation Commissions (LAFCO) were created in California to "approve or disapprove any petition for incorporation, special district formation, dissolution or annexation. For municipal incorporation petitions, they may exclude territory from the proposed incorporation, but not include territory not mentioned on the petition" (Miller 1981 103). Additionally, the majority of the LAFCO board members are composed of

county commissioners. As Miller points out, the membership of the LAFCO board (i.e., county commissioners and representatives from existing municipalities) greatly impact the incorporation timeline. The board's membership will attempt to protect their individual interests before approving the incorporation of a new municipality. Board members are concerned with protecting their turf through future annexations, the potential impacts new cities have on the tax base and the provision of urban services. In effect, areas wishing to incorporate often are delayed for a considerable time period and the population of some of these NIMs can grow substantially during the intervening years.

The three largest NIMs created in the nation during the 1990s were Citrus Heights, CA; Federal Way, WA; and Deltona, FL. These three NIMs each have different origins. Citrus Heights, CA (see Figure 5) had been an unincorporated suburb of Sacramento for most of the 20<sup>th</sup> century and had seen steady residential growth. Beginning in the 1970s, with the construction of a regional mall, the community began considering incorporation. After several failed efforts to incorporate, Citrus Heights and the County Supervisor reached an agreement on incorporation and in 1996 a vote was held of the residents of the area. Citrus Heights was subsequently incorporated with more than 62% of residents voting for incorporation (Citrus Heights, 2007).

TABLE 6: NIMs with Populations Greater Than 20,000

NIM	State	2000 Population
Citrus Heights city	CA	85,071
Federal Way city	WA	83,259
Deltona city	FL	69,543
Chino Hills city	CA	66,787
Lake Forest city	CA	58,707
Lakewood city	WA	58,211
Taylorsville city	UT	57,439
Shoreline city	WA	53,025
Weston city	FL	49,286
Murrieta city	CA	44,282
Wellington village	FL	38,216
Sammamish city	WA	34,104
Wildwood city	МО	32,884
Bonita Springs city	FL	32,797
Palm Coast city	FL	32,732
Burien city	WA	31,881
Laguna Hills city	CA	31,178
University Place city	WA	29,933
Oakley city	CA	25,619
SeaTac city	WA	25,496
Aventura city	FL	25,267
Windsor town	CA	22,744
Calabasas city	CA	20,033

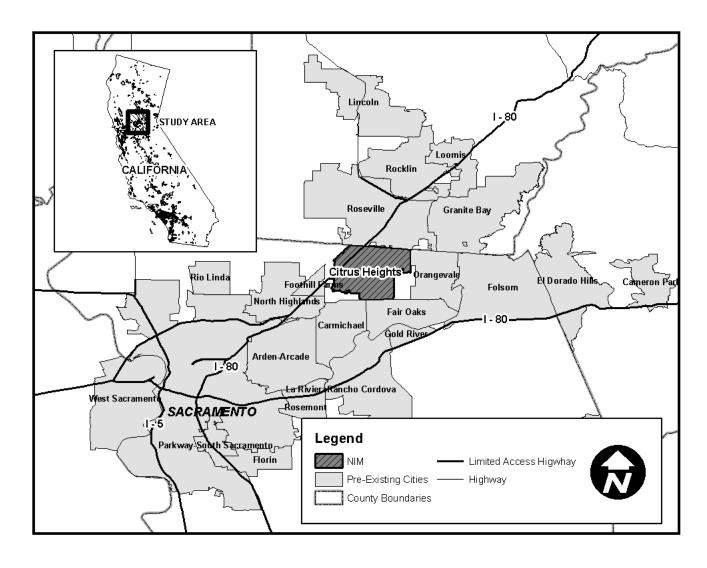


Figure 6. Map of Citrus Heights, CA

The City of Federal Way, Washington (see Figure 6) experienced a similar pattern of development to that of Citrus Heights, CA. Federal Way was originally a logging settlement that slowly grew into a residential suburban enclave for commuters to both Seattle and Tacoma due to its strategic geographic location. Starting in the 1960s the area that would become Federal Way witnessed a residential housing explosion as a result of the growth of two companies with a local presence -- Boeing and Weyerhauser. Additionally, the SeaTac Mall was constructed in the 1970s. As a result of this residential and commercial growth, the community began calling for incorporation as a means to control growth and the quality of life in the area and in 1990 Federal Way was officially incorporated (Federal Way, 2007). Seven additional NIMs were also incorporated near Federal Way during the 1990s. The include: Burien, Covington, Edgewood, Lakewood, Maple Valley, SeaTac, and University Place.

Deltona, FL (see Figure 7) had a different evolution than Citrus Heights and Federal Way. The community began to evolve in 1962 with the purchase of 17,203 acres by the Mackle Brothers and the submittal of a planned unit development request for the subdivision of the property into 35,173 lots. Unlike the previous two NIMs, Deltona began as a greenfield site that did not have any development prior to 1962 and quickly became a large unincorporated community. As the population grew, Deltona began to feel the pressure

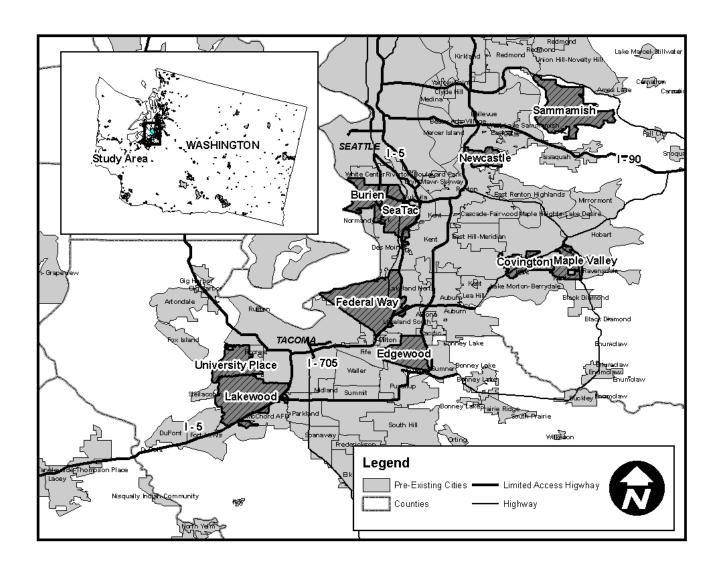


Figure 7. Map of Federal Way, WA

incorporate. Finally, after two unsuccessful incorporation attempts the City of Deltona, FL was created in 1995 (Deltona, 2007). The municipality of DeBary, to the west of Deltona, also incorporated during the 1990s.

Several key factors seem to play a role in shaping NIMs with substantial population bases. First, two of the three largest NIMs shared a long history of urbanization (Citrus Heights, CA and Federal Way, WA). Additionally, two of the three largest NIMs experienced multiple failed incorporation attempts (Citrus Heights, CA and Deltona, FL). These histories show that the largest NIMs created during the 1990's were nurtured over many decades. In conclusion, while each NIM is unique some have experienced similar growth trajectories.

While some NIMs are unusually large there are others that seem remarkably small. Of the 263 NIMs created in the 1990s, 36 had a 2000 population of less than 200 residents (see Table 7). While the large, well-populated NIMs are spatially concentrated in CA, FL, and WA, the smallest NIMs do not seem to follow a similar geographic clustering. However, there is still some level of geographic regionalization, where nearly half (48%) of the 36 smallest NIMs were incorporated in the South Census Region. Missouri, which borders the South Region, contained an additional eleven NIMs or nearly one-third of all the smallest NIMs. Missouri was also home to three of the four smallest NIMs in the study, all with populations less than 18 according to the 2000 Census.

Unlike the large minimum population thresholds that are required to incorporate in Florida and Washington, many of the South Census Region states have very low population requirements. For example, Missouri had no minimum population requirement and Oklahoma only required 25 residents to incorporate a jurisdiction.

TABLE 7: NIMs with Populations Less Than 200

NIM	State	2000 Population
River Bend village	MO	10
Biehle village	MO	11
West Hampton Dunes village	NY	11
McBaine town	MO	17
Natural Bridge town	AL	28
Irena village	MO	33
Pinhook village	MO	48
Holiday City village	OH	49
Taos Ski Valley village	NM	56
Horntown town	OK	61
Spaulding town	OK	62
False Pass city	AK	64
Parkline city	ID	65
Swink town	OK	83
St. Joe town	AR	85
Rives town	MO	88
Coney Island village	MO	94
Dutchtown village	MO	99
Pilot Point city	AK	100
Grand Falls Plaza town	MO	104
Millican town	TX	108
Vidette city	GA	112
Atwood town	OK	113
Springtown town	AR	114
Egegik city	AK	116

Miramiguoa Park village	МО	127
Fountain N' Lakes village	MO	129
Rockville town	SC	137
Buckhorn city	KY	144
Blackey city	KY	153
Chimney Rock village	NC	175
Volo village	IL	180
Pocasset town	OK	192
Mobile City city	TX	196
Caledonia village	IL	199
Elmore town	AL	199

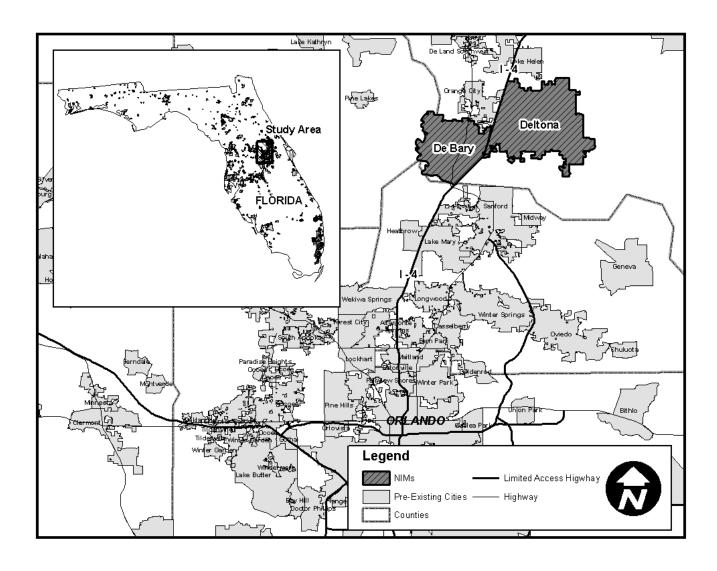


Figure 8. Map of Deltona, FL

These low legislative thresholds may partially explain the incorporation of many smaller communities in these states.

Secondly, some South Census Region states may have a historical bias that tends to lead to the creation of smaller towns. In general, these states are less urbanized and do not have the same history of larger urbanized areas as seen in other parts of the country. Efforts to maintain a small town way of life or a preconceived notion of what city life should be like may lead citizens to try and incorporate small cities in an effort to retain their rural heritage.

The three smallest NIMs were River Bend, MO (10); Biehle Village, MO (11); and West Hampton Dunes Village, NY (11). River Bend, MO (see Figure 8) was the smallest NIM created during the 1990s. It was incorporated to protect the residents of the small community from annexation by nearby neighboring cities. A settlement between River Bend residents and Jackson County allowed the incorporation to move forward. The settlement specifically allows for the incorporation of almost 1,100 acres minus "85 acres containing water wells that serve much of Eastern Jackson County" (Cramer, 1998). The incorporation comes on the heels of years of litigation between the County and the community of River Bend. The community had taken the County to court believing that they were already a municipality since Jackson County had not acted on their initial petition to incorporate within the required six months back in 1996. As a result of the incorporation the community will be protected from being annexed by the

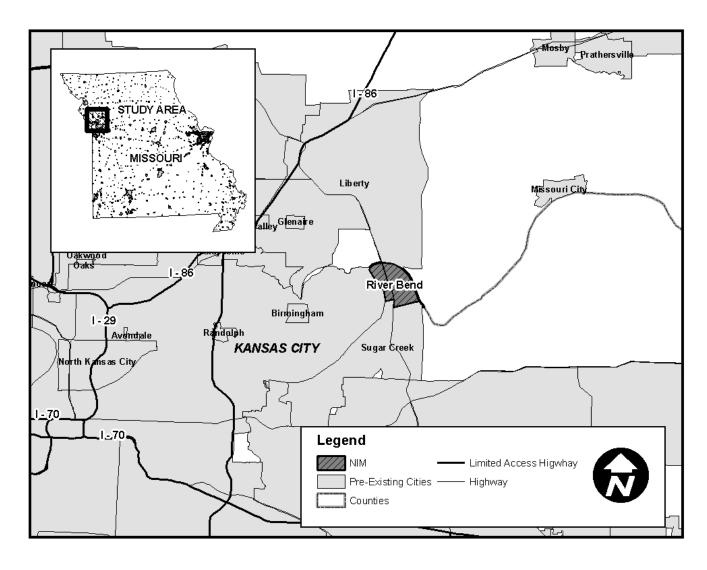


Figure 9. Map of River Bend, MO

nearby towns of Liberty, Independence and Sugar Creek according to the local newspaper (Cramer, 1998).

The Village of Biehle, MO (see Figure 9) was incorporated in 1991 and had a 2000 population of 11. Biehle, MO was originally incorporated to provide fire protection to the area. Prior to the incorporation, the nearest fire department in Biehle was 10 miles away (Associated Press, 2003). However, by 2003 Biehle had disincorporated because the sales tax revenue that was generated to pay for the fire service had disappeared as a result of the Village's only tax producing business, Buchheit, Inc. a farm and building supply store, moving most of its operations out of town in 2000. Coincidentally, the business only moved a few miles to Perryville, MO, a larger municipality to the north of Biehle.

The tiny village of West Hampton Dunes, NY (see Figure 10) has had a somewhat different path to incorporation. West Hampton Dunes, NY is a community that consists of 342 properties but only 11 full-time residents according to the 2000 U.S. Census. The Village is an upscale beach community on the southern tip of Long Island. The primary motivation behind efforts to incorporate focused on solving decades of concern over beach erosion. Prior to incorporation the property owners of the Village of West Hampton Dunes were party to numerous legal initiatives against Suffolk County, the State of New York and the federal government. These legal challenges were focused on rebuilding two miles of beach and constructing a dune that was lost following "the construction of a groin field to the east of the Village boundary" (Daley and

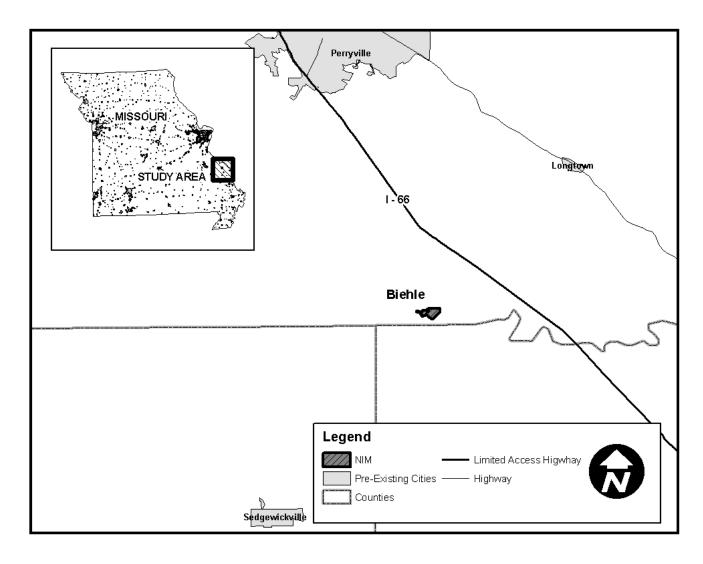


Figure 10. Map of Biehle, MO

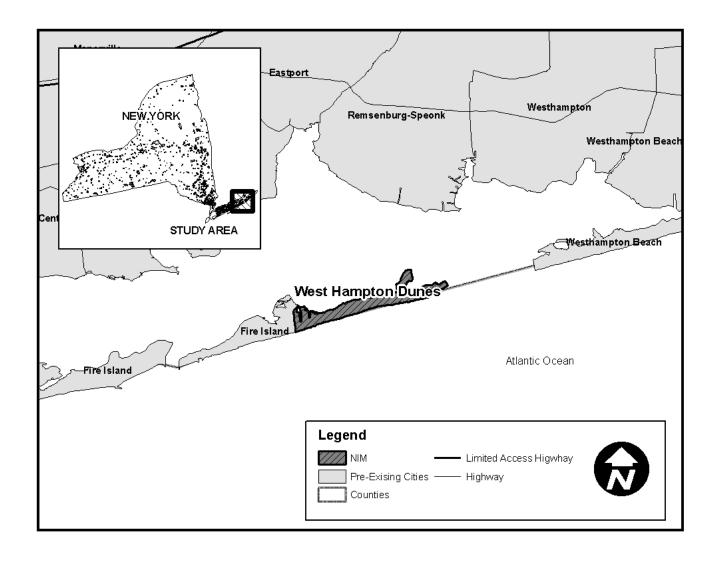


Figure 11. Map of Westhampton Dunes Village, NY

Jones, 2001, 1). The incorporation of West Hampton Dunes Village, a legally and politically recognized entity, paved the way for the "redevelopment of the Village, improved public access, endangered habitat enrichment and vital coastal flood and erosion protection" (Daley and Jones, 2000, 1).

These three NIMs highlight the difficulty in developing a coherent explanation for why some NIMs are established with very small populations. River Bend, MO, viewed incorporation as an alternative to annexation while the Village of Biehle, MO, incorporated to provide a public service but was disincorporated shortly thereafter due to insufficient funds. Finally, West Hampton Dunes Village became a municipality in an effort to "fix" ongoing environmental problems. Unlike the largest NIMs created in the 1990s, many of the smallest NIMs had complicated and unique explanations regarding the logic for their origins.

#### 4.1.4 NIMs in the United States: Clustering

An explicit dichotomy of NIM formation existed during the 1990s. More than 44% of the NIMs (116) are located in a county where at least one other NIM incorporated between 1990 and 2000 (Table 8). For example, King County, WA (Seattle) experienced 10 incorporations, Union County, NC (just outside of Charlotte) contained 6 NIMs and Guilford County, NC (Greensboro, NC) was home to 5 new municipalities. Miami-Dade County, Florida also experienced a comparable clustering effect with 4 new municipalities being incorporated during

the 1990s. Meanwhile, the remaining 147 NIMs were formed in relative isolation of other NIMs.

TABLE 8: Counties with Multiple NIMs, 2000

# of NIMs	County	State	
10	King	Washington	
6	Union	North Carolina	
5	Guilford	North Carolina	
4	Miami-Dade	Florida	
4	Essex	New Jersey	
4	Hidalgo	Texas	
3	Tuscalossa	Alabama	
3	Orange	California	
3	Riverside	California	
3	McHenry	Illinois	
3	Brunswick	North Carolina	
3	Forsyth	North Carolina	
3	Hughes	Oklahoma	
3	Salt Lake	Utah	
3	Pierce	Washington	
2	Elmore	Alabama	
2	Jackson	Alabama	
2	Shelby	Alabama	
2	Lake & Pennisula		
2	Faulkner	Arkansas	
2	Los Angeles		
2	San Bernardino		
2	Lee	Florida	
2	Monroe	Florida	
2	Volusia	Florida	
2	Boone	Illinois	
2	Kane	Illinois	
2	Montgomery	Maryland	
2	Alcorn	Mississippi	
2	Newton	Missouri	
2	St. Louis	Missouri	
2	Stone	Missouri	
2	Rockland	New York	
2	Alamance	North Carolina	
2	Carteret	North Carolina	
2	Columbus	North Carolina	

2	Choctaw	Oklahoma
2	Charleston	South Carolina
2	Unicoi	Tennessee
2	Williamson	Tennessee
2	Utah	Utah
2	Weber Utah	
2	Marion	West Virginia

The clustering of NIMs to specific counties can be partially explained by a "herd mentality" where a local political culture is established that facilitates the diffusion of a NIM ideology in response to the aggressive annexation tactics of neighboring cities. A 'copy cat' effect seems to take place within a region after the first unincorporated community successfully makes the transition to NIM status. This 'seedbed effect' seems to encourage other unincorporated territories to consider incorporation strategies. A good example of this is the recent proliferation of NIMs within the Greensboro/Winston-Salem/High-Point Combined Statistical Area (CSA). The Greensboro CSA generated 13 NIMs during the 1990s (Figure 11) creating a sort of 'incorporation frenzy' that lasted throughout the decade. According to the *Greensboro News & Record* "incorporation fever has swept through the Piedmont recently as small, rural communities have decided to become towns rather than get swallowed by a nearby city" (Barron 1996, B1).

By contrast, isolated NIMs are formed for fairly unique reasons that are largely unrelated to competing jurisdictional pressures and are more likely the product of local political conditions (i.e., the need for services). These isolated

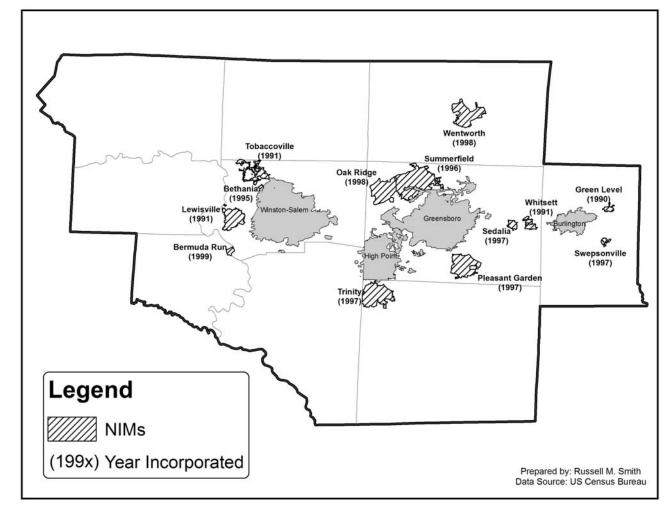


Figure 12. Spatial Distribution of NIMs established between 1990 – 2000 in the Greensboro/Winston-Salem/High Point Combined Statistical Area

NIMs can be generally characterized as quintessential small rural communities.

These places are often slow to urbanize and eventually incorporate or they incorporated as a result of a community need. This process has been the traditional life cycle of incorporating communities around the country for many decades.

This dichotomy of NIM formation results in unique population patterns.

The clustering NIMs witnessed a mean population of 9,698 and a median population of 2,125 according to 2000 Census data. In contrast, NIMs that were incorporated in relative isolation had a mean population of 3,617 and a median population of 677. This wide discrepancy in mean and median population highlights a basic geographic difference among clustering and isolated NIMs. Additionally, this data may point to the impact population has on the spatial location of NIMs. For example, more populated NIMs can usually be found closer to other NIMs than less populated NIMs.

These findings highlight the geographic variation experienced by NIMs created during the 1990s. In particular, the locational variation of NIMs by Census Region and State offer a unique glimpse into the geography of new municipalities. Additionally, the examination of the peculiar population patterns of these NIMs also provides much needed insight into this relatively unexplored field. Finally, the explicit dichotomy that exists between clustering NIMs and isolated NIMs offers numerous possibilities for future research.

However, a key question left unanswered is whether or not statistically significant differences exist between NIMs and a group of NIM Cohort Municipalities along a range of socio-economic variables. Some of the literature suggested that many NIMs are formed as defensive incorporations to thwart the expansionist strategies of a nearby larger city (Rigos and Spindler 1991; Burns 1994). Others argue that many NIMs are homogeneous enclaves of largely white, upper-income residents that wish to 'slam the door shut' on their more diverse, big-city neighbors (Blakely and Snyder 1997; Teaford 1997; Musso 2001). Testing to see if there are statistically significant differences between NIMs and a group of cohort cities on a range of socio-economic variables will make it possible to determine if the literature and the hypothesis of this dissertation are correct.

#### 4.2. A Statistical Comparison of NIMs and their Cohort Municipalities

It has been hypothesized that NIMs will be statistically significantly different from a group of Cohort municipalities and that the differentiating variables will include: population size, population density, race, median household income, and percent poverty to name a few. To explore this question a t-test was performed to examine the relationship between the 263 NIMs established during the 1990s and a select group of 234 Cohort municipalities.

Additionally, it is hypothesized that the key differentiating variables between NIMs and Cohort will not deviate based upon geography. The results

presented in Section 1 revealed an uneven distribution of NIMs across the country. As a result, a two way analysis of variance (ANOVA) procedure was conducted for both U.S. Census Region and Metropolitan/Micropolitan Statistical Area designation to determine if geographic location by region and metropolitan area influenced the socio-economic differences that existed between NIMs and Cohort municipalities. The two way ANOVA tests for regional differences and NIM-Cohort differences simultaneously. The ANOVA tests examined the relationship between NIMs and Cohort cities for the Northeast, Midwest, South, and West Census Regions. Additionally, an ANOVA test also examined the relationship between NIMs and Cohort cities located in both Metropolitan/Micropolitan Statistical Areas and Non-Metro/Micro locations. A three way ANOVA was not utilized because the results of such a procedure would be beyond the scope of this study. In particular, this dissertation is not interested in the relationship between Metro/Non-Metro municipalities and Census Region. Variables that do not show any significant interaction between the Group (i.e., NIM or Cohort) and Region (i.e., North, Midwest, South and West) or the Metropolitan Affiliation (i.e., Metropolitan/Micropolitan Statistical Area or Non-Metro/Micro Area) are reported in separate sections.

Finally, the results of these tests are discussed below in the following order. First, the results of the national t-test of socio-economic variation between NIMs and Cohort municipalities will be explained. Secondly, the results of the ANOVA procedure by U.S. Census Region will be presented. This will begin with

a discussion of NIM and Cohort variation by Census Region and conclude with a presentation of any significant interaction effects between NIM/Cohort and Census Region. Additionally, the ANOVA procedure findings for the Metropolitan/Micropolitan geography will also be discussed. This will include a discussion of NIM variation and Cohort variation by Metropolitan/Micropolitan designation and end with a discussion of any significant interaction effects between NIM/Cohort and Metropolitan/Micropolitan designation.

#### 4.2.1 T-test: NIMs vs. Cohort Cities

Table 9 highlights the results of the statistical differences for all 263 NIMs and 234 Cohort Cities (some NIMs shared the same Cohort City) included in the database. Fourteen (14) of the twenty four (24) socio-economic variables included in this analysis were statistically different at the 5% level of significance. Not surprisingly, total population, population density and the percentage of white resident were all statistically significantly different.

TABLE 9: T-Test Results for NIMs and Cohort Cities, 2000

	NIM Mean	Cohort City	Difference
Variable	(n=263)	Mean (n=234)	(NIM-Cohort City)
Population (Persons)	6,300	54,958	-48,658
Density (Person per Square Mile)	1,110	1,582	-472
White Residents (%)	86.2	81.9	4.3
Median Household Income (\$)	48,529	41,621	6,908
Median Value of Owner Occupied	148,376		
Housing Units (\$)	(n=257)	119,554	28,822
Residents Living in Poverty (%)	11.1	13.8	-2.7
Mean Travel Time to Work			
(Minutes)	27.3	24	3.3
Residents Employed in City of	14.4	35.8	-21.4

Residence (%)			
Median Year Structure Built			
(Year)	1976	1973	3
Residents Residing in Same			
House or City in 1995 (%)	60.8	63.5	-2.7
Median Year Household Moved			
into Structure (Year)	1992	1994	-2
Median Age (Years)	38.4	36.6	1.8
Residents with College Degree or			
Better (%)	22.4	22.4	0
Black Residents (%)	7.1	9.5	-2.4
Hispanic or Latino Residents (%)	7	9	-2
Residents 65 and Older (%)	13.6	14.2	-0.6
Per Capita Government Revenue			
(\$)	2,375 (n=194)	1,656 (n=200)	719
Per Capita Government			
Expenditure (\$)	2,228 (n=194)	1,683 (n=200)	545
Occupation: Management (%)	31.7	30.9	0.8
Occupation: Service (%)	13.4	15.7	-2.3
Occupation: Sales (%)	25.6	26.5	-0.9
Occupation: Farming (%)	0.9	0.7	0.2
Occupation: Construction (%)	12.2	10.7	1.5
Occupation: Production (%)	16.2	15.6	0.6

Source: U.S. Census Bureau

Bold indicates significant differences at the .05 level

Nationally, NIMs had much smaller populations than the Cohort group (6,300 versus 54,958, respectively). Likewise, NIMs also had much lower population densities (1,110 persons per square mile) than the Cohort municipalities (1,582 persons per square mile). Finally, NIMs had a significantly larger percentage of white residents (86.2%) than did Cohort municipalities (81.9%). These findings are consistent with the literature on municipal incorporation that suggests some new cities are created to 'escape' from their larger, denser, more heterogeneous neighbors.

Several other variables followed the expected findings based on the existing literature on municipal incorporation. Median household income and the median value of owner occupied units were both significantly higher in NIMs than in the Cohort Cities. The median household income for NIM residents averaged \$48,529 compared to just \$41,621 for Cohort municipalities. Likewise, the median value of NIM owner occupied housing units averaged \$148,376 compared to just \$119,554 for the Cohort municipalities. Additionally, the percentage of residents in poverty was significantly lower in NIMs than Cohorts (NIMs - 11.1% vs. Cohorts - 13.8%). The existing literature has argued that NIMs tend to be wealthier enclaves and as a result have higher income levels, higher house values, and lower poverty levels. The data in this dissertation seems to confirm these theories.

However, several of the statistically significantly different variables in this dissertation have not received much attention in the existing literature and need further explanation. Mean travel time and the percent of residents employed in the city of residence are both statistically significantly different. Mean travel times are longer in NIM communities (27.3 minutes) when compared to the Cohort group (24 minutes) and fewer NIM residents are employed in their city of residence when compared to the Cohort cities (14.4% versus 35.8%). These results show that NIM residents spend more time driving to work and as a result the likelihood that they leave their NIM of residence increases. It appears that, since most NIMs are relatively new places they may also have not had the

opportunity to fully develop mature, diversified employment centers within the NIM community.

The average median year a structure was built was also statistically significantly different at the 5% level (NIMs - 1976, Cohort Cities – 1973). This result is not surprising since it was expected that newer structures would predominate in the newer NIMs. Additionally, the percentage of residents residing in the same house or city in 2000 as they did in 1995 was also lower for NIMs (60.8%) compared to Cohort cities (63.5%). This result was also expected given the newness of NIMs. However, the median year that households moved into the structure in which they resided in, according to 2000 U.S. Census data, was 1992 for NIMs and 1994 for the Cohort Cities. A potential explanation for this surprising discrepancy is that the larger, denser Cohort City group experiences more population turnover and as a result has newer residents. A finding that supports this conclusion is the statistically significantly different median age between NIMs and Cohorts populations. Cohort municipalities contain a statistically significantly younger population than the NIMs and during the early part of a person's life cycle people tend to move more often.

One of the most surprising results was the lack of a statistically significant difference between NIMs and Cohort municipalities regarding the percentage of residents with a college degree. The existing literature on municipal incorporation has implied that NIMs tend to capture more highly educated, wealthier residents yet both NIMs and Cohort Cities reported 22.4% of their

populations having college degrees. However, several of the surrogate variables for education (e.g. median income, median value of owner occupied units, and percentage of residents living in poverty) were determined to be significantly different based on the results of the national T-test.

The following variables were not statistical significantly different for NIMs and Cohorts: the percentage of black and Hispanic or Latino residents, the percentage of residents 65 and older, Per Capita Government Revenue, Per Capita Government Expenditure and many of the occupational variables (e.g. % Management, % Sales, % Farming, and % Production). First and most interesting, the percentage of black and Hispanic residents', which was thought to be of importance in determining differences between NIMs and Cohorts, was not statistically significant. However, the percentage of black residents in NIMs (7.1%) was lower than in the Cohort cities (9.5%). Similar trends were reported in the percentage of Hispanic residents located in NIMs (7%) and Cohort cities (9%). It is expected that the 2010 U.S. Census may reveal a very different picture regarding the mix of the Hispanic population given the rapid growth rate for this ethnic group throughout the United States.

Another variable that was not statistically significantly different was the percentage of residents 65 and older. The percentage of residents 65 and older was slightly lower in NIMs (13.6%) than in Cohort cities (14.2%). The Cohort cities may experience slightly larger percentages of older residents due to the provision of elderly retirement centers within larger more established cities.

However, it is expected that this variable will play a more substantive role in determining a National NIM Typology due to the rapid growth of large planned retirement communities across the country and their potential to further develop into larger new cities.

Additionally, the fiscally derived variables that examined the spending and collection of municipal dollars (i.e. per capita municipal revenue and expenditure) were not statistically different although NIMs collected more revenue per capita (e.g. \$2,375 - NIMs vs. \$1,656 - Cohorts) and spent more money per capita (e.g. \$2,228 - NIMs vs. \$1,683 - Cohorts) than the existing larger Cohort cities. The higher revenue collection figures recorded for NIMs was not surprising given the fact that NIMs contain a citizenry that have higher paying jobs and can afford more expensive homes than the Cohort group. Higher incomes and home valuations will tend to generate larger revenue streams through taxation. Additionally, having fewer residents' living in poverty can reduce the potential tax burden for NIMs. However, it was not expected that NIMs would have higher expenditures per capita than the Cohort cities. Much of the literature on municipal incorporation theorizes that some locations incorporate in an effort to escape the higher taxes and public spending found in existing larger municipalities. The higher per capita government expenditures for NIMs may highlight the cost of providing services in new smaller cities. The Cohort municipalities can disperse the potential cost of services over a larger population base, thus reducing the per capita costs found in these cities. Meanwhile, NIMs

have smaller populations through which to distribute governmental costs (e.g. trash collection, water and sewer service, park facilities, etc.).

By and large, the occupational composition of NIMs and Cohort cities as measured by the percentage of the labor force in specific economic activities was broadly comparable. This may be the result of the variable itself as it measures the occupation of the population by residence and not by workplace. For example, the percentage of the population in a given area employed in management occupations may be relatively equally distributed between NIMs and Cohorts by residence, even though a majority of the jobs are located in Cohort cities. The two exceptions included the percentage of residents employed in both services and construction. Services are defined here as people employed in occupations relating to the provision of services including but not limited to health care support occupations, protective services occupations, food preparation and serving, and personal care professions. NIMs contain a statistically significantly lower percentage of residents in services (i.e. 13.4% -NIMs vs. 15.7% - Cohorts) and a significantly higher percentage of residents in construction (i.e. 12.2% - NIMs vs. 10.7% - Cohorts). These findings may highlight the fact that many NIMs are bedroom communities that lack services. As a result, NIMs rely on their largest nearest neighboring city to provide this economic niche. Likewise, NIMs have fewer residents employed in service occupations because service jobs tend to be lower paying professions in which it does not make financial sense to live far from their place of employment. NIMs

may be cost prohibitive for this employment group due to the higher home values found in NIMs. Conversely, the percentage of residents employed in the construction industry was higher in NIMs than Cohorts. This may be the result of construction employees living closer to where they work. There is potentially a greater chance for development and growth and thus construction opportunities in newer areas away from more established urban centers.

In conclusion, the national T-test determined that NIMs are less populated, whiter, wealthier enclaves with fewer residents living in poverty as suggested by the existing literature on NIMs. However, the national examination of NIMs also identified subtle differences that had not been expected. Some of these more subtle findings may only emerge at the national level when the dataset includes large numbers of NIMs – previous NIM research has been largely conducted at the local or regional scale. One example of a more subtle difference in the behavior of NIMs and Cohort cities is the finding that NIM residents on average have lived longer in their structures than have Cohort residents. Other important findings included the lack of statistical significance for the percentage of black residents, percentage of Hispanic or Latino residents, and the percent of residents with a college education variable. Clearly more research is needed to more fully understand the significant differences that exist between NIMs and Cohort cities.

# 4.2.2. TWO WAY ANOVA: NIMs and Cohort City Comparison by U.S. Census Region

A two way ANOVA was conducted to examine the relationships that exist between NIMs and Cohort municipalities across the four census regions of the United States (i.e., Northeast, Midwest, South and West). The two way ANOVA test placed the NIMs and Cohorts into 8 combinations of Group (i.e., NIM or Cohort) and Region (i.e., Northeast, Midwest, South and West). In general, the two way ANOVA procedure found that there was very little interaction effect between the Region and Group for the NIMs and Cohort cities. As a result, when there is no significant interaction the main effects were examined, otherwise the simple effects are reported. The next two sections explore, first, the variations among NIMs themselves by region and second, the differences in the four regions' Cohort municipalities.

#### NIM Variation by Census Region

Of course, some regional differences do exist among NIMs. Table 10 highlights the statistically significant differences that exist between NIMs across the four Census Regions. In general, the Northeast NIMs had the greatest variation when compared to the other three regions. However, only 11 NIMs were established during the 1990s in the Northeast region.

An examination of NIMs by U.S. Census region reveals that the population size and population density of NIMs are both statistically significant variables.

Western NIMs had statistically significantly higher populations (17,565) than the

NIMs of the Northeast (4,821), Midwest (2,683) and South (3,505). The larger population base found in Western NIMs may be the result of higher minimum population thresholds dictated by State law as discussed earlier in the chapter. For example, the state of Washington requires a minimum of 3,000 residents in

TABLE 10. Mean Regional Differences between NIMs, 2000

Variable	Northeast NIMs (n=11)	Midwest NIMs (n=47)	South NIMs (n=151)	West NIMs (n=54)
Population (Persons)	4,821 <sup>b</sup>	2,683 <sup>b</sup>	3,505 <sup>b</sup>	17,565 <sup>a</sup>
Density (Person per Square Mile)	3,651 <sup>a</sup>	554 <sup>b</sup>	863 <sup>b</sup>	1,765 <sup>b</sup>
White Residents (%)	93.1	93.4	85.2	81.3
Black Residents (%)	2.5	3.9	10.3	1.8
Hispanic or Latino Residents (%)	2.2	1.9	7.9	10.2
Median Age (Years)	40	38.2	39.2	35.9
Residents 65 and Older (%)	17.3	12.2	14.7	11.1
Residents with College Degree or Better (%)*	46.3 <sup>a</sup>	17.8 <sup>c</sup>	19.7 <sup>c</sup>	28.8 <sup>b</sup>
Median Value of Owner Occupied Housing Units (\$)*	306,509 <sup>a</sup>	124,812 <sup>c</sup> (n=43)	116,227 <sup>c</sup> (n=150)	225,663 <sup>b</sup> (n=53)
Median Year Structure Built (Year)**	1961 <sup>b</sup>	1971 <sup>c</sup>	1978 <sup>a</sup>	1982 <sup>a</sup>
Median Year Household Moved into Structure (Year)	1991 <sup>b</sup>	1992 <sup>b</sup>	1992 <sup>b</sup>	1995 ª
Residents Residing in Same House or City in	62.0	60.7	60.6	EE 4
1995 (%) Median Household	63.9	60.7	62.6	55.1
Income (\$)	75,891 <sup>a</sup>	49,762 b	43,570 b	55,748 <sup>b</sup>
Residents Living in Poverty (%)	9	9.5	13	7.4
Residents Employed in City of Residence (%)	12.3 <sup>b</sup>	10.5 b	12 <sup>b</sup>	24.7 <sup>a</sup>
Occupation: Management (%)	54.4 <sup>a</sup>	28.2 b	29.7 b	35.7 <sup>b</sup>
Occupation: Service (%)	7.3 <sup>a</sup>	14.3 <sup>b</sup>	13.1 <sup>b</sup>	14.7 b

Occupation: Sales (%)	23.2	26	25.2	26.8
Occupation: Farming (%)	0.1	0.3	1.1	1.4
Occupation: Construction				
(%)	9.5	11.7	13.1	10.5
Occupation: Production				
(%)***	5.5 <sup>c</sup>	19.4 <sup>a</sup>	17.8 <sup>b</sup>	10.8 <sup>c</sup>
Mean Travel Time to Work				
(Minutes)	31.2	27.6	27.4	26
Per Capita Government	0	0	3,985	769
Revenue (\$)	(n=4)	(n=34)	(n=106)	(n=50)
Per Capita Government	0	0	3,689	832
Expenditure (\$)	(n=4)	(n=34)	(n=106)	(n=50)

Source: U.S. Census Bureau

### Bold indicates significant differences at the .05 level.

Different letters (a, b, c) indicate significant differences at the .05 level.

- \* Both the Midwest and South are statistically significantly different from both the Northeast and West. However, the Northeast and West are also statistically significantly different from one another. Finally, the Midwest and South are not statistically significantly different.
- \*\* Both the South and West are statistically significantly different from both the Northeast and Midwest. However, the Northeast and Midwest are also statistically significantly different from one another. Finally, the South and West are not statistically significantly different.
- \*\*\* Both the Northeast and West are statistically significantly different from both the Midwest and South. However, the Midwest and South are also statistically significantly different from one another. Finally, the Northeast and West are not statistically significantly different.

order to petition for incorporation. Additionally, California utilizes local government commissions at the county level to review and approve any municipal incorporation. This may serve to delay incorporation and allow for the population of a particular place to grow prior to being formally incorporated. Meanwhile, Northeastern NIMs had the highest population density with 3,651 persons per square mile compared to 554 persons per square mile in the Midwest, 863 persons per square mile in the South, and 1,765 persons per square mile in the West. Higher population densities in the Northeast may be a byproduct of the limited amount of land available for urban development due to

the regions longer history of urbanization and the politically fragmented geography of the region which limits municipal expansion.

Additional statistically significant variables by U.S. Census region include the percentage of residents with college degrees or better, median value of owner occupied housing units, median year structure was built, median year household moved into structure, median household income, and several of the occupational variables (i.e. Services, Sales, Production).

In particular many of these variables highlight the regional differences between the Northeast and the rest of the country. Specifically, the Northeastern NIMs had greater percentages of residents with college educations (46.3%) when compared to the Midwest, South and West (i.e. 17.8%, 19.7%, and 28.8% respectively). Northeastern NIMs also had higher median values for owner occupied housing units (i.e. \$306,509 – NE vs. \$124,812 – MW, \$116,227 – South, and \$225,663 – West). The highest median household incomes could be found in the Northeast (\$75,891) compared to a median household income of \$49,762 in the Midwest, \$43,570 in the South, and \$55,748 in the West. Greater percentages of residents are employed in management occupations in Northeastern NIMs (54.4%) as compared to Midwestern (28.2%), Southern (29.7%), and Western (35.7%) NIMs. Conversely, the new municipalities of the Northeast contain smaller percentages of residents employed in service occupations (i.e. 7.3% - NE) when compared to the NIMs of the Midwest, South and West (i.e. 14.3% - MW, 13.1% - South, and 14.7% - West). These results all reveal the inter-relationship that exists between education, home value, income, and occupation (i.e. management). The Northeast had higher values on all of these variables compared to the Midwest, South, and West NIMs. This may be the result of the small sample size found in the Northeast (n=11).

Finally, and not surprisingly is the fact that the Northeast also has an older housing stock than the rest of the country (i.e. 1961 – NE vs. 1971 – MW, 1978 – South, and 1982 – West). This finding may be partly explained by the fact that the Northeast has been settled and occupied for a longer period of time than the Midwest, South, and West.

The percentage of residents employed in the city of residence and the median year the household moved into their structure were both statistically significant. Specifically, NIMs from the West Census Region had statistically significantly larger percentages of residents who are employed in the city in which they reside (24.7%) when compared to the Northeast (12.3%), Midwest (10.5%), and South (12%). Since Western NIMs have larger populations (17,565) they may also have more employment opportunities located within their cities to employ residents. Likewise, Western NIMs also have the lowest mean travel time to work (26 minutes) when compared to the other regions (31.2 in the NE, 27.6 in the MW, and 27.4 in the South). This supports the previous finding that many residents' of Western NIMs find employment in or near their place of residence and as a result have shorter commutes.

Western NIMs also contained a larger percentage of newer residents (median year household moved into structure). The median year a householder moved into their structure in the West was 1995 compared to 1991 in the Northeast, and 1992 in both the Midwest and South. The West Region had the largest percentage of population growth between 1990 and 2000 (19.7%). These roughly 10.4 million new residents helped to contribute to the larger percentage of newer residents found in Western NIMs and therefore helped reduce the median year a householder moved into their structure.

Other variables that were not statistically significant but are worthy of comment include the race/ethnic composition variables (i.e. percentage of white residents, percentage of black residents, and percentage of Hispanic or Latino residents). While race/ethnicity does not deviate in any statistically significant way by U.S. Census region, some of the findings associated with these variables are revealing. For example, Northeastern and Midwestern NIMs have the highest percentage of white populations with both having in excess of 93% of their populations classified as Caucasian, while Southern NIMs only had 85.2% of their population listed as White and Western NIMs only had 81.3%.

Meanwhile, Southern NIMs contained the largest percentages of black residents (10.3%) compared to 2.5% in the Northeast, 3.9% in the Midwest, and 1.8% in the West. Western NIMs contained the largest percentages of Hispanic residents (10.2%) compared to 2.2% in the Northeast, 1.9% in the Midwest, and 7.9% in the South. These findings generally confirm the expected racial/ethnic

composition of each region but also highlight the diversity of NIMs across the nation. Both the South and West NIMs contained sizeable minority populations (greater than 10%) compared to the Northeast and Midwest, which was not expected given the existing literature that focuses on racial segregation as a major component of municipal incorporation.

In summary, Northeast NIMs are denser, have higher median incomes, and larger percentages of residents employed in management occupations compared to the other regions. Western NIMs distinguish themselves from the Midwestern and Southern NIMs by having statistically significantly higher home values, larger percentages of residents with college degrees and higher percentages of residents that work in the city in which they reside. Neither Midwestern nor Southern NIMs differentiate themselves from the other Census Regions along any major socio-economic variable.

#### Cohort Variation by Census Region

Next our attention focuses on Cohort municipalities which can provide some statistical comparison for better understanding the socio-economic characteristics of NIMs. In general, some regional differences do exist among Cohort municipalities (see Table 11). However, when there is no significant interaction between Group and Region, the Cohort variation should be the similar to that of the NIMs. The population variable was not statistically significant but did reveal a wide discrepancy across the four U.S. Census regions. Western Cohort cities contained 143,998 people compared to 17,512 in the Northeast,

22,981 in the Midwest, and 35,767 in the South. Western NIMs had the largest populations compared to the other regions. An explanation for this phenomenon may be the fact that urban development in the West is generally limited by the availability of public services (i.e., water and sewer). This is especially true when compared to other regions that have had a longer history of urbanization and more political fragmentation which has led to the creation of numerous service providers. As a result, the populace of the

West may find it necessary to take up residence within an existing municipality in order to receive public services.

The major statistical significant differences that exist among Cohort municipalities across the four Census Regions include higher population densities for Northeastern Cohorts (4,741 persons per square mile) compared with only 1,388 persons per square mile in the Midwest, 1,148 persons per

TABLE 11. Mean Regional Differences between Cohorts, 2000

Variable	Northeast Cohorts (n=9)	Midwest Cohorts (n=42)	South Cohorts (n=135)	West Cohorts (n=48)
Population (Persons)	17,152	22,981	35,767	143,998
Density (Person per Square Mile)*	4,741 <sup>a</sup>	1,388 <sup>c</sup>	1,148 <sup>c</sup>	2,379 b
White Residents (%)	75.1 <sup>b</sup>	92.4 <sup>a</sup>	80.8 b	77.1 <sup>b</sup>
Black Residents (%)**	17.3 <sup>a</sup>	3.9 b	13 <sup>ab</sup>	2.9 b
Hispanic or Latino Residents (%)***	6.3 <sup>ab</sup>	2.1 <sup>b</sup>	8.9 <sup>ab</sup>	15.5 <sup>a</sup>
Median Age (Years)	37.4	35.8	38	33.5
Residents 65 and Older (%)****	13.7 <sup>ab</sup>	14 <sup>ab</sup>	15.9 ª	10 b
Residents with College Degree or Better (%)	28.5	21.7	20.7	26.4

Median Value of Owner Occupied Housing Units (\$)*****	157,556 <sup>a</sup>	106,776 <sup>b</sup>	98,476 b	182,894 <sup>a</sup>
Median Year Structure				
Built (Year)	1961 <sup>a</sup>	1970 <sup>b</sup>	1974 <sup>b</sup>	1977 <sup>b</sup>
Median Year Household Moved into Structure				
(Year)*****	1993 <sup>b</sup>	1994 <sup>ab</sup>	1994 <sup>ab</sup>	1996 a
Residents Residing in				
Same House or City in				
1995 (%)	67	65.3	63.7	60.5
Median Household Income				
(\$)	48,138	44,157	37,801	48,923
Residents Living in Poverty	10	44.0	45.0	4.4
(%) Residents Employed in	10	11.2	15.8	11
City of Residence (%)				
*****	21.2 b	36.9 ab	34.6 ab	41 <sup>a</sup>
Occupation: Management				
(%)	35.1	29.7	29.5	34.9
Occupation: Service (%)	17.9	15	15.6	16.2
Occupation: Sales (%)	28.3	27.3	26	27.1
Occupation: Farming (%)	0.2	0.5	0.9	0.6
Occupation: Construction				
(%)	7.7	10.3	11.2	9.9
Occupation: Production (%)	11	17.1	16.8	11.4
Mean Travel Time to Work				
(Minutes)	26	23.3	24.2	23.4
Per Capita Government		1,183	1,546	2,167
Revenue (\$)	2,318	(n=34)	(n=113)	(n=44)
Per Capita Government		1,209	1,539	2,306
Expenditure (\$)	2,237	(n=34)	(n=113)	(n=44)

Source: U.S. Census Bureau

### Bold indicates significant differences at the .05 level. Different etters (a, b, c) indicate significant differences at the .05 level.

- \* Both the Midwest and South are statistically significantly different from both the Northeast and West. However, the Northeast and West are also statistically significantly different from one another. Finally, the Midwest and South are not statistically significantly different.
- \*\* The Midwest, South and West are not statistically significantly different from each other. However, the Northeast is statistically significantly different from both the Midwest and West but not the South.
- \*\*\* The Midwest and West are statistically significantly different.
- \*\*\*\* The South and West are statistically significantly different.
- \*\*\*\*\* The Northeast and West are not statistically significantly different. The Midwest and South are not statistically significantly different.
- \*\*\*\*\*\* The West and Northeast are statistically significantly different.

square mile in the South, and 2,379 persons per square mile in the West. These results echo those of the NIMs but Cohort cities have higher population densities than NIM cities.

Additionally, the percentage of white residents located within the Midwestern Cohorts (92.4%) was statistically significantly higher compared to the Northeast (75.1%), the South (80.8%), and the West (77.1%). Midwest Cohorts also had the second lowest percentage of black residents (3.9%) compared to 17.3% in the Northeast, 13% in the South, and 2.9% in the West and the lowest percentage of Hispanic residents (2.1% vs. 6.3% in the NE, 8.9% in the South, and 15.5% in the West). These findings highlight the lack of racial/ethnic diversity present in Midwestern Cohorts, as only 6% of the Midwest's population is classified as belonging to a non-white racial/ethnic group. Meanwhile, the remaining U.S. Census Regions had more than three times the percentage of minority populations when compared to the Midwest. Specifically, 22.6% of the Northeast's Cohort population was non-white, 21.9% of the South's Cohort population, and 18.4% of the West's Cohort population.

The median year a structure was built was another statistically significantly different variable. Northeastern Cohort cities contained significantly older structures (1961) when compared to the Midwest (1970), South (1974), and West (1977). This is not surprising since the Northeast is generally comprised of older cities that would contain an older housing stock.

Several other variables were statistically significantly different across one or two Census Regions but not all regions. These include the percentage of residents 65 and older, median value of owner occupied housing units, median year household moved into structure, and percentage of residents employed in city of residence. The percentage of residents 65 and older in the South (15.9%) and West (10%) are statistically significantly different from each other but they are not statistically significantly different from the Northeast (13.7%) or Midwest (14%). The statistically significantly higher percentages of older residents in Southern Cohort cities may partly be explained by the growth in retirement migration to the South. Many retirees are seeking out the warmer weather of the South as a welcome change from the cold of the Northeast and Midwest. Meanwhile, the West Region also has some warmer environs that attract retirees. However, the West is generally perceived as a place for younger, more adventurous populations that are attracted to the numerous outdoor activities and growing technology sectors. Finally, the West region is also further away from the Northeast and Midwest which may deter retirees from moving to this region, especially if they have family in the Northeast and Midwest.

A dichotomy exists between the home values of Cohorts in the Northeast/West and Midwest/South regions. Northeastern and Western Cohort cities had statistically significantly different median values of owner occupied housing units when compared to the Midwestern and Southern Cohorts. Specifically, the median value of owner occupied housing units in Northeastern

Cohorts and Western Cohorts was \$157,556 and \$182,895 respectively. Midwestern and Southern Cohorts had significantly lower median values for owner occupied housing units with the average owner occupied home value in the Midwest being \$106,776 and \$98,476 in the South. Northeastern and Western Cohort cities home values are statistically significantly higher due to the cost of living within those regions. In general, most goods and services are more expensive in the Northeast and West and this is represented, in this case, through higher home values.

The median year the household moved into their structure was also statistically significantly different for two of the four U.S. Census Regions. The Northeast reported that the median year a householder moved into their structure was 1993 compared to 1996 for Western Cohorts. Meanwhile, both the Midwestern and Southern Cohort cities were not statistically significantly different from either the Northeast or West. Western Cohort cities contained a younger population, fewer older residents, and newer residential structures when compared to Northeastern Cohort cities. The median age for Western Cohort cities in 2000 was 33.5% compared to 37.4% in Northeastern Cohort cities. Likewise, the percentage of residents 65 and older in Western Cohorts was only 10% compared to 13.7% in Northeastern Cohorts. Additionally, the median year a structure was built in Western Cohort cities was 1977 compared to 1961 for Northeastern Cohorts. The younger population and newer housing stock located in Western Cohort cities may partial explain the statistically significant difference

between Western and Northeastern Cohorts. Finally, the percentage of residents residing in the same house or city in 1995 was not a statistically significant variable. However, it did confirm the previously discussed findings that Western Cohort cities had newer residents. The percentage of residents residing in the same house or city in 1995 at the time of the 2000 U.S. Census was 60.5% in the West, 67% in the Northeast, 65.3% in the Midwest, and 63.7% in the South.

The final statistically significant variable is the percentage of residents employed in the city of residence. Northeastern Cohorts are statistically significantly different than Western Cohorts, while both Midwestern and Southern Cohorts are not statistically significantly different from either the Northeast or West Cohort cities. Only 21.2% of Northeastern Cohort city residents are employed in the city in which they live. Meanwhile, 41% of Western Cohort city residents work in the communities in which they reside. This may be the byproduct of population since the mean Western Cohort City population was 143,998 people compared to 17,152 in the Northeast. As a result of this large discrepancy in population, the economic activity and job opportunities found in the more populated Western Cohort cities would likely be much greater than those of the Northeastern Cohort cities and would allow more people to live and work in the same city.

Interestingly, the larger percentage of residents employed in Western

Cohort cities did not translate into significantly reduced travel times to work for this group. In fact, Midwestern Cohorts had the lowest mean travel time to work

(23.3 minutes) compared to 26 minutes in the Northeast, 24.2 minutes in the South, and 23.4 minutes in the West. These differences were not statistically significant and in the case of Western Cohort cities may be the result of traffic generated by large populations.

Cohort municipalities of the Northeast, Midwest, South, and West are remarkably similar along the following socio-economic variables: percentage of residents with a college education, median household income, percentage of person living in poverty, occupation (e.g. management, service sales, farming, construction, and production), per capita government revenue and per capita government expenditure.

A group of economically related variables (i.e., college education, median household income, and poverty), while not statistically significantly different across the four Census regions, still revealed some intriguing findings. The percentage of residents with a college degree or better is higher in the Northeast (28.5%) when compared to the Midwest (21.7%), South (20.7%), and West (26.4%). However, the highest median household income was found in the West (\$48,923). This is intriguing given the fact that education and income are closely linked but in this case the more educated Northeastern Cohort cities did not report the highest median household income. Not surprising among these results was the finding that the region with the highest percentage of residents living in poverty, 15.8% in the South, also recorded the lowest percentage of

residents earning a college degree (20.7%) and had the lowest median household income (\$37,801).

The employment composition of Cohort cities across the four U.S. Census regions was also quite similar. All four regions had less than 1% of their residents employed in farming with the Southern Cohort cities having the highest percentage of its population employed in farming (0.9%). The composition of the services, sales, and construction occupations were also very comparable across the regions. The largest variation in terms of occupation among the four regions was found in the percentage of residents employed in management and production occupations. The Northeast had the largest percentage of residents employed in management occupations (35.1%) compared to 29.7% in the Midwest, 29.5% in the South, 34.9% in the West. It was expected that the Northeast and West would have larger populations employed in management positions due to the higher household incomes and more educated population found in the Northeast and West. Meanwhile, 17.1% of the residents of Midwestern Cohort cities were employed in production occupations compared to 11% in the Northeast, 16.8% in the South, and 11.4% in the West. This may highlight the lingering role of manufacturing in the old economic core of the country.

Finally, the government revenue and expenditure variables were not statistically significantly different by U.S. Census region. However, the Northeast Cohort cities did collect the most revenue per capita (\$2,318) compared to the

Midwest (\$1,183), South (\$1,546), and West (\$2,167). Meanwhile, the West Cohort cities had the highest per capita government expenditures with \$2,306 being spent per person in Western Cohort cities compared to \$2,237 in the Northeast, \$1,209 in the Midwest, and \$1,539 in the South.

In conclusion, Cohort municipalities are more similar to one another across the four Census regions than NIMs. However, the Northeastern and Western Cohort cities do differentiate themselves along several variables.

Northeastern Cohort cities are denser and have an older housing stock.

Meanwhile, Western Cohort cities have larger and younger populations than the other Census regions and have higher median home values and median household incomes. Neither Midwestern nor Southern Cohort cities differentiated themselves except for the statistically significantly higher percentage of white residents located with Midwestern Cohort cities.

Significant Interaction Effects between Group and Region

Only four of the 24 variables showed significant interaction effects between the GROUP (NIMs and Cohort) and the REGION (Northeast, Midwest, South, and West). The four variables are:

- 1. Percent of residents with a college degree;
- 2. Median value of owner occupied housing units;
- 3. Percent of residents employed in the management sector; and
- 4. Percent of residents employed in the service sector.

Being classified as a NIM or a Cohort municipality had a significant effect on the percentage of residents with a college degree in the Northeast region (see Table 12). On average, 46.3% of NIM residents in the Northeast region held a college degree or better compared to just 28.5% of the population for Cohort cities even though no statistically significant differences were identified between the NIMs and Cohorts of the Midwest, South, and West region. This finding may be partly the result of the small sample size in the Northeast region (NIMs = 11). When compared to the other Census Regions, the Northeast witnessed fewer municipal incorporations during the 1990s. As a result, any outliers contained within the Northeast region may have a more dramatic impact on the data.

TABLE 12. Regional Differences in the Mean Percentage of Residents with a College Degree, 2000

	Northeast	Midwest	South	West		
NIM	46.3	17.8	19.7	28.3		
Cohort	28.5	21.7	20.7	26.4		
Difference	17.8	-3.9	-1	1.9		
(NIM-Cohort)						

Source: U.S. Census Bureau

Bold indicates significant at differences at the .05 level.

The second variable that experienced a significant interaction effect between group and region was the median value of owner occupied housing units (see Table 13). In both the Northeast and West region, residing in a NIM or Cohort city had a statistically significant effect on the median value of owner occupied housing units. For example, Northeast NIMs reported a median owner

occupied housing value significantly higher than those for the Cohort municipalities (i.e. \$306,509 vs. \$157,556, respectively). The West region witnessed a similar trend when comparing NIMs to Cohort Cities (i.e. \$225,663 vs. \$182,894). Both the Midwest and South region also experienced higher NIM home values but the difference when compared to the Cohort municipalities was not statistically significant. The higher median value of owner occupied units in the NIMs of the Northeast and West regions may be partly due to the "exclusiveness" of the NIMs established in these regions. Unlike the majority of the NIMs of the Midwest and South, Northeastern and Western NIMs are more segregated along racial and economic indicators. This exclusiveness is manifested in the lower percentages of black residents (i.e. NE NIMs – 2.5%, West NIMs – 1.8% vs. MW NIMs – 3.9%, South NIMs – 10.3%) and higher home values as more fully discussed in the previous section of this dissertation.

TABLE 13. Regional Differences in the Mean Median Value of Owner Occupied Housing Units, 2000

	Northeast	Midwest	South	West
NIM	\$306,509	\$124,812	\$116,227	\$225,663
Cohort	\$157,556	\$106,776	\$98,476	\$182,894
Difference	\$148,953	\$18,036	\$17,751	\$42,769
(NIM-Cohort)				

Source: U.S. Census Bureau

Bold indicates significant at differences at the .05 level.

NIMs have a higher percentage of residents employed in the management sector than the Cohorts in the Northeast region (see Table 14). In general all of

the regions, with the exception of the Midwest, reported NIMs having larger percentages of residents employed in the management sector. This was particularly true in the Northeast where the difference was statistically significant (i.e. 54.4% versus 35.1%, respectively). Once again, the small sample size in the Northeast may be part of the explanation for this finding. However, the Northeast NIMs also had the highest median household income and median home values suggesting a highly skilled and well-paid labor pool resided in Northeastern NIMs.

TABLE 14. Regional Differences in the Mean Percentage of Residents Employed in the Management Sector, 2000

	Northeast	Midwest	South	West
NIM	54.4	28.2	29.7	35.7
Cohort	35.1	29.7	29.5	34.9
Difference (NIM-Cohort)	19.3	-1.5	0.2	0.8

Source: U.S. Census Bureau

Bold indicates significant at differences at the .05 level.

The differentiation between NIM and Cohort in the Northeast and South

Census Regions had a significant effect on the percentage of residents employed
in the service sector (see Table 15). In particular, the Northeast and South

Census Region NIMs had lower percentages of residents employed in the
service sector when compared to the Cohort Cities. This may be partly the result
of NIMs being more affluent and as a result having fewer residents working lower
wage service jobs.

TABLE 15. Regional Differences in the Mean Percentage of Residents

Employed in the Service Sector, 2000

	Northeast	Midwest	South	West
NIM	7.3	14.3	13.1	14.7
Cohort	17.9	15.0	15.6	16.2
Difference	-10.6	-0.7	-2.5	-1.5
(NIM-Cohort)				

Source: U.S. Census Bureau

Bold indicates significant at differences at the .05 level.

In conclusion, NIMs and Cohort municipalities had more similarities than differences when examined at the U.S. Census Region level. It was expected that regional variation would play a larger role in differentiating NIMs and Cohorts given the significant cultural and economic differences that exist across the country. Furthermore, the existing literature on NIMs has alluded to significant variation although much of the existing literature has been focused on a local or regional scale of analysis thus making it difficult to draw broader national conclusions.

## 4.2.3 TWO WAY ANOVA: NIMs and Cohort City Comparison by Metropolitan/Micropolitan Designation

A two way ANOVA was performed to examine the relationships that might exist between NIMs and Cohort municipalities located within Metropolitan/
Micropolitan Statistical Areas and those that are Non-Metro/Micro. This geography was chosen because of the unique spatial distribution of NIMs across the country. Mapping the NIMs revealed a clustering of some NIMs in specific metropolitan areas while still other NIMs tended to emerge in relatively isolated,

rural settings. In particular, a "herd mentality" was witnessed in several metropolitan areas in which the incorporation of one NIM spawned the incorporation of additional NIMs in the same metropolitan market. The NIMs and Cohort municipalities are identified as the GROUP for the SAS analysis. This class was analyzed against the METRO class which consisted of municipalities that were located in a Metropolitan/Micropolitan Statistical Area and those that were Non-Metro/Micro.

In general, the two way ANOVA procedure found that there was very little interaction effect between the Group and Metro/Micro geography for the NIMs and Cohort cities of the 1990s. As a result, when there is no significant interaction the main effects were examined: otherwise the simple effects are reported.

NIM Variation by Metropolitan/Micropolitan and Non-Metropolitan Designation

Table 16 highlights the statistically significant differences that existed between NIMs by Metropolitan/Micropolitan and Non-Metropolitan status. In general, the NIMs located within a Metropolitan/Micropolitan Statistical Area had statistically significantly higher total populations, densities, greater percentages of white residents, greater percentages of residents with college educations, higher median values for owner occupied housing units, younger median aged housing structures, newer residents, higher median household incomes, and greater percentages of residents employed in both management and sales

occupations when compared to those NIMs established outside

Metropolitan/Micropolitan Statistical Areas. These results were anticipated
based on the existing literature which finds that cities located within larger more
urbanized settings will have healthier socio-economic characteristics than NIMs
located in more isolated, rural settings. In particular, Metro/Micro NIMs had
statistically significantly higher populations (i.e. 7,295 vs. 582) and population
densities (i.e. 1,262 persons per sq. mile vs. 237 persons per square mile) than
Non-Metro NIMs. This is not surprising since it was expected that municipalities
in more densely populated Metropolitan and Micropolitan Statistical Areas would
attract more residents than the NIMs of less populated, more rural NonMetropolitan areas.

A potential consequence of having larger populations and higher population densities in the Metro/Micro NIMs may be more traffic and longer

TABLE 16. Metropolitan/Micropolitan and Non-Metropolitan Mean Differences between NIMs, 2000

Variable	Metro/Micro NIMs (n=224)	Non-Metro NIMs (n=39)
Population (Persons)	7,295	582
Density (Person per Square Mile)	1,262	237
White Residents (%)	87.4	79.3
Black Residents (%)	6.6	9.6
Hispanic or Latino Residents (%)	7.8	2.7
Median Age (Years)	38.2	39.7
Residents 65 and Older (%)	13.1	16.5
Residents with College Degree or Better (%)	24.1	12.6
Median Value of Owner Occupied Housing Units (\$)	155,922 (n=219)	104,892 (n=38)
Median Year Structure Built (Year)	1977	1973
Median Year Household Moved into Structure	1993	1991

(Year)		
Residents Residing in Same House or City in		
1995 (%)	59.9	65.5
Median Household Income (\$)	51,232	33,006
Residents Living in Poverty (%)	10	17.3
Residents Employed in City of Residence (%)	12.8	23.3
Occupation: Management (%)	32.8	25.5
Occupation: Service (%)	13.6	13.4
Occupation: Sales (%)	26	23.2
Occupation: Farming (%)	0.8	2
Occupation: Construction (%)	11.7	14.8
Occupation: Production (%)	15.3	20.8
Mean Travel Time to Work (Minutes)	27.7	25.3
	2,078	4,482
Per Capita Government Revenue (\$)	(n=170)	(n=24)
	1,914	4,456
Per Capita Government Expenditure (\$)	(n=170)	(n=24)

Source: U.S. Census Bureau

Bold indicates significant at differences at the .05 level.

commutes to work. Metro/Micro NIM residents experienced a mean travel time to work of 27.7 minutes compared to only 25.3 minutes for Non-Metro NIMs. This finding was not statistically significant. However, a related variable was statistically significant. The percentage of residents employed in their city of residence was close to one quarter (23.3%) of all residents for Non-Metro NIMs compared to only 12.8% of Metro/Micro NIM residents. It was expected that the higher the percentage of residents employed in their city of residence the shorter the commute times. This is true for Metro/Micro NIMs and Non-Metro NIMs since residents will not have to travel as far to get to an employment location. Additionally, Non-Metro NIMs may not have any alternative employment opportunities compared to the Metro/Micro NIMs due to their isolated locations.

The percentage of white residents was statistically significantly higher in Metro/Micro NIMs (87.4%) compared to only 79.3% in Non-Metro NIMs. While none of the other two racial/ethnic variables (i.e. percentage of black residents and percentage of Hispanic residents) was statistically significant, Metro/Micro NIMs did have lower percentages of black residents (6.6%) than Non-Metro NIMs (9.6%). This finding supports the theory that NIMs located in more diverse and larger populated areas (i.e. Metro/Micro areas) will tend to create more racially segregated communities. However, NIMs in less populated and potentially less diverse Non-Metro areas may not have the same racial pressures influencing their development. It should be noted that Metro/Micro NIMs did have higher percentages of Hispanic residents (7.8%) compared to 2.7% in Non-Metro NIMs. Many Metro/Micro NIMs are located in states with higher absolute Hispanic populations (i.e. California, Florida, and Texas) and as a result these Metro/Micro NIMs contained more Hispanic residents.

The percentage of residents with a college degree or higher was also statistically significant. The residents of Metro/Micro NIMs were more educated with 24.1% having earned a college degree or higher while only 12.6% of Non-Metro NIMs had college degrees. The higher percentages of residents with college degrees in the Metro/Micro NIMs should result in better economic characteristics (i.e. median value of owner occupied housing units, median household income, percentage of residents living in poverty, and the percentage of residents employed in management occupations) for these communities when

compared to Non-Metro NIMs. Specifically, Metro-Micro NIMs had higher median home values (\$155,922 vs. \$104,892), higher median household incomes (\$51,232 vs. \$33,006), and lower percentages of residents living in poverty (12.8% vs. 23.3%) compared to Non-Metro NIMs. Additionally, a greater proportion of the Metro/Micro NIM population is employed in management (32.8% vs. 25.5%) and sales occupations (26% vs. 23.2%) and these relationships are all statistically significant. Part of the explanation for these differences is the byproduct of Metro/Micro NIMs residents having greater access to education and job opportunities as a result of their location near larger, more diverse urban centers. Non-Metro NIMs are more geographically isolated and lack the amenities of larger urban agglomerations specifically in regard to colleges, universities, and employment centers and tend to generate a less well skilled labor pool.

NIMs located in Metro/Micro areas contained younger populations (i.e. median age and percentage of residents 65 and older), newer populations (i.e. percentage of residents residing in same house or city in 1995 and median year household moved into structure), and newer structures (i.e. median year structure built). The median age for residents of Metro/Micro NIMs was 38.2 years compared to 39.7 years for Non-Metro NIMs. Similarly, Metro/Micro NIMs had statistically significant lower percentages of residents 65 and older (13.1%) compared to 16.5% for Non-Metro NIMs. Metro/Micro NIMs seems to attract

younger populations due to the more dynamic job market and educational opportunities found in these environs.

Also, the younger population of the Metro/Micro NIMs has not lived in the same house or city as long as Non-Metro NIM residents. Only 59.9% of the Metro/Micro NIM population resided in the same house or city in 1995 as they did in the 2000 U.S. Census compared to 65.5% of the population for Non-Metro NIMs. This difference is statistically significant. Additionally, the median year a household moved into their structure was statistically significantly different for Metro/Micro NIMs (1993) compared to Non-Metro NIMs (1991). Finally, the median year a structure was built was statistically significantly different. Metro/Micro NIMs structures are on average four years newer (1977) compared to Non-Metro NIMs (1973). These findings highlight the differences between Metro/Micro and Non-Metro NIMs regarding migration patterns. These results can be partially explained by understanding the migratory nature of the populations located in Metro/Micro areas as compared to Non-Metro areas. Metro/Micro NIM populations are more mobile due to their higher economic status. A better educated, wealthier populace can afford to move more often as a result of job opportunities or housing preferences.

Non-Metropolitan NIMs did have statistically significantly higher percentages of residents employed in several occupational categories (i.e. farming, construction, and production). Two percent (2%) of the Non-Metro NIM population was employed in farming compared to only 0.8% in Metro/Micro NIMs.

Likewise, 14.8% of Non-Metro NIM residents were employed in construction compared to 11.7% for Metro/Micro NIMs. Finally, 20.8% of the Non-Metro NIM population was employed in production occupations while only 15.3% of the Metro/Micro NIM population had production careers. Non-Metropolitan NIMs tended to be located in more rural, isolated environs and as a result tended to generate a less well-skilled labor pool. As a result, Non-Metro NIMs contained more residents who work in occupations that required less formal education (i.e. farming, construction, and production). Meanwhile, the percentage of residents employed in service occupations was nearly identical for both Metro/Micro NIMs (13.6%) and Non-Metro NIMs (13.4%).

Finally, the financial variables were not statistically significant but they did highlight the fact that Non-Metro NIMs collected and spent more money per capita than Metro/Micro NIMs. Non-Metro NIMs collected \$4,482 per capita and spent \$4,456 per resident compared to the \$2,078 in collect governmental revenue and \$1,914 in government expenditures for Metro/Micro NIMs.

In summary, NIMs located in Metropolitan/Micropolitan Statistical Areas had higher socio-economic characteristics as expected. Metropolitan/ Micropolitan NIMs tended to be located within more fully developed urban environments and benefited from their proximity to larger cities and centers of business, commerce, and education.

Cohort Variation by Metropolitan/Micropolitan and Non-Metropolitan Designation

The differences that exist among Cohort municipalities based on Metropolitan/Micropolitan designation are remarkably similar to those discussed previously for NIMs (see Table 17). Metro/Micro Cohorts have statistically significantly larger populations (81,258) than Non-Metro Cohort cities (5,279). These larger populations in Metro/Micro Cohorts are more densely concentrated as the population density for Metro/Micro Cohort cities is 1,984 persons per sq. mile compared to only 823 persons per sq. mile for Non-Metro Cohort municipalities. By definition, Metropolitan and Micropolitan Statistical Areas should contain larger and denser populations and as a result this finding is not surprising. What is surprising is the magnitude of the differences in population and population density.

The racial/ethnic variables were not statistically significant. The percentages of white, black and Hispanic residents were all similar between Metro/Micro Cohorts and Non-Metro Cohort cities. In particular, the percentage of white residents for Metro/Micro Cohort cities was 82.7% compared to 81.5% for Non-Metro Cohorts. The percentage of black residents was 9.7% for Metro/Micro Cohorts compared to 9.1% for Non-Metro Cohorts. Finally, 10.2% of the Metro/Micro Cohort cities population was Hispanic compared to 6.6% in Non-Metro Cohort cities. When compared to the results for race/ethnicity for Metro/Micro and Non-Metro NIMs these results highlight the role of population

TABLE 17. Metropolitan/Micropolitan and Non-Metropolitan Mean Differences between Cohorts, 2000

Variable	Metro/Micro Cohorts (n=153)	Non-Metro Cohorts (n=81)
Population (Persons)	81,258	5,279
Density (Person per Square Mile)	1,984	823
White Residents (%)	82.7	81.5
Black Residents (%)	9.7	9.1
Hispanic or Latino Residents (%)	10.2	6.6
Median Age (Years)	35.4	39.1
Residents 65 and Older (%)	12.5	17.5
Residents with College Degree or Better (%)	26.1	15.2
Median Value of Owner Occupied Housing Units (\$)	140,441	80,102
Median Year Structure Built (Year)	1976	1969
Median Year Household Moved into Structure (Year)	1995	1993
Residents Residing in Same House or City in 1995 (%)	61.9	66.4
Median Household Income (\$)	47,870	29,817
Residents Living in Poverty (%)	10.7	19.5
Residents Employed in City of Residence (%)	32.7	41.5
Occupation: Management (%)	33.9	25.1
Occupation: Service (%)	14.3	18.4
Occupation: Sales (%)	27.8	24.1
Occupation: Farming (%)	0.4	1.3
Occupation: Construction (%)	9.9	12.0
Occupation: Production (%)	13.7	19.0
Mean Travel Time to Work (Minutes)	25.1	21.7
Per Capita Government Revenue (\$)	1,528 (n=136)	1,926 (n=64)
Per Capita Government Expenditure (\$)	1,544 (n=136)	1,979 (n=64)

Source: U.S. Census Bureau

Bold indicates significant at differences at the .05 level.

size in creating more heterogeneous places. The Metro/Micro Cohort cities and Non-Metro Cohort cities are considerably larger than the same NIMs groups and the larger population size offers more opportunities to create a diverse populace.

The percentage of residents with a college degree or better was also statistically significantly different for Metro/Micro Cohorts and Non-Metro Cohort cities. The residents of Metro/Micro Cohorts were more educated with 26.1% having earned a college degree of better while only 15.2% of Non-Metro Cohorts residents had college degrees. As previously discussed, the higher percentages of residents with college degrees in the Metro/Micro Cohorts should result in enhanced economic opportunities for these communities when compared to Non-Metro Cohorts. Therefore, it was expected that Metro/Micro Cohort cities would have higher median home values (\$140,441 vs. \$80,102), higher median household incomes (\$47,870 vs. \$29,817), and lower percentages of residents living in poverty (10.7% vs. 19.5%) compared to Non-Metro Cohorts. Additionally, more of the Metro/Micro Cohort population is employed in management (33.9% vs. 25.1%) and sales occupations (27.8% vs. 24.1%) and these differences are statistically significant. Conversely, Non-Metro Cohort cities had statistically significantly higher percentages of residents employed in services (18.4% vs. 14.3%), farming (1.3% vs. 0.4%), construction (12.0% vs. 9.9%) and production (19.0% vs. 13.7%). The enhanced economic characteristics of the Metro/Micro Cohort cities is a result of access to larger labor markets and better educational opportunities. The poorer economic picture experienced by the Non-Metro Cohort cities is generally attributable to their geographic isolation.

Like the populations of the previously discussed Metro/Micro NIMs cities, Metro/Micro Cohort cities are younger (i.e. median age, percentage of residents 65 and older), contain newer residents (i.e. median year household moved into structure and percentage of residents residing in the same house or city in 1995) and are composed of newer houses (i.e. median year structure built) than the Non-Metro Cohort cities. The median age for residents of Metro/Micro Cohort cities was 35.4 years compared to 39.1 years for Non-Metro Cohorts. Similarly, Metro/Micro Cohorts had statistically significant lower percentages of residents 65 and older (12.5%) compared to 17.5% for Non-Metro Cohorts. Metro/Micro Cohorts, like the Metro/Micro NIMs, attracted younger populations due to the varied educational and employment opportunities.

The younger population of the Metro/Micro Cohorts has not lived in the same house or city as long as Non-Metro Cohort residents. Only 61.9% of the Metro/Micro Cohort population resided in the same house or city in 1995 as of the 2000 U.S. Census compared to 66.4% of the population of Non-Metro Cohorts. This difference is statistically significant. Additionally, the median year a household moved into their structure was statistically significantly different for Metro/Micro Cohorts (1995) compared to Non-Metro Cohorts (1993). Finally, the median year a structure was built was statistically significantly different.

Metro/Micro Cohorts structures are on average seven years newer (1976) compared to Non-Metro Cohorts (1969). These findings highlight the differences between Metro/Micro and Non-Metro Cohorts regarding residency. As previously

stated these results can be partially explained by understanding the migratory nature of the populations located in Metro/Micro areas as compared to Non-Metro areas. Metro/Micro Cohort populations are more mobile due to their elevated socio-economic status.

Non-Metro Cohorts do have statistically significantly higher percentages of resident employed in their place of residence. About 41.5% of the Non-Metro Cohort cities population lives and works in the same city compared to only 32.7% in Metro/Micro Cohort cities. Non-Metro Cohorts also experience statistically significantly reduced travel time to work. The mean travel time to work is 21.7 minutes for Non-Metro Cohort city residents compared to 25.1 minutes for Metro/Micro Cohort city residents. These findings reveal the strong link between place of employment and travel times. In the isolated Non-Metro Cohort cities a higher percentage of the population lives and works in the same place and that results in reduced commute. This may be the result of Non-Metro Cohort cities capturing a larger share of employment opportunities when compared to Metro/Micro Cohorts. The Metro/Micro Cohort cities may have more competition from nearby surrounding communities while Non-Metro Cohort cities exist in more isolated locales.

The fiscally derived variables (i.e. per capita government revenue and per capita government expenditure) were not statistically significant. However, the Non-Metro Cohort cities had higher revenue collection rates per capita (\$1,926 vs. \$1,528) and expenditures per capita (\$1,979 vs. \$1,544) than the Metro/Micro

Cohorts. This finding may partially be explained by the lack of competition among municipalities in Non-Metro areas. If an area contains multiple service providers or numerous municipalities, there is a greater chance that the cost of providing services will be decreased through competition. However, in Non-Metro areas there is a lack of municipalities competing for residents when compared to Metro/Micro areas.

In summary, based on the total number of statistically significant variables, Cohort municipalities show a wider range of variation by Metropolitan/
Micropolitan status as compared to NIMs. Cohort municipalities are potentially more varied because they have been incorporated longer and thus have had more time to mature. This is especially true of Metropolitan/Micropolitan Cohort municipalities which are located near larger urban centers. In turn, these municipalities have greater access to education and employment opportunities.

Significant Interaction Effects between Group and Metro/Micro Designation

Only two of the 24 variables showed significant interaction effect between GROUP (NIMs and Cohort) and the Metropolitan designation. The two variables were:

- 1. Percent of white residents;
- 2. Percent of residents employed in the service sector.

Being classified as a NIM or a Cohort municipality had a significant effect on the percentage of white residents in a Metropolitan/Micropolitan designated areas (see Table 18). The Metropolitan based NIM group had a mean of 87.4%

while the Cohort group had only 81.5% of their residents classified as Caucasian. No statistically significant differences were identified between the NIMs and Cohorts of Non-Metropolitan/Micropolitan areas. As a result, it can be surmised that NIMs located in Metro/Micro areas follow the existing literature on municipal incorporation and sort along racial lines. "White flight" may offer a partial explanation for this result. The movement of Caucasian residents away from existing cities to relocate in the more homogeneous urbanizing fringe may offer the perception of safety and security from the more diverse populations located in older, more populated places. Meanwhile, the percentage of white residents located in NIMs and Cohorts of Non-Metropolitan/Micropolitan areas is not statistically significant. In fact, the Non-Metro Cohort cities actually have higher percentages of white residents (82.7%) when compared with the Non-Metro NIMs (79.3%). As a result, race does not seem to be as important an influence in Non-Metropolitan/Micropolitan settings as compared to the Metro/Micro group. This may be the result of economic circumstances which dictates that residents must reside in the larger Cohort cities of Non-Metropolitan areas in order to take advantage of limited jobs and housing opportunities.

TABLE 18. Metropolitan/Micropolitan and Non-Metropolitan Designations
Affect on the Mean Percentage of White Residents, 2000

	Metro/Micro	Non- Metro/Micro
NIM	87.4	79.3
Cohort	81.5	82.7
Difference (NIM-Cohort)	5.9	-3.5

Source: U.S. Census Bureau

Bold indicates significant at differences at the .05 level.

Unlike the growing Metropolitan/Micropolitan areas of the country which offer numerous economic opportunities and a sprawling geographic sphere of influence, Non-Metropolitan America may only have a limited number of economic realities that are found in existing Cohort cities.

The other variable to experience significant variation between NIMs and Cohorts was the percentage of residents employed in the service sector. The Service sector is composed of occupations such as healthcare support, protective services, food preparation and serving, and personal care. The differentiation between NIMs and Cohorts in Non-Metropolitan/Micropolitan Statistical Areas was significant for the percentage of residents employed in the service sector (see Table 19). Cohort municipalities in Non-Metropolitan areas had 18.4% of their residents employed in services. Meanwhile, only 13.6% of NIM municipalities in Non-Metropolitan areas were employed in the service sector. Additionally, Cohort municipalities generated larger proportional shares of service jobs in both Metropolitan and Non-Metropolitan settings when compared to the NIMs. Overall, Cohort municipalities tended to be more well

established entities with more fully developed economies than the NIMs which are often bedroom communities that have yet to fully develop diverse economies. This trend is generally exaggerated in the more rural settings.

TABLE 19. Metropolitan/Micropolitan and Non-Metropolitan Designations
Affect on the Mean Percentage of Residents Employed in the Service
Sector. 2000

	Metro/Micro	Non- Metro/Micro
NIM	13.4	13.6
Cohort	14.3	18.4
Difference (NIM-Cohort)	-0.9	-4.8

Source: U.S. Census Bureau

Bold indicates significant at differences at the .05 level.

### 4.2.4 Conclusions

Several key findings have been revealed by examining the potential differences that exist between NIMs and Cohort cities. First, NIMs and Cohort municipalities are statistically significantly different along several key socioeconomic dimensions nationally. This finding compliments the existing literature on municipal incorporation that suggests NIMs are fundamentally different from nearby existing municipalities along a range of socio-economic variables. Both this dissertation and the existing literature have found that race, income, population size, and population density are key differentiating variables for NIMs and Cohort municipalities. Nationally NIMs have larger percentage of white residents, higher median incomes, smaller populations and lower population

densities. Additionally, this study reveals that several additional variables are also important. These include the findings that NIMs have higher mean travel times, lower percentages of residents being employed in their place of residence, contain newer residential structures and have residents' that have lived in their place of residence for longer as compared to the Cohort cities.

Secondly, the key differentiating variables between NIMs and Cohort cities tend to remain fairly stable across U.S. Census regions. Geographic location can play a role in determining whether or not a community incorporates but the primary socio-economic distinctions between NIMs and Cohorts does not change dramatically by macro-geography (i.e. Census Region or Metro/Micro status). Where location appears to be more important is at the micro-geography (i.e. county) scale. At the micro scale a 'herd mentality' seems to dominate the political landscape resulting in conditions ripe for numerous incorporations following the incorporation of the first NIM in a county. This may highlight the greater influence that the local micro-geography context has over incorporation relative to broader Census Region and Metro/Micro differences.

That said some regional differentiation was evident. The primary geographic difference was between the NIMs and Cohorts of the Northeast compared to the other regions. An examination of the NIM-Cohort dichotomy in the Northeast revealed that the percent of college graduates, median value of owner occupied housing units, the percentage of residents employed in management and the percentage of residents employed in the service sector

were all statistically significantly different variables. However, it is important to remember that the Northeast region had a low sample size (n=11). Besides these minor geographic differences only the South and West region witnessed any noticeable regional variation that was different from the rest of the country, particularly regarding the median value of owner occupied housing units' variable for the West and the percentage of residents employed in the service sector in the South region.

Unexpectedly, the importance of Metropolitan/Micropolitan designation was also only of minor consequence. Only two of the 24 variables showed significant interaction effect between NIMs and Cohorts and the Metropolitan designation. These two variables included the percentage of white residents and the percentage of residents employed in the service sector. The NIMs located in a Metropolitan/Micropolitan Statistical Area had a statistically significantly higher percentage of white residents than the Cohort group of municipalities. It is speculated that this is partly a result of white residents 'fleeing' the more diverse urban cores of metropolitan America to take residence in more homogeneous newly incorporated cities (Orfield 1997; Rusk 2003). As Bruce Katz, Director of the Brookings Institution Center on Urban and Metropolitan Policy, stated in an excerpt of a speech given in Kansas City:

And white flight continued during the 1990s despite the touted renewal of our cities. The white population in cities declined by 8.5 percent or 2.3 million people. For the first time in American history, whites are now a minority in the top 100 cities; declining from 52 percent of the population in these places to 44 percent (Katz, 2002, 3).

Meanwhile, Cohort municipalities located in Non-Metropolitan areas had a statistically significantly higher percentage of residents employed in the service sector when compared with Non-Metropolitan NIMs. It is likely that Non-Metropolitan Cohort municipalities have more employment opportunities and fully functioning economies due to their relatively longer history of urbanization, when compared to the rural NIMs that are located in close proximity to them and as a result contain larger percentages of residents employed in service sector jobs. Despite their small size, Non-Metropolitan Cohort municipalities appear to act as regional economic engines in the absence of more fully developed urban agglomerations nearby.

In conclusion, NIMs and Cohort municipalities do differentiate nationally along a specific range of socio-economic variables. However, these differences do not systematically vary by Census region or metropolitan designation. In this sense, location plays only a limited role in determining the differentiating socio-economic variables at a national scale. In fact, an interesting finding of this dissertation is the lack of significance of macro geography. The relative uniformity of differences between NIMs and Cohorts across the country may clearly allude to the commonality of the incorporation experience where NIMs are established in response to the aggressive annexation tactics of nearby existing

municipalities and it leads to the creation of relatively homogeneous enclaves. Clearly, further research is needed that focuses on individual case studies to determine additional factors that may influence how NIMs and Cohorts deviate. After examining the differences between NIMs and Cohorts in detail at several different geographic scales, this dissertation will now investigate if the NIMs themselves can be placed into differentiating functional groups at the national level in an effort to further understand municipal incorporation.

# 4.3 Cluster Analysis of Newly Incorporated Municipalities

For the 263 NIMs established during the 1990s, it is hypothesized that an explicit national NIM typology exists that is differentiated based on skill/affluence levels, age, racial composition, political affiliation, commuting patterns, and urbanity (i.e. population and density). The hypothesized National NIM Typology is expected to consists of three NIM types:

- 1. Exclusive Enclave NIMs,
- 2. Suburban Settlement NIMs, and
- 3. Peripheral Community NIMs

where each of these has unique geographic and socio-economic characteristics (see Table 20). The creation of a National NIM Typology can help in developing a deeper understanding of NIMs by placing each NIM in a broader conceptual framework. Additionally, it is anticipated that the typology will serve as a theoretical foundation for further research on municipal incorporation. Finally, a National NIM Typology may also be useful for federal, state, and local

government practitioners who frequently deal with newly incorporated municipalities. In particular, it is envisioned that public sector officials may utilize the typology to help set government policy and standards regarding future incorporations.

To explore this question further a Principal Component Analysis (PCA) and Cluster Analysis were performed in SAS to determine if a meaningful NIM typology exists. The PCA grouped the 26 variables utilized in this dissertation into interrelated dimensions based on loading scores in an effort to render a more rigorous parsimonious solution. A Cluster Analysis was implemented using the principal component scores generated by the PCA to create the NIM typology based on specific differentiating socio-economic characteristics.

Table 20. National Newly Incorporated Municipalities (NIMs) Typology

NIM TYPE	Locational Requirements	General Description
Exclusive Enclave	Predominately located in beach, mountain, resort and suburbs surrounding large cities.	Extremely homogeneous population with very high income levels, expensive homes, elderly populations, and lower levels of poverty.
Suburban Settlements	Generally located in close proximity to larger cities and in or near Metropolitan or Micropolitan Statistical Area	Small to medium sized communities with mostly white populations, low percentages of poverty, moderately educated, high incomes and high home values.

Peripheral Communities  Mostly likely to be located outside of Metropolitan/Micropolitan Statistical Areas	Small isolated white communities with relatively young populations, low income levels, low education levels and higher levels of poverty.
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### 4.3.1 Principal Component Analysis

The PCA identified nine principal components (PC's) that indicate an array of socio-economic variables (see Table 21). The final number of factors kept was determined by examining the results of the scree test and eigenvalue rule, the proportion of sample variance explained, and the knowledge of the subject matter (Zwick and Velicer, 1986; Liu et al. 2000). After the nine PC's were identified, the PC's were rotated using the varimax method. This rotation creates a simple structure in which each variable loads highly on a single factor and has small to moderate loadings on the remaining factors. This in turn makes for an easier interpretation of what each PC represents (Johnson and Wichern 1982; Liu et al. 2000). Factor loadings were assigned into three categories: high loadings (> 0.75), moderate loadings (0.45 – 0.75), and low loadings (< 0.45). Low loadings are not shown in Table 20.

The nine retained PC's explain 76 percent of the total sample variance of the existing 26 variables. For 19 of the 26 variables, the variance explained by these nine PC's (communality) is 70% or higher. For the remaining 7 variables, the communality ranged from 0.44 (Percent of Resident Employed in Farming) to

Table 21: Varimax Rotated Factor Loadings From the Principal Component Analysis

Table	PC 1:	PC 2:	PC 3:	PC 4:	PC 5:	Principal Co	PC 7:	PC 8:	PC 9:	Communality
	Skills/	Elderly	Political	Race	Commuting	Occupational	Migration	Urbanity	Growth	Community
Variable	Affluence	,	Affiliation		Patterns	Composition				
% College Degree	.93							I		.91
% Management	.92									.88
Median Income	.86									.86
Median Value of Owner	.79									70
Occupied Units										.70
% Production	68									.70
% Service	49									.63
% of Residents 65 and Older		.95								.91
Median Age		.89								.92
% of Residents in Workforce		77								.84
% Kerry			.90							.90
% Bush			91							.90
% Black Residents				.91						.93
% White Residents				89						.91
% Employed in Place of					.75					.74
Residence										.74
% Farming					.50					.44
Mean Travel Time					78					.71
% Sales						.75				.61
Metro/Micro vs. Non-						.53				.57
Metro/Micro										
% Construction						61				.70
Median Year HH Moved into							.75			.68
Unit										
Total Population							.63			.66
% of Residents Living in								.69		.79
Poverty										
% Hispanic Residents								.85		.78
Population Density								.56		.73
% County Pop. Growth Rate									.76	.63
('90-'00)										
Median Year Structure Built									.56	.71
Variance Explained by PC	20.7%	11.9%	9.3%	8.3%	6.7%	5.4%	5.2%	4.4%	4.1%	

Loadings greater than .75 are in bold. Loadings less than .45 are not reported.

0.68 (Median Year Household Moving Into Unit). All variables had significant loadings on one of the nine PC's (see Table 20) (Liu et al. 2000).

The first principal component (PC) had high positive loadings for Percent of Residents with College Degrees, Percent of Residents Employed in Management Positions, Median Household Income, and Median Value of Owner Occupied Units. The Percent of Resident Employed in Production Positions and the Service Industry both recorded negative loading scores. Some of the existing literature on 'political balkanization' and the logic behind the NIM phenomenon that has emerged in recent years has tended to focus on the ability of particular social classes to 'vote with their feet' and migrate to new outlying suburban nodes. It is hypothesized that highly skilled and affluent residents tend to be some of the first movers in this regard and the first principal component seems to capture this segment of society. It is expected that a highly skilled population would be reflected by a disproportionate percentage of the population with college degrees that, in turn, would earn a very high median household income. A well educated and well paid populace is also likely to be employed in well-paid management occupations and less likely to be in lower wage earning activities like the production and services industry. Finally, a highly skilled management class tends to be affiliated with the requisite executive style housing as reflected by a high median value for owner occupied units. Overall, the first principal component appears to appropriately capture this broad swath of logic and it is

therefore categorized as a Skills-Affluence measure for the purposes of this dissertation.

The second PC had high positive loadings for the Percent of Residents Aged 65 and Older, and also for Median Age. The Percent of Residents in the Workforce had a high negative loading score for the second PC. The research conducted in this dissertation has revealed a unique age component to the establishment of some NIMs. Specifically, the proliferation and development of retirement communities/cities seems to be an explicit subset within the greater NIM movement. As a result, the percentage of residents 65 and older is of critical importance to further identifying this segment of NIMs. The larger the percentage of older residents the more likely that place will be a home to retirees. Likewise, median age can be directly affected by the percentage of older residents in the community. Also, since the existing literature on municipal incorporation has already identified that residents of new cities are more skilled and have higher incomes one would expect this population of people to also be older since they would need time to accumulate the wealth necessary to relocate to newly incorporated areas. Finally, larger percentages of retirement age residents should result in lower percentages of residents in the workforce. An inverse relationship is expected to exist between the percentage of residents 65 and older and percentage of residents in the workforce. This PC is hereafter referred to as the Elderly PC in an effort to capture these trends.

The third PC had high positive loadings for the Percent of Residents who voted for John Kerry in the 2004 Presidential Election. The Percent of Residents who voted for George W. Bush has high negative loading scores. The existing literature portrays new municipalities as whiter, wealthier, more homogeneous representations of the rest of society. As a result, it was theorized that the political affiliation would be impacted by this phenomenon. Since most States do not track Party Affiliation at the municipal level, the percentage of the population of a NIM that voted for Kerry (Democrat) or Bush (Republican) will be used as a surrogate for Political Party Affiliation. It was hypothesized that a larger percentage of the NIMs population would vote for Republican candidates compared to the country as a whole due to the similarities in socio-economic characteristics of NIMs and Republican Party members. As a result, a high negative Political Affiliation Score would indicate that large percentages of residents of a NIM voted for Bush, while a high positive score would indicate support for Kerry within the NIM. This PC can determine if there are differences among NIMs in political party affiliation. As a result this PC will be called Political Affiliation.

The fourth PC will be called Race for its high positive loading score for the Percent of Black Residents and high negative loading scores for Percent of White Residents. The racial composition of NIMs is crucial to our understanding of NIMs based on the existing literature. Many of the state and local examinations of municipal incorporation highlight the role race plays in the

formation of new municipalities. Specifically, many scholars believe that the "white flight" syndrome experienced by larger more heterogeneous urban areas is a major differentiating factor between NIMs and existing municipalities. For this cluster analysis it is hypothesized that race will continue to play a role as exclusive super-majority NIMs, mixed heterogeneous, and minority NIMs are established in the United States. The Race PC scores can be interpreted where high negative PC scores are indicative of large percentages of residents of a NIM being white. Meanwhile, a high positive PC score for Race indicates that a large percentage of the residents of a NIM are black.

The fifth PC was mainly associated with the Percent of Residents

Employed in their Place of Residency which had a high positive loading score.

The Percent of Residents Employed in Farming witnessed a moderately positive loading score and the Mean Travel Time had a high negative loading score. It is hypothesized that the larger the percentage of residents employed in their NIM of residence, the lower the potential travel time experienced for that NIM. This PC captures this phenomenon as the percentage of residents employed in their place of residence is inversely related to the mean travel time variable as indicated by the negative loading score for Mean Travel Time. As the ANOVA tests revealed in the previous section, NIMs had lower percentages of residents employed in the city in which they lived and longer commutes than Cohort cities. However, within the NIMs there may be some differentiation that occurs based on the fact that some NIMs are older (i.e. incorporated in 1990 vs. 1999) and/or

have been urbanizing for a longer period of time. This may have allowed some NIMs to develop more diverse economies and as a result, have more places of potential employment for residents and thus reducing commute times. As a result, this PC will be called Commuting Patterns. The positive moderate loading score for the percentage of residents employed in farming included in this PC is more difficult to explain. However, less than 1% (0.9%) of all NIM residents nationally are employed in farming occupations and as a result this variable should not play a large role in differentiating NIMs.

The sixth PC will be called Occupational Composition for the high positive loading score associated with the Percent of Residents Employed in Sales and the high negative loading score for the Percent of Residents Employed in Construction. The Metropolitan/Micropolitan location variable had moderate positive loading scores for this PC. These results can be interpreted as NIMs located in Metropolitan/Micropolitan locations will have higher percentages of residents employed in sales occupations. Meanwhile, NIMs located in Non-Metro locales will have higher percentages of residents employed in construction occupations. NIMs vary by location throughout the country. As a result, the occupational composition of NIMs is theorized to vary based upon this geographic distribution. NIMs located in more urbanized metropolitan areas would potentially have higher levels of sales activity and as a result need more residents employed in sales occupation due to the larger populations and superior economic characteristics found in metropolitan America. However, it is

more difficult to hypothesize why the NIMs located in developing areas further away or outside metropolitan areas would have larger percentages of residents employed in construction occupations. The Occupational Characteristics PC will capture this phenomenon.

The Median Year the Household Moved into the Dwelling Unit had high positive loading scores for the seventh PC. Additionally, the Total Population variable had moderately positive loading scores. Population size and the newness of households in a NIM are related. More populated NIMs have the potential for having newer residents as a byproduct of migration into the community. As the population of a place increases, the median year in which that population moved into their dwelling unit would be expected to get younger. This phenomenon is expected to vary for NIMs due to the great disparity in NIM population size across the country. As a result, PC seven will be known as Migration.

The Percent of Hispanic Residents, Percent of Residents Living in Poverty, and Population Density (persons per square mile) all had high to moderate positive loading scores for the eighth PC. Not all NIMs are exclusively wealthy enclaves. Some impoverished NIMs tend to feature a large percentage of Hispanic residents and high population densities. As a result, Principal Component eight will help to examine this hypothesis and be known as Urbanity. As the existing literature on municipal incorporation suggests, the role of minorities, poverty, and density can be defining characteristics of existing cities.

Many NIM residents (especially wealthy, white residents) are perceived to be 'escaping' the higher population densities, ethnicity, and poverty located in many existing cities.

Finally, PC nine consists of high positive loading scores for the Percent Population Growth Rate of the Host County (1990-2000) and moderate positive loading scores for the Median Year Residential Structures were Built. The spatial distribution of NIMs across the country is uneven and complex. Interestingly, some NIMs are located in rapidly developing counties while others are being incorporated in slower growing rural counties. As a result, PC nine will be utilized to examine the relationship between the growth rate of the County in which a NIM is located and the median year the structure was built. It is hypothesized that NIMs in higher growth rate counties will have newer structures than those in lower growth rate counties. This PC shall be known as Growth.

The output from the Principal Component Analysis created a score for each of the NIMs along each of the nine PCs (see Appendix A). These nine scores were then combined into a final Weighted Composite Score for each NIM that is then used to cluster the NIMs into a unique National NIM Typology (Appendix B and C). Prior to combining the individual scores, the nine scores were weighted based on the percent of variance explained by each PC as it relates to the total variance explained by all of the PCs identified (Appendix B). For example, the Skills/Affluence Component (PC 1) was given a proportional weight based on the percentage of the total variance explained by PC1 (i.e.

20.7/76.0=27.2). This calculation was performed in an effort to more accurately reflect the proportional role of each PC in explaining the differentiation between NIMs. Table 22 provides a detailed outlook of how each PC was assigned a proportional weight.

**Table 22: Proportional Weighting of PC Scores** 

PC	% of Variance Explained	Proportional Weight (%)
Skills/Affluence (1)	20.7	27.2
Elderly (2)	11.9	15.7
Political Affiliation (3)	9.3	12.3
Race (4)	8.3	10.9
Commuting Patterns (5)	6.7	8.8
Occupational Characteristics (6)	5.4	7.1
Migration (7)	5.2	6.8
Urbanity (8)	4.4	5.8
Growth (9)	4.1	5.4
Total Variance Explained	76.0	

# 4.3.2 Cluster Analysis: NIMs by Weighted Composite Score

After creating a Weighted Composite Score for each of the NIMs created in the 1990s (Appendix B), SAS v9.1 was utilized to conduct a Cluster Analysis. Cluster Analysis is useful for grouping large amounts of data into similar clusters. The process of clustering attempts to minimize the variance within a group and maximize variance between groups.

This procedure will help to better quantify the relationships that exist between the NIMs and their Weighted Composite Score regarding socio-economic variation. The Weighted Composite Score is a proportional representation of all nine PC scores. This score will allow for the comparison and clustering of all 255 NIMs along the same socio-economic factors. A hierarchical clustering technique was utilized because the total number of clusters was unknown. Specifically, the Centroid method partitioned the NIMs into clusters based on the mean of the Weighted Composite Score found among all NIMs and the NIMs within developing clusters. The mean of the NIMs was recalculated every time a NIM was moved from one group to a cluster. The results of the cluster analysis were robust against changes in technique. Both the Average Distance method and Ward's method were utilized and reported similar clusters.

Based on the results of the Cluster Analysis, three clusters of NIMs were identified. These three clusters will be utilized to develop the National NIM Typology (Appendix C). The Cluster Analysis determined the data ranges (cutoff values) for the three clusters. The data ranges were -0.73 to 0.01 for Peripheral Communities, 0.03 – 0.69 for Suburban Settlements, and 0.72 to 1.18 for Exclusive Enclaves. Additionally, the mean Weighted Composite PC Score for each of the three clusters was -0.29 for Peripheral Community NIMs, 0.29 for Suburban Settlements, and 0.86 for Exclusive Enclave NIMs. The frequency distribution for the Peripheral Community NIMs type followed a normal

NIMs type experienced a slightly negatively skewed distribution. However, the frequency histograms confirmed the logic of the chosen cut-off values in determining the NIM types. A more detailed discussion of each NIM type follows.

# 4.3.3 Discussion of a NIM Typology

In general, the three clusters generated by the Cluster Analysis followed the NIM Typology outlined in Table 20. These three typologies can provide a useful socio-economic overview regarding the formation of different types of NIMs across the United States. The following section offers a detailed discussion of the unique socio-economic characteristics that help define each of the three NIM types (see Tables 23 and 24). In addition, illustrative examples of each NIM Type will be discussed and highlighted. The most commonly occurring NIM Typology are Peripheral Communities with 55% (140 of 255) of all NIMs, while only 5% of all NIMs can be classified as Exclusive Enclaves (13 out of 255). Suburban Settlement NIMs accounted for the remaining 40% of NIMs (102 out of 255) in the country.

### Exclusive Enclave NIMs

The Exclusive Enclave NIM Typology consisted of 13 municipalities and reported the highest mean Weighted Composite Score (0.86). There are substantially fewer Exclusive Enclave NIMs compared to the other two NIM typologies. This may be a byproduct of the extremely unique socio-economic

characteristics that define Exclusive Enclaves regarding levels of affluence and skill sets. The mean population for the Exclusive Enclave NIMs was 8,320, second only to the Peripheral Community cluster in total population size. Exclusive Enclave NIMs did experience the highest population density per square mile (3,926) out of the three NIM types (see Table 24).

Exclusive Enclave NIMs enjoyed the highest mean Skills/Affluence PC Score (0.39) (Table 23), which translates into having the highest median household income (\$73,737), the most expensive median owner occupied dwelling units (\$349,215), and the highest mean percentage of college educated residents (51.7%) (Table 24). Additionally, Exclusive Enclave NIMs are characterized as having the highest percentage of residents 65 and older (32.2%), highest median age (53.4 years), and lowest percentage of residents in the workforce (46.9%) as explained by the high mean Elderly PC Score of 0.30.

The racial composition of Exclusive Enclave NIMs is predominately white as indicated by the negative PC Score for Race (-0.01) (Table 23). In fact, the Exclusive Enclave NIMs had the highest percentage of white residents (95.6%) out of the three clusters but also the highest percentage of Hispanic or Latino residents (10.1%) (Note: Starting with the 2000 U.S. Census residents were allowed to be Hispanic and White or Hispanic and Black which can result in percentages greater than 100.) The high percent of Hispanic or Latino residents is somewhat surprising but can be partially explained by the location of the

**Table 23: National NIM Typology Profiles** 

				Mean Weight Principal Component Scores									
Туре	# of NIMs	% Market Share of NIMs	Mean Weighted Composite Score	Weighted Composite Score Data Range	Skills/ Affluence	Elderly	Political Affiliation	Race	Commuting Patterns	Occupational Composition	Migration	Urbanity	Growth
Exclusive Enclaves	13	5.1%	0.86	0.72 to 1.18	0.39	0.30	0.04	-0.01	0.02	0.03	0.02	0.02	0.04
Suburban Settlements	102	40.0%	0.29	0.03 to 0.69	0.13	0.02	0.00	0.05	0.01	0.01	0.01	0.01	0.00
Peripheral Communities	140	54.9%	-0.29	-0.73 to 0.01	-0.13	-0.04	-0.01	-0.04	-0.01	-0.01	-0.01	-0.01	-0.003

Table 24. Socio-economic Composition of NIM Typologies, 2000

Table	24. Socio-economic Compositio	Average NIM Types					
PC	Variables	Exclusive Enclaves	Suburban Settlements	Peripheral Communities			
PC 1: Skills/Affluence	% Residents with College Degree	51.7 <sup>a</sup>	31.2 b	14.1 <sup>c</sup>			
	% of Residents Employed in Management Occupations	51.6 <sup>a</sup>	39.1 <sup>b</sup>	25.2 °			
	Median Household Income (\$)	73,737 <sup>a</sup>	56,282 <sup>b</sup>	41,203 <sup>c</sup>			
	Median Value of Owner Occupied Housing Units (\$)	349,215 a	195,588 <sup>b</sup>	95,588 <sup>c</sup>			
	% of Residents Employed in Production Occupations	3.8 <sup>a</sup>	11.5 <sup>b</sup>	20.2 <sup>c</sup>			
	% of Residents Employed in Service Occupations	11.1	13	13.8			
PC 2: Elderly	% Residents 65 & Older	32.2 <sup>a</sup>	14.6 <sup>b</sup>	11.4 <sup>b</sup>			
	Median Age (years)	53.4 <sup>a</sup>	40 <sup>b</sup>	36.1 °			
	% of Residents in Workforce	47.0 <sup>a</sup>	60.2 <sup>b</sup>	64.9 <sup>b</sup>			
PC 3: Political Affiliation	% Residents Voted for Kerry	43.4 <sup>b</sup>	43.9 <sup>b</sup>	33.3 <sup>a</sup>			
	% Residents Voted for Bush	55.7 b	54.5 <sup>b</sup>	64.6 <sup>a</sup>			
PC 4: Race	% White Residents	95.7 b	77.3 <sup>a</sup>	91.1 b			
	% Black Residents	1.1 b	13.5 <sup>a</sup>	3.3 b			
PC 5: Commuting	% of Residents Employed in Place						
Patterns	of Residence	23.6 b	18.1 <sup>b</sup>	10.7 <sup>a</sup>			
	% of Residents Employed in Farming Occupations	0.1	1.1	1			
	Mean Travel Time to Work (minutes)	25.8	27.2	27.8			
PC 6: Occupational Composition	% of Residents Employed in Sales Occupations*	29.2ª	26.3 <sup>ab</sup>	24.7 <sup>b</sup>			
	% of NIMs Located in Metro/Micro Statistical Areas	100	86	83.5			
	% of Residents Employed in Construction Occupations	4.2 <sup>a</sup>	9 b	15 °			
PC 7: Migration	Median Year Household Moved into Structure	1995	1993	1993			
	Population*	8,320 a	12,038 ab	2,281 <sup>b</sup>			
PC 8: Urbanity	% Residents Living in Poverty	5.0	11.1	11.7			
	% Hispanic Residents	10.1	9.1	5.3			
	Population Density (persons per sq. mile)	3,926	1,534	507			
PC 9: Growth	% County Growth Rate	40.5 a	19.8 <sup>b</sup>	21.1 <sup>b</sup>			
	Median Year Structure Built	1981	1978	1976			

Source: U.S. Census Bureau

Different letters (a, b, c) indicate significant differences at the .05 level.

\* Both the Exclusive Enclaves and Peripheral Communities are statistically significantly

different from each other. However, they are not statistically significantly different from Suburban Settlements.

majority of the Exclusive Enclave NIMs. Seven (7) of the 13 Exclusive Enclave NIMs are located in California (2), Florida (4), or Texas (1), each of which has large Hispanic/Latino populations. Four more Exclusive Enclave NIMs are located in North Carolina which has experienced a rapidly growing Hispanic/Latino population over the last five to ten years.

Additionally, Exclusive Enclave NIMs had the highest mean Score for several Principal Components including: Political Affiliation (0.04), Commuting Patterns (0.02), Occupational Characteristics (0.03), Migration (0.02), Urbanity (0.02), and Growth (0.04). These results can be translated into the following findings.

First, 43.4% of Exclusive Enclave NIM residents voted for the Democratic candidate for President in 2000 (John Kerry) compared to 55.47% of the residents that voted for the Republican candidate (George W. Bush). The conservative political preference matches well with the level of affluence contained in these Exclusive Enclaves. Additionally, Exclusive Enclave NIMs also experienced the largest percentage of residents working in the community in which they reside (23.6%) and the shortest commute times to work (25.8 minutes) suggesting a relatively self-contained lifestyle. However, this also could be the result of more residents of Exclusive Enclave NIMs working from home and not necessarily indicative of these NIMs being major employment centers.

As previously discussed these enclave NIMs have the lowest percentage of residents employed in the workforce relative to the other two typologies.

All of the Exclusive Enclave NIMs are located in a Metropolitan or Micropolitan Statistical Area and Exclusive Enclave NIMs had the highest percentage of residents employed in sales occupations (29.2%) and the lowest percentage of residents in construction (4.2%) partly due to the more fully developed economies located in Metropolitan and Micropolitan areas. Exclusive Enclave NIMs also had the 'newest' residents based on the median year a household moved into their unit (1995) and consequently it is hypothesized that the relatively larger populations found in Exclusive Enclave NIMs are indicative of newer populations as a result of migration.

Surprisingly, Exclusive Enclave NIMs did have the highest Urbanity PC score (Table 23) although this PC was measured by a NIMs standing on not just poverty but also population density, and the percentage of Hispanic residents. The Enclave NIMs reported the highest population density (3,926) and the highest percentage of Hispanic residents (10.1%) relative to the other two major NIM typologies even though these same NIMs also had the lowest percentage of residents living in poverty (5.0%).

Finally, Exclusive Enclave NIMs had the highest Growth PC Score (0.04) (Table 23). Exclusive Enclave NIMs tend to be located in counties experiencing explosive population growth rates (40.5%) between 1990 and 2000 with the newest housing stock (i.e. median year structure built – 1981) when compared to

other NIMs. This is not surprising since many of these NIMs are located in beach/seaside or mountain locations experiencing phenomenal growth as second home markets and havens for wealthy retirees.

Many of the Exclusive Enclave NIMs are the result of the planned nature of many Exclusive Enclave NIMs. In particular, many of these NIMs are developer driven, planned subdivisions. As a result, the maximization of property and financial gains were key components in the development of these places.

To better understand the Exclusive Enclave NIM Typology some illustrative examples of these NIMs will now be discussed.

Perhaps one of the most stereotypical Exclusive Enclave NIMs in America is Malibu, CA. Malibu is a beach community with 21 miles of coastline located in northwest Los Angles County that is synonymous with exclusivity. While the area has been developed over the last century, it was not until 1991 that it officially incorporated. Malibu scored the second highest Weighted Composite Score (1.02) among the 13 Exclusive Enclave NIMs (Appendix C). According to the 2000 U.S. Census, the median value of an owner occupied housing unit in Malibu was \$1,000,000 and the median household income was \$102,031. Additionally, 91.9% of Malibu's residents are white. Only 14% of Malibu's population was over the age of 65 and only 7.6% of the residents were living in poverty in 2000. Since the late 1920's, Malibu has been home to movie stars and entertainment personalities. One of the more famous neighborhoods located within Malibu is "The Colony". "The Colony" is a gated community with 24 hour

security that has been home to some of Hollywood's most famous faces (e.g. Jack Warner, Gary Cooper, and Barbara Stanwyck). The neighborhood routinely witnesses the sale of homes in the \$1.6 to \$6.0 million range and vacant lots sell for more than \$1.0 million (Malibu, 2007). Today, stars ranging from Martin Sheen to Melissa Etheridge call Malibu home.

In another example, Bermuda Run is a gated community located southwest of Winston-Salem, NC that incorporated in 1999 and is a prime example of exclusivity. Bermuda Run ranked 12<sup>th</sup> out of the 13 Exclusive Enclave NIMs with a Weighted Composite Score of 0.73. Bermuda Run is home to 1,431 residents according to the 2000 U.S. Census. The original development that would evolve into the Town of Bermuda Run began as a country club and golf course community with the sale of 175 lots at \$10,000 a piece. The first lot was sold to Arnold Palmer in 1971. Since then retirement amenities, luxury condominiums, and an additional golf course and club house have been constructed on the property (Bermuda Run, 2007). The socio-economic characteristics of Bermuda Run are quintessentially those of an Exclusive Enclave. Bermuda Run's residents are 99% Caucasian and have a median household income of \$84,187. The median value of an owner occupied dwelling unit within the Town is \$257,500. Likewise, 41% of Bermuda Run's residents are 65 or older and only 1.4% lived in poverty according to 2000 U.S. Census data.

Finally, the City of Lone Tree, CO, which is located less than 20 miles south of Denver, CO, is another example of an Exclusive Enclave NIM. Lone

Tree received a Weighted Composite Score of 0.78 and ranked 8<sup>th</sup> out of the 13 Exclusive Enclave NIMs. Lone Tree had a population of 4,873 and a population density of 2,827 persons per square mile in 2000. Additionally, 91.5% of Lone Tree's residents are white. According to the City's website "a major impetus for incorporation was resident's concerns relating to land use, the quality of development along the C-470 corridor, and their desire for greater input over development decisions affecting their future" (Lone Tree, 2007). Lone Tree City residents had a median household income of \$96,308 and a median value of owner occupied housing units of \$292,500. Additionally, only 1.4% of Lone Tree's population lived in poverty according to the 2000 U.S. Census. Interestingly, Lone Tree did have a relatively young population compared to the other Exclusive Enclave NIMs with a median age of 36.9 years and only 3.9% of the residents being 65 years or older.

Malibu, CA, Bermuda Run, NC, and Lone Tree, CO are typical Exclusive Enclave NIMs. In general, these NIMs are some of the most racially and economically segregated municipalities in the United States. They are also increasingly gated enclaves or restricted developments that look to explicitly separate themselves from the remainder of society. Where once cities, towns, and villages were established to provide public services (i.e. water, sewer, fire protection), Exclusive Enclave NIMs appear to be incorporating to protect their interests and themselves from the rest of society.

### Suburban Settlement NIMs

One hundred and two (102) cities were clustered into the Suburban Settlement NIM Typology. Suburban Settlement NIMs had a mean weighted composite score of 0.29 (Table 23). These NIMs recorded a mean population of 12,038 and a population density of 1,533 people per square mile (Table 24). Additionally, 88 of the 102 NIMs (86%) within this cluster were located in a Metropolitan or Micropolitan Statistical Area. Suburban Settlement NIMs have the largest mean population, second highest density and are more likely to be located near urban agglomerations than are the Peripheral Community NIMs, which only had 83.5% of its NIMs located in a Metropolitan or Micropolitan Statistical Area.

Suburban Settlement NIMs recorded the second highest mean Skills/Affluence PC Score (0.13) and second highest mean Elderly PC Score (0.02) (see Table 23). Therefore, Suburban Settlement NIMs experienced the second highest median household income (\$56,281), the second highest median value of owner occupied housing units (\$195,588) and the second highest percentage of residents with a college degree (31.2%). Suburban Settlement NIMs also had the second highest mean age (40.0 years), percent of residents 65 and older (14.6%) and percentage of residents in the workforce (60.2%).

Suburban Settlement NIMs had a mean PC Race Score of 0.05.

Approximately 77% of the residents of these NIMs are Caucasian, while 13.5% are Black and 9.1% are Hispanic or Latino. These results show Suburban

Settlement NIMs as one of the most diverse NIM typologies. As a result of these PC scores, it can be concluded that many of these municipalities are on their way to becoming more fully functioning cities that include a heterogeneous populace.

These NIMs had the second highest mean Score for several Principal Components including: Political Affiliation (0.00), Commuting Patterns (0.01), Occupational Characteristics (0.01), Migration (0.01), Urbanity (0.01), and Growth (0.00). First, 43.9% of Peripheral Community NIM residents voted for the Democratic candidate for President in 2000 compared to 54.5% for George W. Bush. This NIM type also had the second largest percentage of residents working in the community in which they reside (18.1%) and second shortest commute times to work (27.2 minutes). This may highlight the importance of Suburban Settlement NIMs location in Metropolitan/Micropolitan Statistical Areas and their proximity to employment centers compared to the more isolated Peripheral Community NIMs.

Additionally, Suburban Settlement NIMs had the second highest percentage of residents employed in sales occupations (26.3%) and second lowest percentage of residents in construction (9%). Again, this may be a function of the more fully developed economies located in Metropolitan and Micropolitan areas as well as the larger populations compared to those found in the Peripheral Community NIM Typology. While these NIMs had the highest populations they did not have the newest residents based on the median year a householder moved into their unit (1993). Larger populations are usually more

indicative of newer populations as a result of in-migration. However this is not the case in regards to Suburban Settlement NIMs.

Suburban Settlement NIMs did have the second highest Urbanity score. This is attributable to having the second highest population density (1,534) and the second highest percentage of Hispanic residents (9.1%) and not directly linked to poverty since this NIM typology had the second lowest percentage of residents living in poverty (11.1%).

Finally, Suburban Settlement NIMs had the second highest Growth Score (0.00). In general, these NIMs have the second newest housing stock (i.e. median year structure built – 1978), but are generally located in the slowest growing County's as measured by the Percent County Population Growth Rate (1990-2000) of 19.8% when compared to the other NIM types.

The characteristics outlined above generally describe a more diverse population that inhabits Suburban Settlements when compared to the Exclusive Enclave Typology. Suburban Settlement NIMs seem to showcase the characteristics of a younger city that is maturing and becoming a more fully functioning city. Examples of Suburban Settlement NIMs include Kenmore, WA which is located north of Seattle, WA; Wellington, FL a suburb of Palm Beach and Fort Lauderdale, FL; and Oak Ridge, NC which is located in the Piedmont Triad of North Carolina.

The City of Kenmore, WA is one of ten NIMs incorporated in King County, WA during the 1990s and received a Weighted Composite Score of 0.32 and

ranked 40<sup>th</sup> out of the 102 Suburban Settlement NIMs. Kenmore had a 2000 U.S. Census population of 18,678 and a population density of 3,029 people per square mile, making it a relatively large and densely settled NIM. More than 86% of the population of Kenmore is white (86.7%). And over 40% of Kenmore's residents have a college degree or better (41.5%). Conversely, only 5.7% of Kenmore's population lived in poverty in 2000. Kenmore's residents had a median household income of \$61,756 and a median value of owner occupied dwelling units of \$246,000. Additionally, 11.4% of Kenmore's residents' worked within the City. The larger population of Kenmore provides more opportunity to live and work within the same city even though a great many residents still commute to jobs in other cities. According to the City of Kenmore's website, development in the area that is currently known as Kenmore has been occurring for the better part of a century although it was not until 1998 that the city was officially incorporated (Kenmore, 2007). Kenmore's incorporation may have been precipitated by the growth of the nearby City of Bothell, WA which witnessed a doubling of its population (12,345 to 30,150) and land area (5.3 sq. miles to 12.02 sq. miles) during the 1990s.

Wellington, FL is another example of a Suburban Settlement NIM that had a Weighted Composite Score of 0.39 and ranked 29<sup>th</sup> out of 102 Suburban Settlement NIMs. The Village of Wellington, FL, which is located in Palm Beach County, FL, was originally known as the Acme Improvement District prior to incorporation in 1995. The Village is home to 38,216 residents according to the

2000 U.S. Census and just under 89% are white. Additionally, the median household income in the Village was \$70,271 and the median value of an owner occupied dwelling unit was \$164,800. Only 4.3% of Wellington's population lived in poverty in 2000. Meanwhile, 38% of the residents of Wellington earned a college degree of better. Prior to the creation of the improvement district in the 1950s the area had only a couple of hundred residents because most of the property was wetlands and swamp. As a result, the primary focus of the district was to drain the Everglades to allow for the construction of what would become the Village of Wellington. Today the Village is "mainly composed of golfing and equestrian areas with an upscale shopping mall and many small specialty boutiques and restaurants" (Wellington, 2007). According to the Village's website one of the motivations behind incorporation was the millions of dollars in financial incentives that would be received from the State of Florida (Wellington, 2007).

The Town of Oak Ridge, NC is located in Guilford County, NC just outside the City of Greensboro. Oak Ridge had a Weighted Composite Score of 0.07 and ranked 89<sup>th</sup> out of 102 Suburban Settlement NIMs. Oak Ridge had a 2000 U.S. Census population of 3,988 and a population density of 272 people per square mile. Almost 94% of the Town is white (93.5%) and more than 40% (40.2%) have earned a college degree or better. The Town is primarily a bedroom community with only 9.3% of its residents employed within the Town and a mean travel time to work of almost 26 minutes. The median household

income is \$74,608 and the median value of owner occupied dwelling units is \$204,900. Oak Ridge also had a low percentage of residents living in poverty with only 3.8%. The Town was created as a result of the growth of nearby cities. As one of the founding members of the city stated "A group of us got together and formed a committee because we knew Summerfield, which had been incorporated a few years earlier, Kernersville and Greensboro were interested in moving into this area" (Hairston, 2007). Oak Ridge was incorporated to protect itself from annexation by nearby larger neighbors and is slowly developing into a more fully functioning municipality.

Kenmore, WA, Wellington, FL, and Oak Ridge, NC are prototypical examples of Suburban Settlements with higher median incomes and relatively affordable home values and low levels of employment within the municipalities. As a typology Suburban Settlement residents are not as homogeneous as those found in the Exclusive Enclave and Peripheral Community typologies. More often than not these places tend to be segregated by economic factors rather than racial status. While this type of NIM may often start out as a bedroom community, they have the potential to develop into more complete cities.

## Peripheral Community NIMs

The Peripheral Community NIMs Typology contained 140 municipalities and had the lowest mean Weighted Composite Score (-0.29) (see Table 23).

The mean population of the NIMs classified as Peripheral Community NIMs was

just 2,280. Peripheral Community NIMs also had the lowest population density with a mean of 506 people per square mile (see Table 24). Finally, Peripheral Community NIMs had the lowest percentage of NIMs located in a Metropolitan or Micropolitan designated area (83.5%) of the three identified NIM types.

The mean Weighted PC Skills/Affluence Score for NIMs classified as Peripheral Communities was -0.13. This score translates into having the lowest mean median household income (\$41,202), lowest median value of owner occupied housing units (\$95,983), lowest percentage of residents with college educations (14.1%) and lowest percentage of residents employed in management positions (25.2%). As expected these isolated NIMs do not have access to the same employment opportunities found in more developed and integrated urban environments.

Peripheral Community NIMs, compared to the other NIM types, had the youngest population with a median age of 36.1 years and only 11.4% of their residents over the age of 65 as indicated by the PC Elderly Score of -0.04. Peripheral Community NIMs also had the highest percentage of residents in the workforce (64.8%). This result is not surprising since the poor economic characteristics of Peripheral Community NIMs would lead one to hypothesize that a larger percentage of the population would have to work in order to support their families. Likewise, the large percentage of residents employed in the workforce would also lead to the conclusion that a sizeable part of the population would have to be of employment age or relatively young.

The Race PC Score of -0.04 for Peripheral Community NIMs indicates they are extremely homogeneous municipalities. Somewhat surprisingly, the Peripheral Community NIMs had the second highest percentage of white residents (91.1%) and the second lowest percentage of Black residents (3.3%) and lowest percentage of Hispanic or Latino residents (5.3%) out of all the NIM typologies. The homogeneity found in Peripheral Community NIMs suggests that these NIMs lack the diversity of larger cities and are largely inhabited by poor whites in relatively remote locations.

Peripheral Community NIMs had the lowest mean Score for many of the Principal Components including: Political Affiliation (-0.01), Commuting Patterns (-0.01), Occupational Characteristics (-0.01), Migration (-0.01), Urbanity (-0.01), and Growth (-0.003). Peripheral Community NIMs had the largest percentage of residents that voted for Bush (64.6%) in the 2004 Presidential Election compared to only 33.3% for Kerry. These NIMs also experienced the lowest percentage of residents working in the community in which they reside (10.7%) and the longest commute times to work (27.8 minutes). This could be the result of a lack of employment opportunities in the NIM.

These NIMs also had the lowest percentage of residents employed in sales occupations (24.7%) and highest percentage of residents in construction (15%). This may be partially attributable to the fact that only 83.5% of the Peripheral Community NIMs are located in a Metropolitan or Micropolitan Statistical Area that have larger urban populations in which to develop sales jobs.

Peripheral Community NIMs also had the smallest populations and the oldest residents based on the median year a householder moved into their unit (1993).

Not surprisingly, Peripheral Community NIMs did have the lowest Urbanity score. However, this is largely attributable to having the lowest population density (507 persons per square mile) and the lowest percentage of Hispanic residents (5.3%) and not directly linked to the poverty rate itself since these NIMs had the highest percentage of residents living in poverty (11.7%). Finally, Peripheral Community NIMs had the lowest Growth Score (-0.003). While Peripheral Community NIMs are located in County's experiencing the second highest growth rates (21.1%) they still have the oldest housing stock (i.e. median year structure built – 1976) when compared to the other NIM types.

Examples of Peripheral Community NIMs that will be discussed further include: Natural Bridge, AL, Clincho, VA, and Progresso, TX. Natural Bridge, Alabama is an excellent example of a Peripheral Community NIMs. Natural Bridge had the lowest Weighted Composite Score (-0.73) of all the 255 NIMs included in this dissertation. The Town had a population of 28 and was the second smallest municipality in Alabama according to the 2000 U.S. Census. Additionally, 100% of Natural Bridge's residents are white and the median age is 39.5 years old. Natural Bridge gets its name from the unusual rock formation found near the Town, which spans over 148 feet and is the longest rock arch east of the Rockies (Natural Bridge, 2007). For many years the nearby coal industry provided the majority of people with jobs. However, the coal industry

has recently left the area and has been replaced by the Natural Bridge Restaurant as the Town's largest employer. As a result of the decline in the coal industry, the median household income in Natural Bridge was only \$11,875 in 2000 and approximately 62% of the residents lived in poverty. Additionally, none of the 28 residents of Natural Bridge had earned a college degree according to 2000 U.S. Census data. Finally, like many small towns, Natural Bridge can trace its roots back to the railroad that first came to the area in the late 1890's (Beckwith, 2002).

The Town of Clincho, Virginia is another example of a Peripheral Community NIM that had a Weighted Composite Score of -0.35 and ranked 88<sup>th</sup> out of 140 Peripheral Community NIMs. Clincho, VA is located in Dickerson County in southwestern Virginia, in what was once a thriving coal area. According to the U.S. Census, the Town had a population of 424 in 2000, 90.6% of which were white. The median age of Clincho's residents was 39.4 years old. In the early part of the 20<sup>th</sup> century the area was similar to the "boom towns" of the west that thrived on the natural resources found in the area. Water supplied the first industry with power to run the grist mill and later the coal found in the nearby mountains brought many people to the region. However, it was not until 1991 that the town officially incorporated (Clincho, 2007). The residents that called Clincho home in 2000 had a median income of only \$18,393 and a median value of owner occupied dwelling units of \$23,300. Additionally, 30% of the

residents live in poverty, while only 6.2% had earned a college degree or better by 2000.

The Town of Progresso, Texas provides a final example of a Peripheral Community NIM. Additionally, this town also represents a unique sub-set of Peripheral Community NIMs because it is one of several border towns that were incorporated in the 1990s in Texas. Progresso, Texas is located in Hidalgo County on the U.S. – Mexico border and had a Weighted Composite Score of 0.01 and ranked highest out of the 140 Peripheral Community NIMs. A new bridge across the Rio Grande River has contributed to the recent rise in Progresso's population and may have played a role in incorporation. However, the origins of Progresso can be traced back to the late 1880's when sugar cane was the staple crop and most of the land around Progresso was divided into small farms and ranches (Progresso, 2007). More recently, the Town had a 2000 population of 4,851 and population density of 1,626 persons per sq. mile. Ninety-nine percent (99%) of the residents of Progresso are Hispanic and the median age in the Town in only 21.6 years. Like other Peripheral Community NIMs, Progresso also had very low home values and incomes. The median value of owner occupied housing units was \$29,100 and the median household income was only \$18,184 according to the 2000 U.S. Census. Less than 4.0% of Progresso's population had earned a college degree or better (3.5%) and not unsurprisingly 50.9% of the population lived in poverty in 2000.

As these examples infer Peripheral Community NIMs are characterized by small populations, lower incomes, higher levels of poverty and geographic isolation. One interesting dynamic revealed through the examination of two of these examples is the potential role the exploitation of natural resources may have in the development of Peripheral Communities. In particular, the coal industry was a common trait shared by both Natural Bridge, AL and Clincho, VA. Meanwhile, Progresso can trace its origins to agriculture. A portion of Peripheral Community NIMs may be created in response to changing economic realties. This can be especially true in places that see their primary employment centers close or relocate and leave a large portion of the population behind without a job. Locales that rely greatly on the manufacturing, mining, gas, oil, and coal industries can be especially vulnerable since many of these industries operate as "pseudo-cities" and provide many important services to the local population. When the industry closes or leaves town they leave behind a populace that is used to receiving a particular level of public services but without any entity to provide that service. As a result, these areas may be inclined to incorporate.

# 4.3.4 Spatial Distribution of National NIM Typology

Table 25 provides a detailed account of the spatial distribution of the three NIM Typologies. The spatial distribution of NIMs by NIM type reveals differences in the number and types of NIMs established in the four U.S. Census Regions (i.e. Northeast, Midwest, South, and West).

**Table 25. National NIM Typology Regional Variation** 

	U.S. Census Region			
	Northeast	Midwest	South	West
Total # of NIMs	11 (4.2%)	47 (17.9%)	151 (57.4%)	54 (20.5%)
Exclusive Enclave				
NIMs	0 (0%)	0 (0%)	10 (76.9%)	3 (23.1%)
Suburban				
Settlement NIMs	8 (7.8%)	12 (11.8%)	48 (47.1%)	34 (33.3)
Peripheral				•
Community NIMs	3 (2.1%)	30 (21.4%)	91 (65%)	16 (11.4%)

## Spatial Distribution of Exclusive Enclave NIMs

The South Census Region received a disproportionate share of all NIM activity during the 1990s (57.4%) and 10 of the 13 Exclusive Enclave NIMs established during the 1990s were located in the South Census Region. This may highlight the role warmer weather, beautiful beaches, and a growing wealthy retirement population is having in the South. An examination of Figure 14 reveals that 6 of the 10 Exclusive Enclave NIMs established in the South Census Region are located near a coastline (e.g. Key Biscayne, FL; Marco Island, FL; Carolina Shores, NC; and St. James, NC). The West Census Region (see Figure 15) experienced a similar phenomenon with 2 of the 3 Exclusive Enclaves located near the Pacific Coast (e.g. Laguna Woods, Ca and Malibu, Ca).

# Spatial Distribution of Suburban Settlement NIMs

The spatial distribution of Suburban Settlement NIMs was more uniform relative to Exclusive Enclave NIMs. Each of the four U.S. Census Regions

established Suburban Settlement NIMs during the 1990s. However, the South and West still received the largest numbers and percentages of Suburban Settlement NIM activity. Specifically, the South witnessed the incorporation of 48 (47.1%) Suburban Settlement NIMs. Meanwhile, the West saw 34 Suburban Settlements established. In the South and West Census Regions, Suburban NIMs tended to cluster in larger metropolitan areas such as Charlotte, NC, Greensboro, NC, Los Angles, CA, Miami, FL, and Seattle-Tacoma, WA (see Figure 14 and Figure 15). While, the Northeastern NIMs are primarily clustered in the larger NY metropolitan region (see Figure 12). Finally, the Midwest had 12 Suburban Settlements established within the region, many of which are located near Chicago, IL and St. Louis, MO. The defining spatial characteristic of Suburban Settlement NIMs seems to be the role that proximity to larger urban agglomerations plays in their establishment.

### Spatial Distribution of Peripheral Community NIMs

The Peripheral Community NIMs are predominately located in the South U.S. Census Region. This region witnessed the incorporation of 91 (65.0%) Peripheral Communities during the 1990s. The Midwest had the second largest number of Peripheral Communities with 30 (21.4%) while, the West had 16 (11.4%) Peripheral Communities established. In general, the spatial dynamic that characterized this type of NIM was the increased likelihood that they would be located outside of a Metropolitan Statistical Area. The Peripheral Community

NIMs that are located in Metropolitan Statistical Areas are generally found in less populated Metropolitan Statistical Areas, particularly in the relatively impoverished region that includes Alabama, Arkansas, Oklahoma, and Tennessee. This four state region witnessed the incorporation of 40 (28.6%) Peripheral Communities.

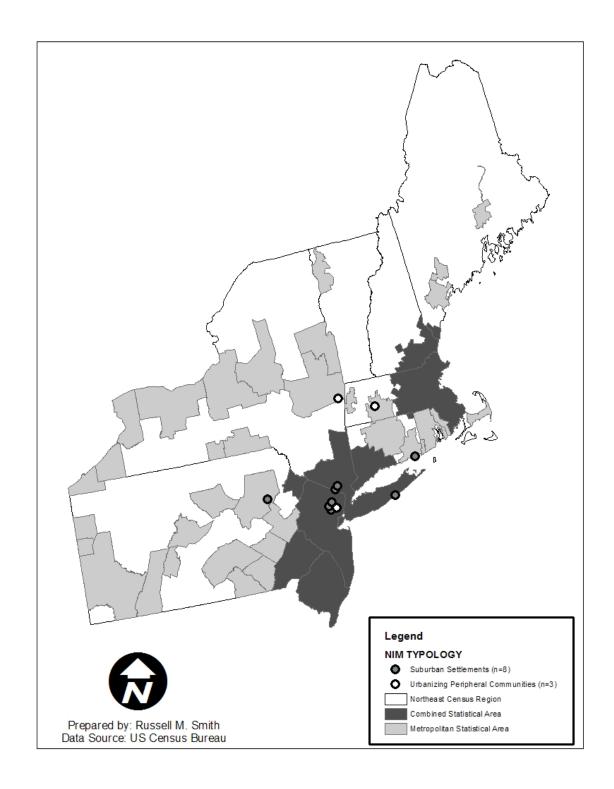


Figure 13. National NIM Typology: Northeast Census Region

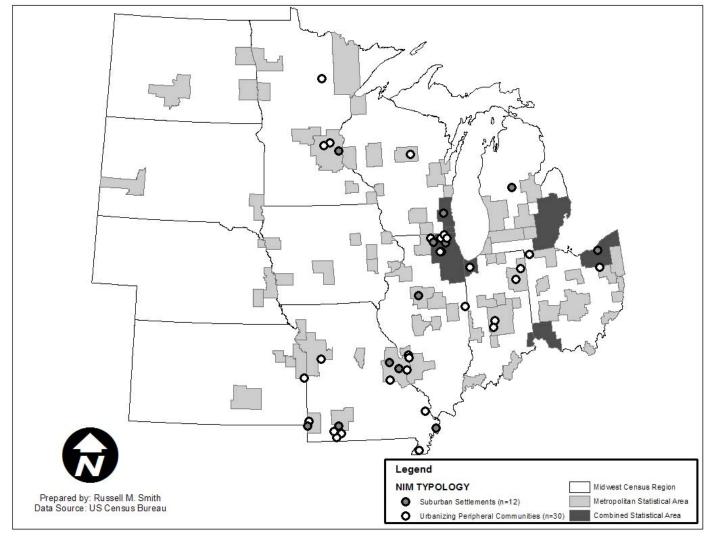


Figure 14. National NIM Typology: Midwest Census Region

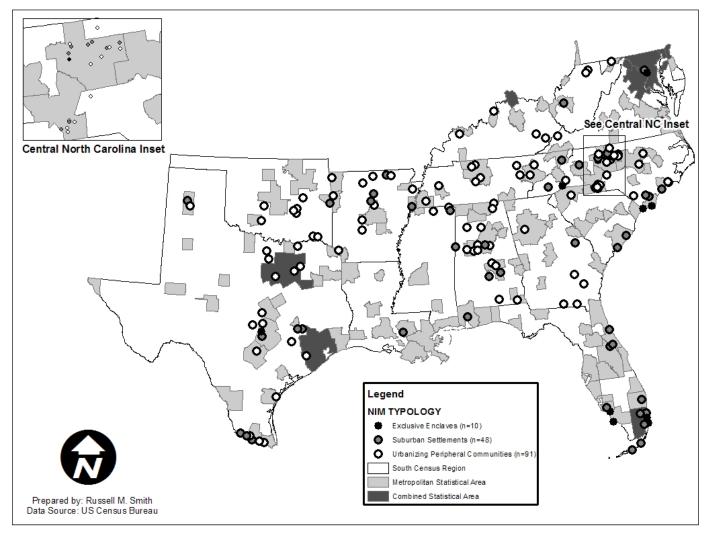


Figure 15. National NIM Typology: South Census Region

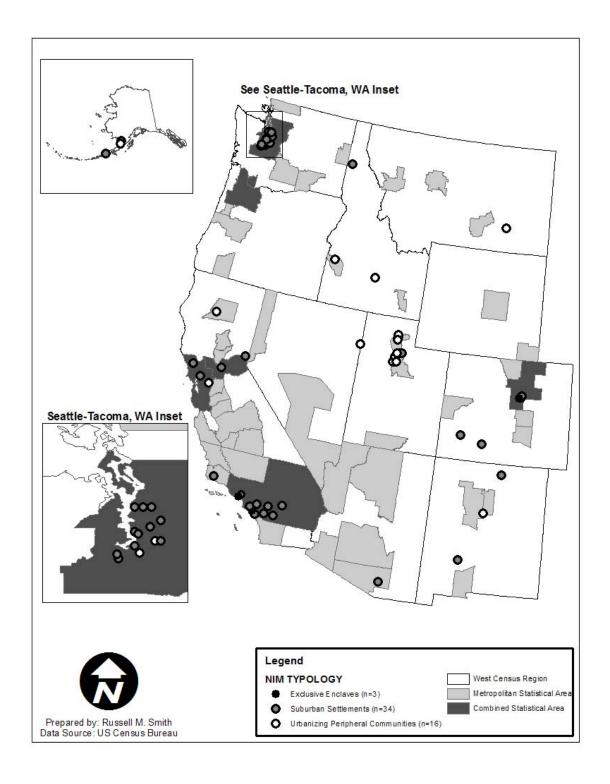


Figure 16. National NIM Typology: West Census Region

### 4.3.5 Conclusions

In summary, the creation of a National NIM Typology serves several purposes. First, the research conducted in this dissertation reveals the existence of a National NIM Typology for the NIMs established during the 1990s. The cluster analysis conducted identified three unique NIM typologies that differentiated based upon specific socio-economic criteria. The NIM types identified included: Exclusive Enclaves (n=13), Suburban Settlements (n=102), and Peripheral Communities (n=140). Exclusive Enclave NIMs contained extremely wealthy, educated, and racially homogeneous populations. The Suburban Settlement typology included cities that generally served as bedroom communities close to large urban areas. Finally, Peripheral Community NIMs tended to be sparsely populated places with a lower educated citizenry and higher levels of poverty.

Secondly, the creation of a National NIM Typology is an important first step in better understanding and studying NIMs. Through the creation of a national typology it becomes possible to better understand the unique geography of municipal incorporation. Additionally, the National NIM Typology will also provide future research opportunities through the creation of a basic framework and language in which municipal incorporations may be studied and compared. It is envisioned that the typology will serve as the basis for future discussions on city formation. The typology

will be especially useful for developing a broader theoretical background for more detailed case study analysis.

Finally, the National NIM Typology can assist public policy makers at different levels of government to make informed decisions regarding incorporation. For example, this research can help shape State incorporation standards regarding population requirements, distances from existing municipalities and various socio-economic requirements. Existing local governments may utilize this information when dealing with the potential incorporation of a nearby community. Finally, areas considering incorporating can get a better understanding of the results of municipal incorporation through the use of the typology. In general, the National NIM Typology will assist policy makers across the country that are focused on balancing the rights of individual communities to cultivate grass-roots democracies with larger concerns about regional economies of scale and metropolitan level competitive advantage in regards to economies of scale and efficient use of tax revenues.

#### CHAPTER IV

#### CONCLUSIONS

Municipal incorporation theory has evolved from the time of the first cities. Many of the earliest cities were established in response to advances in agricultural production which allowed larger numbers of people to reside in closer proximity to each other. Eventually trading, religious, and/or defensive settlements emerged from these advances in agriculture. As cities evolved over the millennia and across the globe, places sought incorporation as a way to provide needed public services to growing urban populations. Today, the existing literature on municipal incorporation theorizes that some cities are now being established in an attempt to create homogeneous enclaves that sort along racial, ethnic, and economic lines.

This dissertation has examined the 263 NIMs established in the 1990s and offers one of the first national analyses of the geographic attributes and socio-economic variation of NIMs. Specifically, this dissertation addressed three key questions regarding municipal incorporation. First, the research conducted in the dissertation highlighted the spatial distribution of NIMs in the United States. This examination revealed that municipal incorporation resulted in an uneven and complex pattern to their development. Specifically, this research uncovered

regional variations in NIM spatial activity that suggested that a disproportionate share of NIMs are being established in the South.

Additionally, this dissertation revealed unique clusters of NIMs in specific counties (e.g. King County, WA; Union County, NC; and Guilford County, NC) where a NIM 'movement' of sorts appears to have been established. The clustering of NIMs to specific counties can be partially explained as a response to the aggressive annexation tactics of neighboring cities. Specifically, this dissertation revealed a 'copy cat' effect that seems to take place within a region after the first unincorporated community successfully makes the transition to NIM status. A successful incorporation may encourage other unincorporated territories to consider incorporation strategies.

Secondly, this research determined that there are statistically significant differences between NIMs and a group of Cohort cities at the national scale along a wide array of socio-economic variables. The national examination of municipal incorporation conducted in this dissertation confirmed what was previously discovered and theorized at the local and regional scale. These findings validate the existing literature on municipal incorporation that implies that new cities are established as homogeneous settlements in response to perceived threats from neighboring more heterogeneous cities. As expected, NIMs and Cohorts were found to be statistically significantly different along the following variables: population, population density, percentage of white residents, median household income, median value of owner occupied dwelling units, and

percentage of residents living in poverty. However, several additional variables also were shown to be statistically significantly different including: mean travel time to work, percentage of residents employed in their city of residence, median year structure built, percentage of residents residing in the same house of city in 1995, median year household moved into structure and median age.

Surprisingly, the percentage of residents with a college degree or better, the percentage of black, the percentage of Hispanic, and the government finance variables (i.e. per capita government revenue and per capita government expenditure) were not shown to be statistically significantly different across the nation. These results confirm a large portion of the theory that was developed regarding municipal incorporation and offers additional new variables for examination.

Interestingly, this research also revealed that macro geography (i.e. U.S. Census Region and Metropolitan Designation) does not play a large role in determining socio-economic variation between NIMs and Cohorts. Rather, the key statistically significantly different socio-economic variation between NIMs and Cohort Cities remain relatively stable across the country. That said a more localized geography appears to play a substantive role in the municipal incorporation process as highlighted by the clustering phenomenon experienced by some NIMs in specific counties across the country. It appears that a sort of Jeffersonian 'grass-roots' democracy is being cultivated in very specific locales such as King County, Seattle, and Guilford County, Greensboro NC that is

capable of 'birthing' a disproportionate number of NIMs. The apparent 'herd-mentality' that seems to flourish in certain places is worthy of additional attention and this dissertation is a first step in targeting these unique geographies.

Finally, the development of a National NIM typology uncovered three types of NIM that will aid future municipal incorporation research and serve as a foundation for examining differences among new cities. The three NIM types (i.e. Exclusive Enclaves, Suburban Settlements, and Peripheral Communities) can be utilized in future case studies. The typologies remind us that not all NIMs are created equally. It is also hypothesized that additional subsets of NIMs exist within the three NIM types and that this may be an avenue of future research. In particular, it is possible that there may be multiple types of Suburban Settlements including those Suburban Settlement NIMs that will develop into more heterogeneous fully functioning cities and those that will remain homogeneous residential places that will not develop a full range of urban land uses (e.g. commercial, industrial, institutional).

The dearth of research on municipal incorporation affords numerous opportunities for future research endeavors for geographers. This dissertation provides a first glimpse into the regional patterns of NIM development and highlights the rapid growth in NIMs across the Sunbelt states. Future research could examine if there are differences in the factors that influence municipal incorporation within the Sunbelt. Secondly, I believe future research should include a more detailed examination of NIMs in North Carolina. North Carolina

experienced the largest number of incorporations between 1990 and 2000. This future study could focus on examining both the socio-economic and legislative variables that impact municipal incorporation. Additionally, an examination into the role of lot sizes and house size could help further refine the NIM Typology. Finally, I would like to further explore the cluster effect that seems to be a byproduct of NIM development in several parts of the country.

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## APPENDIX A. NIM PRINCIPAL COMPONENT SCORES

NIM	STATE	PC1: Skills/ Affluence	PC 2: Elderly	PC 3: Political Affiliation	PC 4: Race	PC 5: Commuting Patterns
Encode att.	Alc		0.0040		4.7000	
Egegik city	AK	0.4760	0.0019	-1.3778	1.7993	5.5504
False Pass city	AK	0.7126	-0.9835	-2.3145	2.3647	5.5281
Pilot Point city	AK	-0.3444	-1.0763	-0.4193	1.1739	3.8688
Chelsea town	AL	0.4187	-0.4773	-1.6056	-0.0033	-0.4178
Coaling city	AL	-0.5746	-0.7198	-0.6191	-0.1930	-0.2450
Coker town	AL	-0.3773	-0.1612	-1.0921	-0.4520	-0.0999
Deatsville town	AL	-0.3286	-0.0865	-1.3480	-0.4507	-0.6150
Dodge City town	AL	-1.1577	-0.0775	-1.0008	-0.6628	-0.2124
Elmore town	AL	-0.8308	-0.2586	-1.3967	1.3026	-0.0041
Gordonville town	AL	-0.5340	0.7314	0.3051	4.5768	-2.0092
Horn Hill town	AL	-0.8471	-0.1246	0.2473	-0.4075	-0.4387
Hytop town	AL	-1.4290	-0.7897	0.2166	-0.4402	-1.0634
Indian Springs Village town	AL	1.6691	0.1578	-1.5642	0.0798	0.0584
Lake View town	AL	-0.2990	-0.5381	-1.4057	-0.2535	-1.0812
Macedonia town	AL	-0.9143	-0.1986	1.4402	4.3868	-0.5880
Natural Bridge town	AL	-1.9368	0.3702	-1.1606	-0.5830	0.9210
North Bibb town	AL	-0.6177	-0.6149	-1.4862	-0.3706	-0.7550
Pike Road city	AL	0.8627	-0.4123	-0.6911	1.6960	0.5033
Pleasant Groves town	AL	-1.0728	-0.7342	-0.0919	-0.4606	-0.7543
Rehobeth town	AL	-1.1100	-0.2341	-1.2905	-0.5088	0.3624
Spanish Fort city	AL	0.7373	0.3770	-1.4807	0.1746	0.0716
Anthonyville town	AR	-1.3429	0.1029	1.8768	4.8311	-0.9025
Briarcliff town	AR	-0.8501	0.3214	-0.0152	-0.7926	0.2110
Cedarville city	AR	-0.9156	-0.5614	-0.7159	-0.2588	-0.3943
Cherokee Village city	AR	-0.4655	2.7878	-0.0980	-0.4360	-0.0060
Donaldson town	AR	-0.7901	0.1777	-0.0610	-0.7585	-0.8319
Etowah town	AR	-1.4416	-0.1946	0.6596	-0.2607	0.0593
Fairfield Bay city	AR	-0.2905	4.0870	0.1250	-0.2538	1.3761
Fountain Lake town	AR	-1.5288	0.1361	0.7505	-0.7807	0.5627
Highland city	AR	-0.6491	0.8420	-0.3691	-0.6436	1.3095
Holland city	AR	-0.5739	-0.1073	-0.2454	-0.3744	-1.1282
Springtown town	AR	-1.3490	-0.9893	-0.9035	-0.1889	0.5221
St. Joe town	AR	-0.7950	0.2149	-0.5892	-0.0958	0.2514
Twin Groves town	AR	-0.5412	0.6065	0.6427	3.0850	-1.0097
Sahuarita town	AZ	-0.0630	0.1383	0.2347	-0.3194	0.5052
American Canyon city	CA	-0.1330	-0.2407	1.6929	0.3227	-0.3940
Buellton city	CA	0.1016	-0.2773	0.4294	-0.2466	1.1575
Calabasas city	CA	2.2412	-0.5195	1.1616	0.2095	-0.2508
Calimesa city	CA	-0.3850	1.0398	0.1523	-0.3517	0.1260

Canyon Lake city	CA	0.5276	0.4282	-0.7797	-0.0489	-0.8208
Chino Hills city	CA	0.7936	-1.1719	0.7474	0.8642	-0.9012
Citrus Heights city	CA	-0.8512	-0.5480	0.7805	-0.4405	-0.3399
Laguna Hills city	CA	0.9838	-0.2799	0.1830	0.0999	0.1014
Laguna Woods city	CA	-0.0857	6.1281	0.4221	-0.4166	0.2966
Lake Forest city	CA	0.5548	-0.8525	0.4217	0.0386	0.0875
Malibu city	CA	3.1373	0.0741	1.9326	-0.0089	0.0424
Murrieta city	CA	0.0825	-0.3687	-0.0248	0.1902	-0.4276
Oakley city	CA	-0.1239	-0.9641	1.2966	0.0092	-1.2809
Shasta Lake city	CA	-1.0325	0.0019	0.1706	-0.5717	0.4890
Truckee town	CA	0.3806	-0.8875	1.7482	-0.4973	1.4154
Windsor town	CA	0.3805	-0.6296	1.2949	-0.0075	0.1977
Yucca Valley town	CA	-0.6085	0.9661	0.1379	-0.4906	0.5805
Foxfield town	CO	1.8083	-0.1085	-0.4031	0.0746	-0.2228
Lone Tree city	CO	2.3376	-0.1003	-0.9406	0.8025	-0.2220
Mountain Village town	CO	1.5882	-1.0711	2.5580	-0.3128	1.6384
South Fork town	CO	0.1812	0.8273	-0.8761	-0.0175	1.9307
Groton Long Point	CO	0.1012	0.0273	-0.0701	-0.0173	1.9307
borough	СТ	2.0837	0.4352	1.0998	-0.7590	-0.2904
Aventura city	FL	0.8022	1.9313	0.8981	-0.1806	-0.3525
Bonita Springs city	FL	-0.2997	1.8473	0.5378	-0.4135	0.9016
De Bary city	FL	-0.3346	0.9535	0.2076	-0.3321	-0.5613
Deltona city	FL	-0.7741	-0.1875	1.3942	-0.1633	-0.6626
Fort Myers Beach	- ' -	-0.77-41	-0.1073	1.0042	-0.1000	-0.0020
town	FL	-0.0281	2.6170	0.3910	-0.5759	1.2122
Islamorada, Village of						
Islands	FL	-0.0121	0.4818	0.3063	-0.3939	1.1023
Key Biscayne village	FL	2.6940	0.0757	0.2907	-0.3377	0.3484
Marathon city	FL	-0.2465	0.2557	0.9888	-0.6380	2.9004
Marco Island city	FL	0.5914	2.8219	-0.3934	-0.1606	1.9478
Palm Coast city	FL	-0.3836	1.8455	0.8676	0.2802	0.8582
Pinecrest village	FL	2.2593	-0.5301	0.7386	-0.2331	-0.0516
Sunny Isles Beach city	FL	0.5978	1.7820	0.5766	-0.4544	-1.0718
Wellington village	FL	0.6309	-0.4560	0.8414	0.1764	0.0046
Weston city	FL	1.1440	-0.7894	0.9905	0.2257	-0.2418
Dasher town	GA	-0.3908	-0.3134	-1.0450	-0.4623	0.2731
Fargo city	GA	-0.6576	-0.4556	-2.0658	1.4278	1.5569
Graham city	GA	-0.7428	0.0524	-0.0870	1.9463	-0.1624
Lithia Springs city	GA	-0.5145	0.3144	1.2714	-0.5137	-0.7616
Offerman city	GA	-1.1087	-0.0946	-0.4682	-0.0927	-0.9594
Vidette city	GA	0.3553	0.7782	-0.2444	1.2908	0.0359
Carey city	ID	-0.0948	-0.6305	2.3172	-0.8616	1.1154
Parkline city	ID	-0.4536	0.9963	-0.6247	0.1789	1.9158
Star city	ID	-0.4550	-0.8834	-1.0817	-0.0906	-0.2158
Bismarck village	IL	-0.3027	-0.6634	-0.1205	-0.0900	0.7116
•						
Caledonia village	IL	-0.1898	-0.8740	0.3604	-1.1645	-0.5541

Godfrey village	IL	-0.0952	0.2093	0.3655	-0.4426	-0.0892
Greenwood village	IL	0.3742	-0.6074	0.9019	-1.2745	0.0946
Lily Lake village	IL	0.5760	-0.8414	-0.0566	-0.3150	-0.6861
Ringwood village	IL	0.4032	0.0233	0.1530	-0.5005	-0.5336
Timberlane village	IL	0.8223	-0.6870	-0.1441	-0.2027	0.0274
Trout Valley village	IL	1.9796	-0.0473	-0.2391	0.0182	-1.1736
Virgil village	IL	-0.0221	-1.2736	-0.0638	-0.5338	-0.2770
Volo village	IL	-0.4210	-0.4117	0.5057	-0.8170	0.1222
West Peoria city	IL	-0.2272	0.1693	1.2800	-0.6560	1.3839
Avon town	IN	0.1690	-1.0633	-0.8676	-0.0450	-0.1030
Leo-Cedarville town	IN	0.0928	-0.8349	-1.1714	-0.3908	0.2661
Monrovia town	IN	-0.6109	-0.4127	-0.0819	-1.0406	-0.1075
Winfield town	IN	0.2913	-0.2556	0.0691	-0.1845	-0.5382
Zanesville town	IN	-0.5441	-1.0281	-0.3996	-0.6241	0.1861
Linn Valley city	KS	-0.5311	1.0218	-0.2273	-0.1004	-0.4268
Blackey city	KY	-0.9709	0.7919	0.8206	-0.7815	-0.8084
Buckhorn city	KY	0.5043	-0.8329	-0.5050	-0.4849	1.6472
Goshen city	KY	0.8008	-1.1431	-0.7343	-0.3480	-0.2992
Robards city	KY	-0.7798	-0.3777	0.1053	-0.7931	-0.3410
St. Gabriel town	LA	-0.7151	0.5496	0.5555	3.0356	1.0903
Easthampton city	MA	-0.2021	-0.4569	1.7813	-0.9652	0.8621
Chevy Chase View						
town	MD	3.3398	-0.1366	0.7274	-0.4124	-0.1654
North Chevy Chase		0.0740	0.0400	4 =000	0.0404	
village	MD	3.0746	-0.2429	1.5960	-0.2484	-0.0855
Village of Lake Isabella village	MI	-0.5221	0.7146	0.6861	-0.4685	0.1191
Cohasset city	MN	-0.5120	0.1036	0.3651	-0.5529	1.1719
Grant city	MN	1.4576	-0.4860	0.3031	-0.2520	-0.1859
Oak Grove city	MN	0.1333	-1.1207	0.1781	-0.2520	-1.1471
Otsego city	MN	-0.2694	-1.2253	0.0588	-0.4904	-0.4158
Bull Creek village	MO	-1.8042	-0.9304	-0.1762	-0.7533	1.3003
Coney Island village	MO	-0.6525	2.1523	-0.6381	-0.1553	-1.6020
Dutchtown village	MO	-1.0745	-0.6466	-0.7468	-0.7207	0.5835
Grand Falls Plaza	IVIO	1.0740	0.0400	0.1400	0.7207	0.0000
town	МО	-0.3148	0.0335	-0.5184	-0.6641	0.2920
Green Park city	МО	-0.3412	0.3456	0.8759	-0.8818	0.2758
Highlandville city	МО	-0.9000	-0.3786	-0.2500	-0.6488	-0.3901
Innsbrook village	МО	0.7717	2.1564	-0.7598	-0.0937	-0.9158
Lake Lafayette city	МО	-1.4530	-0.7145	0.9308	-0.3800	-1.0643
Loma Linda town	МО	0.6915	0.1789	-1.1796	-0.0070	0.0502
McCord Bend village	МО	-1.3576	0.3782	0.0017	-0.7105	-0.8168
Miramiguoa Park						
village	MO	-1.0749	-0.2208	0.3167	-0.4494	-1.8434
Pinhook village	MO	-0.9340	0.1161	-0.7324	4.2052	0.5520
Rives town	MO	-1.8760	0.3657	0.7953	-0.7593	-0.2574

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West Alton city	MO	-1.0368	-0.2457	1.8014	-1.0474	-0.5160
Wildwood city	MO	1.4715	-0.7804	-0.4557	0.1813	-0.1334
Farmington town	MS	-0.8685	-0.7037	-0.3447	-0.4289	0.0722
Glen town	MS	-0.9831	0.2460	0.5114	-0.8472	-0.0374
Snow Lake Shores		4 0000	4.00=0	4 4000	0.0044	4 0004
town	MS	-1.0209	1.8370	1.4886	-0.3211	-1.2281
Colstrip city	MT	0.1802	-0.9474	1.7152	-0.6455	2.2524
Badin town	NC	-0.5144	0.0636	0.5218	0.6750	0.4520
Bermuda Run town	NC	1.5391	2.7209	-1.2480	0.1521	-0.0079
Bethania town	NC	0.4046	0.1956	-0.0434	0.2669	-0.4819
Boardman town	NC	-0.8211	0.4885	1.1766	1.2153	-1.2959
Bogue town	NC	-0.5956	0.0470	-0.7612	-0.4120	0.0025
Carolina Shores town	NC	-0.5675	4.2309	0.0906	-0.5169	1.1225
Cedar Rock village	NC	2.0277	0.4727	-0.4712	-0.0561	0.3965
Chimney Rock village	NC	-0.5703	0.4264	0.1311	-0.9736	0.9309
Flat Rock village	NC	1.5045	2.5109	-0.7890	0.0557	0.4630
Forest Hills village	NC	1.4875	0.0091	-0.1435	0.1499	1.0844
Green Level town	NC	-1.0532	-0.6298	0.5440	3.4285	-0.1128
Hemby Bridge town	NC	-0.0936	-0.0936	-0.8453	-0.3480	-1.5157
Lake Park village	NC	0.9393	-0.6970	-1.1037	0.4462	-0.7392
Lewisville town	NC	0.7193	-0.5194	-0.5607	-0.0738	0.2592
Marvin village	NC	1.8720	-0.5467	-1.1325	0.4220	-0.3512
Mineral Springs town	NC	-0.1513	-0.4121	-0.8417	0.4205	-0.7351
Momeyer town	NC	-0.7212	0.1531	-0.4687	-0.1917	-0.5500
North Topsail Beach						
city	NC	0.5679	0.5691	-0.8817	-0.0322	-0.5393
Northwest city	NC	-0.7567	0.1435	0.4470	3.1931	-0.6167
Oak Ridge town	NC	0.9574	-0.5679	-0.9186	0.1788	-0.0135
Peletier town	NC	-0.9997	0.6555	-0.6772	-0.7885	-0.3090
Pleasant Garden town	NC	-0.2818	-0.1341	-0.6478	0.1129	-0.2321
Sandyfield town	NC	-0.2952	-0.2165	-0.3507	4.3231	-0.6570
Sedalia town	NC	-0.4600	0.1029	-0.0255	3.6540	-0.0077
St. James town	NC	1.9242	2.1764	-0.2498	0.1938	0.6493
Summerfield town	NC	0.7778	-0.4697	-0.7031	0.0462	0.1795
Swepsonville town	NC	0.0971	-0.0700	0.4273	-0.3296	0.1838
Tobaccoville village	NC	-0.2757	-0.3542	-0.5398	-0.4060	-0.1068
Trinity city	NC	-0.7027	-0.3419	-0.9859	-0.1816	0.0982
Unionville town	NC	-0.2072	-0.5656	-0.9783	-0.2400	-0.3087
Wentworth town	NC	-0.4852	-0.2248	-0.3538	0.3813	-0.5251
Wesley Chapel village	NC	0.6850	-0.6938	-0.8703	0.0039	-0.2048
Whitsett town	NC	-0.3033	0.0162	-0.1264	-0.3649	0.0805
Wilson's Mills town	NC	-0.5310	-0.7074	-0.3367	0.7480	-0.7244
Caldwell borough	NJ	1.1028	-0.0777	0.3952	-0.5862	-0.1613
Essex Fells borough	NJ	3.2375	-0.1457	-0.0812	-0.3471	-0.1686
Glen Ridge borough	NJ	2.2483	-0.5191	1.2350	-0.4283	-0.8776
Cien Maye boloagii	UVI	2.2403	-0.5181	1.2330	-0.4203	-0.0770

North Caldwell						
borough	NJ	2.5018	-0.1769	0.0411	0.6451	-0.3933
Edgewood town	NM	-0.0744	-0.3909	-0.3623	-0.2261	-1.0172
Elephant Butte city	NM	-0.3183	2.6382	-1.0740	-0.2728	0.8301
Taos Ski Valley village	NM	2.1154	-0.6409	1.1397	-0.2184	1.3941
West Wendover city	NV	-1.2257	-1.6070	1.0799	-0.7329	2.8469
Airmont village	NY	1.4895	-0.1394	0.7140	-0.1018	-0.7772
East Nassau village	NY	0.2145	-0.2972	1.0231	-0.9012	0.0067
Kaser village	NY	0.6097	-0.5293	-4.0899	0.3242	-0.3233
West Hampton Dunes						
village	NY	1.8128	2.1434	1.4278	-0.9005	-3.7016
Highland Hills village	ОН	-0.4213	0.8836	2.7379	2.5653	-0.3573
Holiday City village	ОН	-0.3228	-1.0957	-0.9828	-0.1551	0.8129
New Franklin village	ОН	-0.2891	0.0874	0.9940	-0.8274	-0.2846
Atwood town	OK	-1.0454	0.0890	-0.1876	-0.3789	0.9537
Central High town	OK	-0.3092	-0.1155	-0.8093	-0.2699	-0.0515
Fort Coffee town	OK	-0.5040	0.1164	2.5297	2.8262	-0.1511
Horntown town	OK	-0.3308	-0.1097	-0.1865	-0.4848	0.9374
Pocasset town	OK	-1.2296	-0.3143	-0.9490	-0.3257	1.0812
Sawyer town	OK	-0.6543	0.2822	0.0021	-0.1650	0.4775
Schulter town	OK	-0.8263	-0.1250	0.4595	-0.3926	-0.1328
Spaulding town	OK	-0.1020	0.3450	-0.7914	0.2594	-0.3210
Swink town	OK	-0.5501	1.6123	-0.6538	-0.8116	-1.5282
Bear Creek Village						
borough	PA	1.6637	0.6574	-0.0697	-0.4444	-0.0396
Awendaw town	SC	-0.7314	0.0626	0.8744	2.7299	-0.7266
Reidville town	SC	-0.4971	-0.0081	-0.8373	-0.0815	-0.2377
Rockville town	SC	0.8852	0.9707	1.3612	0.4728	0.5646
Coopertown town	TN	-0.2901	-0.4958	-0.5554	-0.1380	-0.7252
Hickory Withe town	TN	0.2262	0.0587	-0.8507	0.5412	-0.9237
Louisville city	TN	-0.1338	-0.0184	-0.2493	-0.5090	-0.0392
Midtown city	TN	-1.3899	-0.0403	-0.5305	-0.2279	0.2300
Nolensville town	TN	-0.0405	-0.6269	-0.4664	-0.0272	-0.3461
Plainview city	TN	-0.9833	-0.5839	-0.1639	-0.4289	-0.9465
Pleasant View city	TN	-0.2073	-0.7177	-0.5665	-0.2610	-0.5121
Sunbright city	TN	-0.8169	0.2664	-0.3827	-0.5178	-0.7493
Thompson's Station	TNI	0.2400	0.2200	0.0500	0.4054	0.4426
town	TN	0.3499	-0.3208	-0.2522	0.1051	-0.1136
Three Way city	TN	0.4878	-0.8587	-1.0972	-0.0201	-0.0013
Unicoi town	TN	0.3631	0.0928	-1.1561	-0.1678	0.3144
Anderson city	TX	0.0058	0.8098	-0.0146	1.3551	0.1229
Bear Creek village	TX	1.3438	-0.5957	-0.2290	-0.0849	-0.5584
Bishop Hills town	TX	0.7620	0.6629	-1.3976	-0.4685	0.1254
Cross Timber town	TX	-0.0841	-0.2745	-1.0169	0.0781	-1.3615
Fairchilds village	TX	-0.4883	-0.6840	-0.8004	-0.3116	-0.8905
Granjeno city	TX	-0.4388	-0.1467	1.4042	-1.1460	-0.1647

Hawk Cove city	TX	-1.0731	0.6948	-0.3204	-0.3006	-2.7859
Highland Haven city	TX	0.3248	3.6326	-0.9438	-0.1933	0.0670
Industry city	TX	-0.5548	0.0395	-0.9265	0.4529	0.2600
Ingleside on the Bay						
city	TX	-0.2479	0.1919	-0.8491	-0.4571	-0.0013
Kempner city	TX	-0.6026	-0.6759	-1.1993	0.0084	-0.3660
Liberty Hill city	TX	-0.5391	-0.2157	-0.8159	-0.4745	-1.1866
Los Indios town	TX	-1.1586	-0.9670	0.2218	0.0218	-0.9321
Millican town	TX	0.1881	0.5347	-0.5207	-0.3951	0.6774
Palisades village	TX	-1.0428	-0.1248	-0.7915	-0.9418	-0.6152
Paradise city	TX	-0.5414	-0.1491	-1.0044	-0.4038	-0.1140
Penitas city	TX	-0.8003	-0.9221	1.5699	-0.8026	0.4309
Progreso city	TX	-0.8141	-1.2415	1.1827	-0.6242	1.4279
Ravenna city	TX	-1.2512	0.4608	-0.4595	-0.4228	-0.7167
Red Lick city	TX	0.4877	-0.3884	-1.1143	-0.1189	0.3969
Rio Grande City city	TX	-0.3541	-0.4810	2.1513	-0.7869	2.5244
Santa Clara city	TX	-0.1796	-0.3928	-1.1399	0.0697	0.0753
Sullivan City city	TX	-1.0118	-1.0750	2.5464	-0.3177	0.6485
Sunset city	TX	-0.8154	0.3707	-0.7298	-0.5192	-1.0506
Talty city	TX	0.6919	-0.9337	-0.9088	0.1633	-1.2190
The Hills village	TX	2.3168	1.0675	-1.4410	0.6292	-0.5414
Eagle Mountain town	UT	0.2104	-1.3619	-1.6853	-0.0626	-0.8737
Herriman town	UT	0.2617	-1.2204	-1.2678	-0.1531	-0.2031
Holladay city	UT	0.8841	-0.1122	0.0559	-0.3962	0.2803
Marriott-Slaterville city	UT	-0.4696	-0.3475	-1.0636	-0.3860	0.4862
Saratoga Springs						
town	UT	1.0061	-0.8828	-2.0310	0.3238	-1.3944
Taylorsville city	UT	-0.5280	-1.3272	0.3214	-0.3630	0.0278
West Haven city	UT	0.0064	-1.1451	-0.8231	-0.4115	0.1940
Clinchco town	VA	-0.7787	0.9545	1.8425	-1.0817	-1.3184
Burien city	WA	-0.2258	-0.2856	1.8028	-0.2753	0.0758
Covington city	WA	0.0607	-1.1047	0.8030	-0.2276	-0.6835
Edgewood city	WA	0.1584	-0.3070	0.6475	-0.3878	-0.1593
Federal Way city	WA	-0.2715	-1.0301	1.7364	0.3027	-0.2001
Kenmore city	WA	0.8459	-0.4881	1.3727	-0.2075	-0.1987
Lakewood city	WA	-0.4249	-0.3025	1.3216	0.3397	0.3524
Maple Valley city	WA	0.4825	-0.9338	0.2994	0.0202	-0.7613
Newcastle city	WA	1.5596	-0.7214	0.6735	0.4881	-0.0852
Sammamish city	WA	1.9967	-0.9993	0.6979	0.2803	-0.3122
SeaTac city	WA	-0.5948	-0.7156	1.7385	0.0825	0.2363
Shoreline city	WA	0.3650	-0.2951	2.2263	-0.2772	-0.0925
University Place city	WA	0.3030	-0.4467	0.9517	0.1757	0.0473
Woodinville city	WA	0.9975	-0.6906	0.8506	0.0265	0.2475
Pewaukee city	WI	0.8879	-0.3800	-0.5048	-0.1969	0.1704
Weston village	WI	-0.5217	-0.9912	0.2818	-0.3968	0.8243

Carpendale town	WV	-1.0412	0.0357	0.3442	-0.8506	-0.0607
Jefferson town	WV	-1.4535	1.2122	0.2959	0.1522	0.8388
Pleasant Valley city	WV	-0.4550	0.1245	0.3424	-0.7545	0.3412
Whitehall town	WV	-0.1000	-0.2462	-0.2826	-0.1359	-0.0406

NIM	STATE	PC 6: Occupational Composition	PC 7: Migration	PC 8: Poverty	PC 9: Growth
		Composition			
Egegik city	AK	-2.7744	0.2299	0.5358	-0.3190
False Pass city	AK	-2.0324	2.0567	0.0498	-1.3822
Pilot Point city	AK	-1.9696	0.2279	-0.5138	-0.0245
Chelsea town	AL	0.2803	0.4060	-0.1940	1.0306
Coaling city	AL	-0.3939	0.0613	-0.9533	-0.0468
Coker town	AL	0.4357	-0.5686	-0.3673	-0.3972
Deatsville town	AL	-0.1015	-0.0092	-0.6311	0.4694
Dodge City town	AL	-0.5384	0.1379	-0.3619	-0.3672
Elmore town	AL	-0.6835	-0.5006	0.3474	-0.1254
Gordonville town	AL	-0.3956	-0.6710	1.2823	-0.2351
Horn Hill town	AL	-0.7936	-0.2244	0.1812	-1.3209
Hytop town	AL	0.5193	0.4197	-1.2492	-0.4138
Indian Springs Village town	AL	0.6541	-1.0930	-0.2076	0.5098
Lake View town	AL	-0.3195	0.9026	-0.2862	-0.0219
Macedonia town	AL	-1.1052	0.0036	-0.2505	-1.0443
Natural Bridge town	AL	-0.6116	-2.0570	1.3127	-0.4936
North Bibb town	AL	0.4813	0.0027	0.0436	-0.0571
Pike Road city	AL	0.8301	-0.1354	-0.5945	0.4573
Pleasant Groves town	AL	0.3666	-1.1214	-0.6193	-0.2350
Rehobeth town	AL	0.3674	-0.3888	-0.2622	0.0431
Spanish Fort city	AL	0.1244	0.0775	-0.1128	0.4915
Anthonyville town	AR	3.2153	-1.0875	0.2077	-0.4634
Briarcliff town	AR	-0.8959	-0.1784	-0.1885	0.3793
Cedarville city	AR	-0.3972	0.1853	-0.1240	-0.0330
Cherokee Village city	AR	-1.0584	0.4602	-0.1247	-0.6903
Donaldson town	AR	-1.9760	0.1958	0.3866	-1.4772
Etowah town	AR	0.2727	-0.1586	-0.0414	-1.1509
Fairfield Bay city	AR	-0.4701	0.6952	-0.6779	-0.2703
Fountain Lake town	AR	0.1593	0.0439	-0.7825	1.1615
Highland city	AR	-0.4751	0.2505	-0.0877	-0.4972
Holland city	AR	-0.9832	0.1280	0.2223	0.5490
Springtown town	AR	-1.0964	-0.7034	-0.1450	0.2560
St. Joe town	AR	0.7503	-0.6681	-0.5890	-1.9714
Twin Groves town	AR	-0.8317	-0.5106	-0.8944	1.6426
Sahuarita town	AZ	0.1779	0.2474	-0.1902	1.4983

American Canyon					
city	CA	0.1543	0.3668	0.0335	0.1914
Buellton city	CA	0.2414	0.3606	0.3580	0.1845
Calabasas city	CA	-0.2281	0.7442	-0.2544	-0.3684
Calimesa city	CA	0.9115	-0.1633	0.0815	0.5549
Canyon Lake city	CA	0.2864	0.9162	0.3628	0.4798
Chino Hills city	CA	0.5854	2.5547	0.3331	0.0949
Citrus Heights city	CA	1.9387	3.4053	0.6775	-1.3003
Laguna Hills city	CA	1.0096	1.2798	0.7538	-0.2599
Laguna Woods city	CA	2.0952	0.7834	0.3431	-0.2821
Lake Forest city	CA	1.5283	2.0788	0.6105	-0.5763
Malibu city	CA	-1.6017	0.6032	-0.3432	0.1083
Murrieta city	CA	0.5050	2.0912	0.1617	0.6140
Oakley city	CA	-0.1862	1.7020	0.1573	0.5187
Shasta Lake city	CA	0.4081	0.1584	0.1739	-0.1097
Truckee town	CA	-0.6296	1.2774	-1.0023	0.6510
Windsor town	CA	0.1226	1.2943	0.2334	0.3231
Yucca Valley town	CA	-0.1736	0.9246	0.3835	0.4491
Foxfield town	СО	0.0809	-0.6000	-0.5133	0.3020
Lone Tree city	CO	0.6068	-0.3309	0.3016	4.4051
Mountain Village					
town	CO	-2.9639	1.3659	-0.4169	2.6044
South Fork town	CO	-0.4182	1.2570	-0.1234	-0.0991
Groton Long Point					
borough	CT	-0.2484	-0.9012	-0.3591	-1.3690
Aventura city	FL	1.6771	1.8919	1.8420	-0.6568
Bonita Springs city	FL	0.0052	1.7349	-0.4256	1.2835
De Bary city	FL	0.3505	0.8890	-0.3151	0.2672
Deltona city	FL	0.9434	2.6166	0.0825	-0.0471
Fort Myers Beach		0.5054	0.5700	0.4000	0.0000
town Islamorada, Village	FL	0.5354	0.5720	-0.4290	0.8992
of Islands	FL	0.4882	0.4424	-0.5633	-0.0402
Key Biscayne village	FL	0.4380	0.4854	2.7002	-0.1723
Marathon city	FL	-0.5035	0.8684	-0.2429	0.2537
Marco Island city	FL	0.7555	0.8754	-0.4941	1.8302
Palm Coast city	FL	0.6540	1.5368	-0.6568	2.0472
Pinecrest village	FL	0.4069	-0.4892	0.8035	-0.2350
Sunny Isles Beach					0.200
city	FL	1.8525	2.0587	3.8123	-1.0932
Wellington village	FL	0.6858	1.6180	-0.2633	0.4333
Weston city	FL	0.7898	1.9614	0.5024	0.5463
Dasher town	GA	0.5391	-0.1573	-0.6076	0.2722
Fargo city	GA	-1.4095	0.0162	0.6295	-1.3463
Graham city	GA	-0.9974	-0.6194	0.1838	-0.9696
Lithia Springs city	GA	-0.0455	-1.0517	-0.2910	-0.1327

	1	T			1
Offerman city	GA	-1.8391	-0.2605	0.2183	0.2041
Vidette city	GA	1.3889	-2.0541	2.1300	-1.2660
Carey city	ID	-1.4198	-0.2196	-0.5622	-0.5628
Parkline city	ID	-1.5958	0.5825	-0.1484	-0.3350
Star city	ID	0.2728	0.8976	0.1370	0.9820
Bismarck village	IL	1.2443	-0.6327	-0.7307	-1.4195
Caledonia village	IL	-0.4169	-1.1505	-0.5636	-0.9998
Godfrey village	IL	0.6782	-0.2800	-0.5151	-0.7494
Greenwood village	IL	-0.8266	-2.0161	-0.3352	0.0500
Lily Lake village	IL	0.4984	-0.2004	-0.6703	0.0613
Ringwood village	IL	-0.0615	-1.3850	-0.6863	0.4836
Timberlane village	IL	0.2280	-0.5558	-0.7640	0.4766
Trout Valley village	IL	0.3487	-0.9832	0.2633	0.0285
Virgil village	IL	-0.1315	-0.4713	-1.0038	0.1754
Volo village	IL	0.2807	-2.3841	1.1936	0.2758
West Peoria city	IL	1.2764	-0.3322	-0.1053	-1.6242
Avon town	IN	0.4813	0.5640	-0.6666	0.6104
Leo-Cedarville town	IN	0.8046	-0.1760	-0.6257	-0.6480
Monrovia town	IN	0.4488	-0.9579	-0.3960	-0.6920
Winfield town	IN	-0.2616	0.7312	-0.6606	0.0532
Zanesville town	IN	0.7370	-0.6560	-0.9331	-0.8103
Linn Valley city	KS	0.1993	0.8331	-0.5056	0.4321
Blackey city	KY	-1.1585	-0.0373	0.5277	-1.5742
Buckhorn city	KY	-2.2112	0.3583	0.7788	-1.8892
Goshen city	KY	0.7182	-0.0989	0.2460	-0.0530
Robards city	KY	-0.2953	-0.3645	-0.9235	-0.6923
St. Gabriel town	LA	0.4781	-0.4241	0.3668	0.5617
Easthampton city	MA	0.4963	-0.1371	-0.7942	-1.0918
Chevy Chase View town	MD	-0.5898	-2.3702	0.4575	-1.1643
North Chevy Chase	IVID	-0.5090	-2.5702	0.4373	-1.10-3
village	MD	-0.7137	-1.7033	0.2951	-1.0861
Village of Lake					
Isabella village	MI	0.2651	0.2632	-0.6272	0.4445
Cohasset city	MN	0.0703	-0.0053	-1.0649	-0.8578
Grant city	MN	-0.0979	-1.1413	-0.7447	0.4481
Oak Grove city	MN	-0.3903	0.0892	-0.8234	0.0638
Otsego city	MN	-0.1396	-0.0551	-0.8918	0.1330
Bull Creek village	MO	1.3764	0.1656	-0.3367	2.3689
Coney Island village	MO	-0.0139	0.2414	0.1730	1.1789
Dutchtown village	MO	0.4080	-0.7931	-0.1358	-0.3979
Grand Falls Plaza					
town	MO	2.0746	-0.5673	-0.5399	-0.1534
Green Park city	MO	1.4886	-0.8757	-0.6735	-0.7432
Highlandville city	MO	-0.6468	0.0463	-0.0126	1.3573
Innsbrook village	MO	-0.2300	0.4179	-0.5253	0.4534

Lake Lafayette city	МО	-0.2168	0.2058	-0.7121	-0.4009
Loma Linda town	MO	0.2430	0.0929	-0.4767	0.0757
McCord Bend village	МО	-0.5051	-0.0227	0.1095	1.3770
Miramiguoa Park					
village	MO	-1.2143	0.7626	0.3124	-0.3819
Pinhook village	MO	-1.3550	0.5492	0.7591	-1.2235
Rives town	МО	-0.7102	-0.8648	-0.5977	-0.2627
West Alton city	МО	0.0972	-0.6898	-0.8168	0.0693
Wildwood city	МО	0.4259	1.2414	-0.4690	-0.4976
Farmington town	MS	0.7073	-0.4005	-0.7336	-0.6536
Glen town	MS	-0.5745	-0.2586	-0.5881	-0.0562
Snow Lake Shores					
town	MS	-0.6470	0.8979	-0.9022	-1.4456
Colstrip city	MT	-2.2568	0.9193	-1.1567	-1.3071
Badin town	NC	0.8480	-1.0602	-0.3023	-1.1703
Bermuda Run town	NC	0.9477	-0.8417	-0.1560	0.3109
Bethania town	NC	0.8635	-1.5222	-0.1116	-0.4345
Boardman town	NC	-1.7075	-0.4866	0.3565	0.4052
Bogue town	NC	-0.4531	0.4785	-0.6264	0.1934
Carolina Shores	-110	0.1001	0.1700	0.0201	0.1001
town	NC	1.5880	-0.2326	-1.0761	2.2020
Cedar Rock village	NC	0.6065	-1.4203	-0.8080	-0.1357
Chimney Rock					
village	NC	0.6781	0.0776	-0.1096	-0.3432
Flat Rock village	NC	0.3172	-0.2926	-0.3499	0.4604
Forest Hills village	NC	-0.6813	-0.8606	0.7550	-1.0345
Green Level town	NC	0.5842	-0.2279	-0.7310	0.4063
Hemby Bridge town	NC	0.1376	0.3088	0.0716	0.3883
Lake Park village	NC	0.3683	0.7988	0.1220	0.7726
Lewisville town	NC	0.6934	-0.2208	-0.4751	-0.2228
Marvin village	NC	-0.0491	0.2842	-0.3759	1.1054
Mineral Springs town	NC	-0.4459	-0.0108	-0.4286	0.7425
Momeyer town	NC	0.9378	-0.5733	-0.0989	-0.4241
North Topsail Beach					
city	NC	-0.2347	0.6844	-0.2614	-0.1373
Northwest city	NC	0.1385	-0.4592	-0.7328	1.0703
Oak Ridge town	NC	0.2695	-0.0188	-0.5213	0.1841
Peletier town	NC	-0.4083	0.5866	-0.4395	0.6105
Pleasant Garden					
town	NC	0.6223	-0.2562	-0.4905	0.1083
Sandyfield town	NC	-0.6208	-1.3268	0.0351	-0.8435
Sedalia town	NC	0.9439	-1.2399	-1.0928	0.6968
St. James town	NC	-0.8054	0.3926	-0.5548	1.4265
Summerfield town				1	
Summerne la town	NC	0.3532	0.1064	-0.6241	0.1531
Swepsonville town	NC NC	0.3532 0.8078	0.1064 -1.0109	-0.6241 -0.5416	0.1531 -0.0594

Trinity city	NC	0.9542	-0.8886	-0.5737	-0.2834
Unionville town	NC	0.2466	0.0174	-0.5121	0.8526
Wentworth town	NC	0.2148	-0.2249	-0.5773	-0.4835
Wesley Chapel		0.2 : :0	0	0.01.0	000
village	NC	0.2646	0.1063	-0.6179	0.9557
Whitsett town	NC	0.5707	-1.8440	-0.5822	-0.2227
Wilson's Mills town	NC	-0.1141	0.4842	-0.4727	1.2002
Caldwell borough	NJ	1.0262	0.2184	0.8638	-1.8108
Essex Fells borough	NJ	-0.0579	-1.8547	0.0530	-1.2168
Glen Ridge borough	NJ	0.3925	-0.7603	0.8482	-2.1065
North Caldwell					
borough	NJ	0.3520	-1.3071	0.3950	-0.9760
Edgewood town	NM	-0.8138	0.5276	0.3591	1.1335
Elephant Butte city	NM	-0.1913	0.2936	0.1155	0.6226
Taos Ski Valley					
village	NM	-0.4325	-0.4956	-0.8838	0.6700
West Wendover city	NV	0.8252	0.1721	0.2922	3.0285
Airmont village	NY	0.2468	-1.0828	0.1340	-0.6614
East Nassau village	NY	0.3115	-2.1097	-0.3070	-1.2088
Kaser village	NY	1.3690	2.4966	7.5481	-2.8512
West Hampton	NINZ	5 0050	0.0004	0.0040	4 0000
Dunes village	NY	-5.6650	0.8004	-0.8812	1.0930
Highland Hills village	OH	0.5233	-0.7078	0.1829	-0.5295
Holiday City village	OH	-1.5943	0.1813	-0.1444	-2.3157
New Franklin village	OH	0.4715	-1.5579	-0.6086	-0.6933
Atwood town	OK	0.0143	-0.7208	-0.0553	-1.4929
Central High town	OK	-0.2180	-0.8448	0.1251	-0.6069
Fort Coffee town	OK	-0.2642	-0.6289	-0.5551	0.3503
Horntown town	OK	-1.0204	-1.2579	-0.7355	-0.7554
Pocasset town	OK	0.1814	0.0557	0.1743	-0.3406
Sawyer town	OK	-1.7420	0.6692	0.2586	-0.9002
Schulter town	OK	0.1861	-0.8072	-0.0409	-0.9358
Spaulding town	OK	-1.9941	-0.9814	1.0641	-2.2269
Swink town	OK	-3.5363	0.7084	2.4477	-1.0327
Bear Creek Village	D.4	0.0704	0.0500	0.0000	4.0700
borough	PA	-0.0701	-0.8533	-0.2682	-1.0708
Awendaw town	SC	-0.2025	0.1784	-0.7317	0.4809
Reidville town	SC	-0.0589	-0.6775	-0.4645	-0.3269
Rockville town	SC	0.5810	-2.0892	-0.5656	-0.5057
Coopertown town	TN	0.0590	0.3371	-0.6579	0.6152
Hickory Withe town	TN	-0.3395	0.3858	-0.5930	0.1850
Louisville city	TN	-0.3028	-0.0299	-0.3270	0.2404
Midtown city	TN	1.0329	-0.9010	0.0220	-0.5260
Nolensville town	TN	0.0207	-0.2092	-0.9826	1.4388
Plainview city	TN	-0.1468	0.5555	-0.3800	0.5875
Pleasant View city	TN	-0.1096	0.6446	-0.5869	0.5526

Sunbright city	TN	-1.7489	0.4431	0.6602	-0.9281
Thompson's Station		111 100	00	0.0002	0.0201
town	TN	-0.3246	-0.2295	-0.6172	1.3066
Three Way city	TN	0.2080	0.0574	-0.7125	0.1916
Unicoi town	TN	0.5343	-0.3011	0.4424	0.0402
Anderson city	TX	-0.9543	-0.9385	0.3518	-0.2646
Bear Creek village	TX	-0.2363	-1.0045	-0.3348	1.1798
Bishop Hills town	TX	0.7618	-0.8376	0.2645	-0.4057
Cross Timber town	TX	-0.4351	-0.2315	-0.1890	0.0800
Fairchilds village	TX	0.0198	-0.1877	-0.0047	1.6167
Granjeno city	TX	1.0065	-3.6881	4.7449	2.2886
Hawk Cove city	TX	-0.6521	0.3961	0.5680	-0.1682
Highland Haven city	TX	-0.4781	0.1898	-0.2356	0.7088
Industry city	TX	-0.6129	-0.4791	0.3585	0.3218
Ingleside on the Bay					
city	TX	0.3806	0.0822	0.4017	-0.1197
Kempner city	TX	0.5215	0.2490	-0.0915	0.4598
Liberty Hill city	TX	-0.4532	0.6763	0.4834	1.9169
Los Indios town	TX	-0.6445	-1.0862	3.9617	2.2922
Millican town	TX	-0.5902	-1.2294	0.4875	1.0060
Palisades village	TX	-0.3744	-0.2841	-0.2926	0.0504
Paradise city	TX	0.0624	-0.8961	0.1371	0.1310
Penitas city	TX	-0.2161	-1.4225	2.6820	2.7631
Progreso city	TX	-1.2633	-1.1645	4.3945	2.5427
Ravenna city	TX	-0.7812	0.0917	0.0221	-0.8409
Red Lick city	TX	0.3416	-0.2407	-0.3894	-0.0238
Rio Grande City city	TX	-0.1527	-0.8213	3.7131	1.9779
Santa Clara city	TX	1.2707	-0.9131	0.0059	0.5921
Sullivan City city	TX	-0.6115	-0.9170	3.5937	2.8706
Sunset city	TX	-1.1650	0.5163	0.7215	-1.3795
Talty city	TX	-1.3088	1.0271	-0.4374	1.3189
The Hills village	TX	0.1492	0.4143	0.1795	0.7935
Eagle Mountain town	UT	-0.5487	1.1385	-0.0094	0.9792
Herriman town	UT	-0.2340	0.9361	-0.3063	0.5877
Holladay city	UT	1.3785	-0.4058	0.0261	-0.5162
Marriott-Slaterville					
city	UT	1.5186	-0.6352	-0.4018	0.2158
Saratoga Springs		0.4500	4 0005	0.0500	0.7000
town	UT	-0.4590	1.0085	0.3520	0.7299
Taylorsville city	UT	1.8598	2.2378	0.5502	-0.8143
West Haven city	UT	-0.1031	0.2051	-0.5463	0.4790
Clinchco town	VA	-3.4805	0.0438	0.9735	-1.6893
Burien city	WA	0.9476	0.9433	0.2318	-0.8764
Covington city	WA	0.4024	0.9236	-0.3684	-0.4076
Edgewood city	WA	0.2703	-0.2657	-0.5205	-0.2677
Federal Way city	WA	1.3485	3.4097	0.0626	-0.9599

Kenmore city	WA	0.2767	0.7745	-0.1251	-0.4581
Lakewood city	WA	1.0867	2.0986	0.4321	-0.6460
Maple Valley city	WA	0.2141	1.3933	-0.1874	-0.1409
Newcastle city	WA	0.1914	0.4701	-0.4721	-0.0818
Sammamish city	WA	0.0229	1.2838	-0.3064	-0.3987
SeaTac city	WA	0.6808	1.0278	-0.1428	-0.4708
Shoreline city	WA	0.9454	1.4825	0.1074	-1.1996
University Place city	WA	0.7746	1.2516	0.0068	-0.4318
Woodinville city	WA	0.0557	0.5706	-0.4020	0.0413
Pewaukee city	WI	0.9019	-1.2698	-0.5055	-0.0988
Weston village	WI	1.0290	0.5683	-1.0075	-0.6631
Carpendale town	WV	0.6547	-0.7198	-0.6968	-0.3969
Jefferson town	WV	1.5542	-0.2718	1.2415	-0.9797
Pleasant Valley city	WV	0.6874	-0.3090	-0.2164	-0.7623
Whitehall town	WV	1.0025	0.2757	-0.0927	-0.3975

## APPENDIX B. NIM WEIGHTED PC SCORES

NIM	STATE	Weighted PC 1:	Weighted PC 2:	Weighted PC 3:	Weighted PC 4:	Weighted PC 5:
		Skills/ Affluence	Elderly	Political Affiliation	Race	Commuting Patterns
Egegik city	AK	0.1295	0.0003	-0.1695	0.1961	0.4884
False Pass city	AK	0.1938	-0.1544	-0.2847	0.2578	0.4865
Pilot Point city	AK	-0.0937	-0.1690	-0.0516	0.1280	0.3405
Chelsea town	AL	0.1139	-0.0749	-0.1975	-0.0004	-0.0368
Coaling city	AL	-0.1563	-0.1130	-0.0762	-0.0210	-0.0216
Coker town	AL	-0.1026	-0.0253	-0.1343	-0.0493	-0.0088
Deatsville town	AL	-0.0894	-0.0136	-0.1658	-0.0491	-0.0541
Dodge City town	AL	-0.3149	-0.0122	-0.1231	-0.0722	-0.0187
Elmore town	AL	-0.2260	-0.0406	-0.1718	0.1420	-0.0004
Gordonville town	AL	-0.1452	0.1148	0.0375	0.4989	-0.1768
Horn Hill town	AL	-0.2304	-0.0196	0.0304	-0.0444	-0.0386
Hytop town	AL	-0.3887	-0.1240	0.0266	-0.0480	-0.0936
Indian Springs Village town	AL	0.4540	0.0248	-0.1924	0.0087	0.0051
Lake View town	AL	-0.0813	-0.0845	-0.1729	-0.0276	-0.0951
Macedonia town	AL	-0.2487	-0.0312	0.1771	0.4782	-0.0517
Natural Bridge town	AL	-0.5268	0.0581	-0.1428	-0.0635	0.0810
North Bibb town	AL	-0.1680	-0.0965	-0.1828	-0.0404	-0.0664
Pike Road city	AL	0.2347	-0.0647	-0.0850	0.1849	0.0443
Pleasant Groves town	AL	-0.2918	-0.1153	-0.0113	-0.0502	-0.0664
Rehobeth town	AL	-0.3019	-0.0368	-0.1587	-0.0555	0.0319
Spanish Fort city	AL	0.2006	0.0592	-0.1821	0.0190	0.0063
Anthonyville town	AR	-0.3653	0.0162	0.2309	0.5266	-0.0794
Briarcliff town	AR	-0.2312	0.0505	-0.0019	-0.0864	0.0186
Cedarville city	AR	-0.2490	-0.0881	-0.0881	-0.0282	-0.0347
Cherokee Village city	AR	-0.1266	0.4377	-0.0121	-0.0475	-0.0005
Donaldson town	AR	-0.2149	0.0279	-0.0075	-0.0827	-0.0732
Etowah town	AR	-0.3921	-0.0305	0.0811	-0.0284	0.0052
Fairfield Bay city	AR	-0.0790	0.6417	0.0154	-0.0277	0.1211
Fountain Lake town	AR	-0.4158	0.0214	0.0923	-0.0851	0.0495
Highland city	AR	-0.1766	0.1322	-0.0454	-0.0702	0.1152
Holland city	AR	-0.1561	-0.0169	-0.0302	-0.0408	-0.0993
Springtown town	AR	-0.3669	-0.1553	-0.1111	-0.0206	0.0459
St. Joe town	AR	-0.2162	0.0337	-0.0725	-0.0104	0.0221
Twin Groves town	AR	-0.1472	0.0952	0.0791	0.3363	-0.0888
Sahuarita town	AZ	-0.0171	0.0217	0.0289	-0.0348	0.0445
American Canyon	CA	-0.0362	-0.0378	0.2082	0.0352	-0.0347

city						
Buellton city	CA	0.0276	-0.0435	0.0528	-0.0269	0.1019
Calabasas city	CA	0.6096	-0.0816	0.1429	0.0228	-0.0221
Calimesa city	CA	-0.1047	0.1633	0.0187	-0.0383	0.0111
Canyon Lake city	CA	0.1435	0.0672	-0.0959	-0.0053	-0.0722
Chino Hills city	CA	0.2159	-0.1840	0.0919	0.0942	-0.0793
Citrus Heights city	CA	-0.2315	-0.0860	0.0960	-0.0480	-0.0299
Laguna Hills city	CA	0.2676	-0.0440	0.0225	0.0109	0.0089
Laguna Woods city	CA	-0.0233	0.9621	0.0519	-0.0454	0.0261
Lake Forest city	CA	0.1509	-0.1338	0.0519	0.0042	0.0077
Malibu city	CA	0.8533	0.0116	0.2377	-0.0010	0.0037
Murrieta city	CA	0.0224	-0.0579	-0.0030	0.0207	-0.0376
Oakley city	CA	-0.0337	-0.1514	0.1595	0.0010	-0.1127
Shasta Lake city	CA	-0.2808	0.0003	0.0210	-0.0623	0.0430
Truckee town	CA	0.1035	-0.1393	0.2150	-0.0542	0.1246
Windsor town	CA	0.1035	-0.0989	0.1593	-0.0008	0.0174
Yucca Valley town	CA	-0.1655	0.1517	0.0170	-0.0535	0.0511
Foxfield town	CO	0.4918	-0.0170	-0.0496	0.0081	-0.0196
Lone Tree city	CO	0.6358	-0.0702	-0.1157	0.0875	-0.0344
Mountain Village						
town	CO	0.4320	-0.1682	0.3146	-0.0341	0.1442
South Fork town	CO	0.0493	0.1299	-0.1078	-0.0019	0.1699
Groton Long Point						
borough	CT	0.5668	0.0683	0.1353	-0.0827	-0.0256
Aventura city	FL	0.2182	0.3032	0.1105	-0.0197	-0.0310
Bonita Springs city	FL -	-0.0815	0.2900	0.0661	-0.0451	0.0793
De Bary city	FL	-0.0910	0.1497	0.0255	-0.0362	-0.0494
Deltona city	FL	-0.2106	-0.0294	0.1715	-0.0178	-0.0583
Fort Myers Beach town	FL	-0.0076	0.4109	0.0481	-0.0628	0.1067
Islamorada, Village	1 6	-0.0070	0.4109	0.0401	-0.0020	0.1007
of Islands	FL	-0.0033	0.0756	0.0377	-0.0429	0.0970
Key Biscayne village	FL	0.7328	0.0119	0.0358	-0.0368	0.0307
Marathon city	FL	-0.0670	0.0401	0.1216	-0.0695	0.2552
Marco Island city	FL	0.1609	0.4430	-0.0484	-0.0175	0.1714
Palm Coast city	FL	-0.1043	0.2897	0.1067	0.0305	0.0755
Pinecrest village	FL	0.6145	-0.0832	0.0908	-0.0254	-0.0045
Sunny Isles Beach						
city	FL	0.1626	0.2798	0.0709	-0.0495	-0.0943
Wellington village	FL	0.1716	-0.0716	0.1035	0.0192	0.0004
Weston city	FL	0.3112	-0.1239	0.1218	0.0246	-0.0213
Dasher town	GA	-0.1063	-0.0492	-0.1285	-0.0504	0.0240
Fargo city	GA	-0.1789	-0.0715	-0.2541	0.1556	0.1370
Graham city	GA	-0.2020	0.0082	-0.0107	0.2121	-0.0143
Lithia Springs city	GA	-0.1399	0.0494	0.1564	-0.0560	-0.0670
Offerman city	GA	-0.3016	-0.0149	-0.0576	-0.0101	-0.0844

Vidette city	GA	0.0966	0.1222	-0.0301	0.1407	0.0032
Carey city	ID	-0.0258	-0.0990	0.2850	-0.0939	0.0982
Parkline city	ID	-0.1234	0.1564	-0.0768	0.0195	0.1686
Star city	ID	-0.0987	-0.1387	-0.1330	-0.0099	-0.0190
Bismarck village	IL	-0.2132	-0.0634	-0.0148	-0.1048	0.0626
Caledonia village	IL	-0.0516	-0.1372	0.0443	-0.1269	-0.0488
Godfrey village	IL	-0.0259	0.0329	0.0450	-0.0482	-0.0079
Greenwood village	IL	0.1018	-0.0954	0.1109	-0.1389	0.0083
Lily Lake village	IL	0.1567	-0.1321	-0.0070	-0.0343	-0.0604
Ringwood village	IL	0.1097	0.0037	0.0188	-0.0546	-0.0470
Timberlane village	IL	0.2237	-0.1079	-0.0177	-0.0221	0.0024
Trout Valley village	IL	0.5384	-0.0074	-0.0294	0.0020	-0.1033
Virgil village	IL	-0.0060	-0.2000	-0.0079	-0.0582	-0.0244
Volo village	IL	-0.1145	-0.0646	0.0622	-0.0891	0.0108
West Peoria city	IL	-0.0618	0.0266	0.1574	-0.0715	0.1218
Avon town	IN	0.0460	-0.1669	-0.1067	-0.0049	-0.0091
Leo-Cedarville town	IN	0.0253	-0.1311	-0.1441	-0.0426	0.0234
Monrovia town	IN	-0.1662	-0.0648	-0.0101	-0.1134	-0.0095
Winfield town	IN	0.0792	-0.0401	0.0085	-0.0201	-0.0474
Zanesville town	IN	-0.1480	-0.1614	-0.0491	-0.0680	0.0164
Linn Valley city	KS	-0.1445	0.1604	-0.0280	-0.0109	-0.0376
Blackey city	KY	-0.2641	0.1243	0.1009	-0.0852	-0.0711
Buckhorn city	KY	0.1372	-0.1308	-0.0621	-0.0529	0.1449
Goshen city	KY	0.2178	-0.1795	-0.0903	-0.0379	-0.0263
Robards city	KY	-0.2121	-0.0593	0.0130	-0.0865	-0.0300
St. Gabriel town	LA	-0.1945	0.0863	0.0683	0.3309	0.0959
Easthampton city	MA	-0.0550	-0.0717	0.2191	-0.1052	0.0759
Chevy Chase View town	MD	0.9084	-0.0214	0.0895	-0.0450	-0.0146
North Chevy Chase village	MD	0.8363	-0.0381	0.1963	-0.0271	-0.0075
Village of Lake Isabella village	MI	-0.1420	0.1122	0.0844	-0.0511	0.0105
Cohasset city	MN	-0.1393	0.0163	0.0449	-0.0603	0.1031
Grant city	MN	0.3965	-0.0763	0.0177	-0.0275	-0.0164
Oak Grove city	MN	0.0363	-0.1760	0.0219	-0.0402	-0.1009
Otsego city	MN	-0.0733	-0.1924	0.0072	-0.0535	-0.0366
Bull Creek village	MO	-0.4907	-0.1461	-0.0217	-0.0821	0.1144
Coney Island village	MO	-0.1775	0.3379	-0.0785	-0.0169	-0.1410
Dutchtown village	MO	-0.2923	-0.1015	-0.0919	-0.0786	0.0513
Grand Falls Plaza						
town	MO	-0.0856	0.0053	-0.0638	-0.0724	0.0257
Green Park city	MO	-0.0928	0.0543	0.1077	-0.0961	0.0243
Highlandville city	MO	-0.2448	-0.0594	-0.0308	-0.0707	-0.0343
Innsbrook village	MO	0.2099	0.3386	-0.0935	-0.0102	-0.0806
Lake Lafayette city	MO	-0.3952	-0.1122	0.1145	-0.0414	-0.0937

Loma Linda town	MO	0.1881	0.0281	-0.1451	-0.0008	0.0044
McCord Bend village	MO	-0.3693	0.0594	0.0002	-0.0774	-0.0719
Miramiguoa Park						
village	MO	-0.2924	-0.0347	0.0390	-0.0490	-0.1622
Pinhook village	MO	-0.2541	0.0182	-0.0901	0.4584	0.0486
Rives town	MO	-0.5103	0.0574	0.0978	-0.0828	-0.0227
West Alton city	MO	-0.2820	-0.0386	0.2216	-0.1142	-0.0454
Wildwood city	MO	0.4002	-0.1225	-0.0561	0.0198	-0.0117
Farmington town	MS	-0.2362	-0.1105	-0.0424	-0.0467	0.0064
Glen town	MS	-0.2674	0.0386	0.0629	-0.0923	-0.0033
Snow Lake Shores	140	0.0777	0.0004	0.4004	0.0050	0.4004
town	MS	-0.2777	0.2884	0.1831	-0.0350	-0.1081
Colstrip city	MT	0.0490	-0.1487	0.2110	-0.0704	0.1982
Badin town	NC	-0.1399	0.0100	0.0642	0.0736	0.0398
Bermuda Run town	NC	0.4186	0.4272	-0.1535	0.0166	-0.0007
Bethania town	NC	0.1101	0.0307	-0.0053	0.0291	-0.0424
Boardman town	NC	-0.2233	0.0767	0.1447	0.1325	-0.1140
Bogue town	NC	-0.1620	0.0074	-0.0936	-0.0449	0.0002
Carolina Shores	NO	0.4544	0.0040	0.0444	0.0500	0.0000
town	NC	-0.1544	0.6643	0.0111	-0.0563	0.0988
Cedar Rock village	NC	0.5515	0.0742	-0.0580	-0.0061	0.0349
Chimney Rock village	NC	-0.1551	0.0669	0.0161	-0.1061	0.0819
Flat Rock village	NC	0.4092	0.3942	-0.0970	0.0061	0.0407
Forest Hills village	NC	0.4046	0.0014	-0.0970	0.0001	0.0407
Green Level town	NC	-0.2865	-0.0989	0.0669	0.0103	-0.0099
Hemby Bridge town	NC	-0.2865	-0.0989	-0.1040	-0.0379	-0.1334
Lake Park village	NC	0.2555	-0.0147	-0.1040	0.0486	-0.1354
Lewisville town	NC	0.2555	-0.1094	-0.1338	-0.0080	0.0228
Marvin village	NC	0.1937	-0.0818		0.0460	-0.0309
Mineral Springs	NC	0.5092	-0.0656	-0.1393	0.0460	-0.0309
town	NC	-0.0411	-0.0647	-0.1035	0.0458	-0.0647
Momeyer town	NC	-0.1962	0.0240	-0.0577	-0.0209	-0.0484
North Topsail Beach		01.100=	0.02.0	0.00	0.0200	0.0.0.
city	NC	0.1545	0.0894	-0.1085	-0.0035	-0.0475
Northwest city	NC	-0.2058	0.0225	0.0550	0.3480	-0.0543
Oak Ridge town	NC	0.2604	-0.0892	-0.1130	0.0195	-0.0012
Peletier town	NC	-0.2719	0.1029	-0.0833	-0.0859	-0.0272
Pleasant Garden		0.27.10	01.1020	0.000	0.000	0.02.2
town	NC	-0.0766	-0.0211	-0.0797	0.0123	-0.0204
Sandyfield town	NC	-0.0803	-0.0340	-0.0431	0.4712	-0.0578
Sedalia town	NC	-0.1251	0.0162	-0.0031	0.3983	-0.0007
St. James town	NC	0.5234	0.3417	-0.0307	0.0211	0.0571
Summerfield town	NC	0.2116	-0.0737	-0.0865	0.0050	0.0158
	INC	0.2110				
Swepsonville town	NC	0.0264	-0.0110	0.0526	-0.0359	0.0162

		1	1		
NC	-0.1911	-0.0537	-0.1213	-0.0198	0.0086
NC	-0.0564	-0.0888	-0.1203	-0.0262	-0.0272
NC	-0.1320	-0.0353	-0.0435	0.0416	-0.0462
	0.4000	0.4000	0.40=0	0.0004	0.0400
					-0.0180
					0.0071
					-0.0637
					-0.0142
					-0.0148
NJ	0.6115	-0.0815	0.1519	-0.0467	-0.0772
N. I.	0.0005	0.0070	0.0054	0.0700	0.0040
					-0.0346
					-0.0895
NM	-0.0866	0.4142	-0.1321	-0.0297	0.0731
NIM	0.5754	0.1006	0.1402	0 0338	0.1227
					0.1227
					-0.0684
					0.0006
INY	0.1658	-0.0831	-0.5031	0.0353	-0.0285
NIV	0.4024	0.2265	0.1756	0.0000	-0.3257
					-0.0314
					0.0715
					-0.0250
					0.0839
					-0.0045
					-0.0133
					0.0825
					0.0951
					0.0420
					-0.0117
					-0.0282
OK	-0.1496	0.2531	-0.0804	-0.0885	-0.1345
PA	0.4525	0.1032	-0.0086	-0.0484	-0.0035
SC	-0.1989	0.0098	0.1076	0.2976	-0.0639
SC	-0.1352	-0.0013	-0.1030	-0.0089	-0.0209
SC	0.2408	0.1524	0.1674	0.0515	0.0497
TN	-0.0789	-0.0778	-0.0683	-0.0150	-0.0638
TN	0.0615	0.0092	-0.1046	0.0590	-0.0813
TN	-0.0364	-0.0029	-0.0307	-0.0555	-0.0034
TN	-0.3780	-0.0063	-0.0653	-0.0248	0.0202
TN	-0.0110	-0.0984	-0.0574	-0.0030	-0.0305
TN	-0.2675	-0.0917	-0.0202	-0.0467	-0.0833
TN	-0.0564	-0.1127	-0.0697	-0.0285	-0.0451
	NC NC NC NC NC NC NC NJ NJ NJ NJ NJ NM NM NM NM NY NY NY NY OH OH OH OK OK OK OK OK OK OK Th Th Th Th Th	NC -0.0564 NC -0.1320  NC -0.1863 NC -0.0825 NC -0.1444 NJ 0.3000 NJ 0.8806 NJ 0.6115  NJ 0.6805 NM -0.0202 NM -0.0866  NM 0.5754 NV -0.3334 NY 0.4051 NY 0.4051 NY 0.0583 NY 0.1658  NY 0.4931 OH -0.1146 OH -0.0878 OH -0.0786 OK -0.2843 OK -0.0841 OK -0.0841 OK -0.1371 OK -0.0900 OK -0.3345 OK -0.1780 OK -0.1780 OK -0.1780 OK -0.1496  PA 0.4525 SC -0.1496  PA 0.4525 SC 0.2408 TN -0.0789 TN 0.0615 TN -0.0780 TN -0.03780	NC         -0.0564         -0.0888           NC         -0.1320         -0.0353           NC         -0.1863         -0.1089           NC         -0.0825         0.0025           NC         -0.1444         -0.1111           NJ         0.3000         -0.0122           NJ         0.8806         -0.0229           NJ         0.6805         -0.0278           NM         -0.0202         -0.0614           NM         -0.0866         0.4142           NM         -0.0866         0.4142           NY         0.4051         -0.0219           NY         0.0583         -0.0467           NY         0.1658         -0.0831           NY         0.4931         0.3365           OH         -0.1146         0.1387           OH         -0.0786         0.0137           OK         -0.2843         0.0140           OK         -0.0878         -0.1720           OK         -0.0841         -0.0181           OK         -0.0343         -0.0172           OK         -0.3345         -0.0493           OK         -0.1780         0.0443	NC         -0.0564         -0.0888         -0.1203           NC         -0.1320         -0.0353         -0.0435           NC         -0.1863         -0.1089         -0.1070           NC         -0.0825         0.0025         -0.0155           NC         -0.1444         -0.1111         -0.0414           NJ         0.8806         -0.0229         -0.0100           NJ         0.6805         -0.0278         0.0051           NM         -0.0202         -0.0614         -0.0446           NM         -0.0202         -0.0614         -0.0446           NM         -0.0266         0.4142         -0.1321           NM         0.5754         -0.1006         0.1402           NV         -0.3334         -0.2523         0.1328           NY         0.0583         -0.0467         0.1258           NY         0.0583         -0.0467         0.1258           NY         0.0583         -0.0467         0.1258           NY         0.0453         -0.0336         0.1756           OH         -0.1146         0.1387         0.3368           OH         -0.0786         0.0137         0.1223	NC         -0.0564         -0.0888         -0.1203         -0.0262           NC         -0.1320         -0.0353         -0.0435         0.0416           NC         -0.1863         -0.1089         -0.1070         0.0004           NC         -0.0825         0.0025         -0.0155         -0.0398           NC         -0.1444         -0.1111         -0.0414         0.0815           NJ         0.3000         -0.0122         -0.0100         -0.0378           NJ         0.8806         -0.0229         -0.0100         -0.0467           NJ         0.6805         -0.0278         0.0051         0.0703           NM         -0.0202         -0.0614         -0.0446         -0.0246           NM          -0.0866         0.4142         -0.1321         -0.0297           NM         -0.5754         -0.1006         0.1402         -0.0238           NV         -0.3334         -0.2523         0.1328         -0.0799           NY         0.4051         -0.0219         0.0878         -0.0111           NY         0.0583         -0.0467         0.1258         -0.0982           NY         0.1465         -0.0331         -0.5031 <t< td=""></t<>

Sunbright city	TN	-0.2222	0.0418	-0.0471	-0.0564	-0.0659
Thompson's Station						
town	TN	0.0952	-0.0504	-0.0310	0.0115	-0.0100
Three Way city	TN	0.1327	-0.1348	-0.1350	-0.0022	-0.0001
Unicoi town	TN	0.0988	0.0146	-0.1422	-0.0183	0.0277
Anderson city	TX	0.0016	0.1271	-0.0018	0.1477	0.0108
Bear Creek village	TX	0.3655	-0.0935	-0.0282	-0.0093	-0.0491
Bishop Hills town	TX	0.2073	0.1041	-0.1719	-0.0511	0.0110
Cross Timber town	TX	-0.0229	-0.0431	-0.1251	0.0085	-0.1198
Fairchilds village	TX	-0.1328	-0.1074	-0.0984	-0.0340	-0.0784
Granjeno city	TX	-0.1193	-0.0230	0.1727	-0.1249	-0.0145
Hawk Cove city	TX	-0.2919	0.1091	-0.0394	-0.0328	-0.2452
Highland Haven city	TX	0.0884	0.5703	-0.1161	-0.0211	0.0059
Industry city	TX	-0.1509	0.0062	-0.1140	0.0494	0.0229
Ingleside on the Bay						
city	TX	-0.0674	0.0301	-0.1044	-0.0498	-0.0001
Kempner city	TX	-0.1639	-0.1061	-0.1475	0.0009	-0.0322
Liberty Hill city	TX	-0.1466	-0.0339	-0.1004	-0.0517	-0.1044
Los Indios town	TX	-0.3151	-0.1518	0.0273	0.0024	-0.0820
Millican town	TX	0.0512	0.0839	-0.0640	-0.0431	0.0596
Palisades village	TX	-0.2836	-0.0196	-0.0973	-0.1027	-0.0541
Paradise city	TX	-0.1473	-0.0234	-0.1235	-0.0440	-0.0100
Penitas city	TX	-0.2177	-0.1448	0.1931	-0.0875	0.0379
Progreso city	TX	-0.2214	-0.1949	0.1455	-0.0680	0.1257
Ravenna city	TX	-0.3403	0.0723	-0.0565	-0.0461	-0.0631
Red Lick city	TX	0.1327	-0.0610	-0.1371	-0.0130	0.0349
Rio Grande City city	TX	-0.0963	-0.0755	0.2646	-0.0858	0.2222
Santa Clara city	TX	-0.0488	-0.0617	-0.1402	0.0076	0.0066
Sullivan City city	TX	-0.2752	-0.1688	0.3132	-0.0346	0.0571
Sunset city	TX	-0.2218	0.0582	-0.0898	-0.0566	-0.0925
Talty city	TX	0.1882	-0.1466	-0.1118	0.0178	-0.1073
The Hills village	TX	0.6302	0.1676	-0.1772	0.0686	-0.0476
Eagle Mountain		0.0570	0.0400	0.0070	0.0000	0.0700
town	UT	0.0572	-0.2138	-0.2073	-0.0068	-0.0769
Herriman town	UT	0.0712	-0.1916	-0.1559	-0.0167	-0.0179
Holladay city Marriott-Slaterville	UT	0.2405	-0.0176	0.0069	-0.0432	0.0247
city	UT	-0.1277	-0.0546	-0.1308	-0.0421	0.0428
Saratoga Springs	0.	0.1277	0.0010	0.1000	0.0.12.1	0.0.120
town	UT	0.2736	-0.1386	-0.2498	0.0353	-0.1227
Taylorsville city	UT	-0.1436	-0.2084	0.0395	-0.0396	0.0024
West Haven city	UT	0.0018	-0.1798	-0.1012	-0.0449	0.0171
Clinchco town	VA	-0.2118	0.1499	0.2266	-0.1179	-0.1160
Burien city	WA	-0.0614	-0.0448	0.2217	-0.0300	0.0067
Covington city	WA	0.0165	-0.1734	0.0988	-0.0248	-0.0601
Edgewood city	WA	0.0431	-0.0482	0.0796	-0.0423	-0.0140

Federal Way city	WA	-0.0738	-0.1617	0.2136	0.0330	-0.0176
Kenmore city	WA	0.2301	-0.0766	0.1688	-0.0226	-0.0175
Lakewood city	WA	-0.1156	-0.0475	0.1626	0.0370	0.0310
Maple Valley city	WA	0.1312	-0.1466	0.0368	0.0022	-0.0670
Newcastle city	WA	0.4242	-0.1133	0.0828	0.0532	-0.0075
Sammamish city	WA	0.5431	-0.1569	0.0858	0.0306	-0.0275
SeaTac city	WA	-0.1618	-0.1123	0.2138	0.0090	0.0208
Shoreline city	WA	0.0993	-0.0463	0.2738	-0.0302	-0.0081
University Place city	WA	0.0824	-0.0701	0.1171	0.0191	0.0042
Woodinville city	WA	0.2713	-0.1084	0.1046	0.0029	0.0218
Pewaukee city	WI	0.2415	-0.0597	-0.0621	-0.0215	0.0150
Weston village	WI	-0.1419	-0.1556	0.0347	-0.0432	0.0725
Carpendale town	WV	-0.2832	0.0056	0.0423	-0.0927	-0.0053
Jefferson town	WV	-0.3954	0.1903	0.0364	0.0166	0.0738
Pleasant Valley city	WV	-0.1237	0.0195	0.0421	-0.0822	0.0300
Whitehall town	WV	-0.0272	-0.0387	-0.0348	-0.0148	-0.0036

NIM	STATE	Weighted PC 6: Occupational Composition	Weighted PC 7: Migration	Weighted PC 8: Poverty	Weighted PC 9: Growth
Egegik city	AK	-0.1970	0.0156	0.0311	-0.0172
False Pass city	AK	-0.1443	0.1399	0.0029	-0.0746
Pilot Point city	AK	-0.1398	0.0155	-0.0298	-0.0013
Chelsea town	AL	0.0199	0.0276	-0.0113	0.0557
Coaling city	AL	-0.0280	0.0042	-0.0553	-0.0025
Coker town	AL	0.0309	-0.0387	-0.0213	-0.0214
Deatsville town	AL	-0.0072	-0.0006	-0.0366	0.0253
Dodge City town	AL	-0.0382	0.0094	-0.0210	-0.0198
Elmore town	AL	-0.0485	-0.0340	0.0202	-0.0068
Gordonville town	AL	-0.0281	-0.0456	0.0744	-0.0127
Horn Hill town	AL	-0.0563	-0.0153	0.0105	-0.0713
Hytop town	AL	0.0369	0.0285	-0.0725	-0.0223
Indian Springs Village town	AL	0.0464	-0.0743	-0.0120	0.0275
Lake View town	AL	-0.0227	0.0614	-0.0166	-0.0012
Macedonia town	AL	-0.0785	0.0002	-0.0145	-0.0564
Natural Bridge town	AL	-0.0434	-0.1399	0.0761	-0.0267
North Bibb town	AL	0.0342	0.0002	0.0025	-0.0031
Pike Road city	AL	0.0589	-0.0092	-0.0345	0.0247
Pleasant Groves town	AL	0.0260	-0.0763	-0.0359	-0.0127
Rehobeth town	AL	0.0261	-0.0264	-0.0152	0.0023
Spanish Fort city	AL	0.0088	0.0053	-0.0065	0.0265
Anthonyville town	AR	0.2283	-0.0739	0.0120	-0.0250

Briarcliff town	AR	-0.0636	-0.0121	-0.0109	0.0205
Cedarville city	AR	-0.0282	0.0126	-0.0072	-0.0018
Cherokee Village city	AR	-0.0751	0.0313	-0.0072	-0.0373
Donaldson town	AR	-0.1403	0.0133	0.0224	-0.0798
Etowah town	AR	0.0194	-0.0108	-0.0024	-0.0621
Fairfield Bay city	AR	-0.0334	0.0473	-0.0393	-0.0146
Fountain Lake town	AR	0.0113	0.0030	-0.0454	0.0627
Highland city	AR	-0.0337	0.0170	-0.0051	-0.0268
Holland city	AR	-0.0698	0.0087	0.0129	0.0296
Springtown town	AR	-0.0778	-0.0478	-0.0084	0.0138
St. Joe town	AR	0.0533	-0.0454	-0.0342	-0.1065
Twin Groves town	AR	-0.0591	-0.0347	-0.0519	0.0887
Sahuarita town	AZ	0.0126	0.0168	-0.0110	0.0809
American Canyon city	CA	0.0110	0.0249	0.0019	0.0103
Buellton city	CA	0.0171	0.0245	0.0208	0.0100
Calabasas city	CA	-0.0162	0.0506	-0.0148	-0.0199
Calimesa city	CA	0.0647	-0.0111	0.0047	0.0300
Canyon Lake city	CA	0.0203	0.0623	0.0210	0.0259
Chino Hills city	CA	0.0416	0.1737	0.0193	0.0051
Citrus Heights city	CA	0.1376	0.2316	0.0393	-0.0702
Laguna Hills city	CA	0.0717	0.0870	0.0437	-0.0140
Laguna Woods city	CA	0.1488	0.0533	0.0199	-0.0152
Lake Forest city	CA	0.1085	0.1414	0.0354	-0.0311
Malibu city	CA	-0.1137	0.0410	-0.0199	0.0058
Murrieta city	CA	0.0359	0.1422	0.0094	0.0332
Oakley city	CA	-0.0132	0.1157	0.0091	0.0280
Shasta Lake city	CA	0.0290	0.0108	0.0101	-0.0059
Truckee town	CA	-0.0447	0.0869	-0.0581	0.0352
Windsor town	CA	0.0087	0.0880	0.0135	0.0174
Yucca Valley town	CA	-0.0123	0.0629	0.0222	0.0243
Foxfield town	CO	0.0057	-0.0408	-0.0298	0.0163
Lone Tree city	CO	0.0431	-0.0225	0.0175	0.2379
Mountain Village town	CO	-0.2104	0.0929	-0.0242	0.1406
South Fork town	CO	-0.0297	0.0855	-0.0072	-0.0054
Groton Long Point borough	CT	-0.0176	-0.0613	-0.0208	-0.0739
Aventura city	FL	0.1191	0.1286	0.1068	-0.0355
Bonita Springs city	FL	0.0004	0.1180	-0.0247	0.0693
De Bary city	FL	0.0249	0.0605	-0.0183	0.0144
Deltona city	FL	0.0670	0.1779	0.0048	-0.0025
Fort Myers Beach town	FL	0.0380	0.0389	-0.0249	0.0486
Islamorada, Village of Islands	FL	0.0347	0.0301	-0.0327	-0.0022
Key Biscayne village	FL	0.0311	0.0330	0.1566	-0.0093
Marathon city	FL	-0.0358	0.0590	-0.0141	0.0137
Marco Island city	FL	0.0536	0.0595	-0.0287	0.0988

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Palm Coast city	FL	0.0464	0.1045	-0.0381	0.1105
Pinecrest village	FL	0.0289	-0.0333	0.0466	-0.0127
Sunny Isles Beach city	FL	0.1315	0.1400	0.2211	-0.0590
Wellington village	FL	0.0487	0.1100	-0.0153	0.0234
Weston city	FL	0.0561	0.1334	0.0291	0.0295
Dasher town	GA	0.0383	-0.0107	-0.0352	0.0147
Fargo city	GA	-0.1001	0.0011	0.0365	-0.0727
Graham city	GA	-0.0708	-0.0421	0.0107	-0.0524
Lithia Springs city	GA	-0.0032	-0.0715	-0.0169	-0.0072
Offerman city	GA	-0.1306	-0.0177	0.0127	0.0110
Vidette city	GA	0.0986	-0.1397	0.1235	-0.0684
Carey city	ID	-0.1008	-0.0149	-0.0326	-0.0304
Parkline city	ID	-0.1133	0.0396	-0.0086	-0.0181
Star city	ID	0.0194	0.0610	0.0079	0.0530
Bismarck village	IL	0.0883	-0.0430	-0.0424	-0.0767
Caledonia village	IL	-0.0296	-0.0782	-0.0327	-0.0540
Godfrey village	IL	0.0482	-0.0190	-0.0299	-0.0405
Greenwood village	IL	-0.0587	-0.1371	-0.0194	0.0027
Lily Lake village	IL	0.0354	-0.0136	-0.0389	0.0033
Ringwood village	IL	-0.0044	-0.0942	-0.0398	0.0261
Timberlane village	IL	0.0162	-0.0378	-0.0443	0.0257
Trout Valley village	IL	0.0248	-0.0669	0.0153	0.0015
Virgil village	IL	-0.0093	-0.0320	-0.0582	0.0095
Volo village	IL	0.0199	-0.1621	0.0692	0.0149
West Peoria city	IL	0.0906	-0.0226	-0.0061	-0.0877
Avon town	IN	0.0342	0.0384	-0.0387	0.0330
Leo-Cedarville town	IN	0.0571	-0.0120	-0.0363	-0.0350
Monrovia town	IN	0.0319	-0.0651	-0.0230	-0.0374
Winfield town	IN	-0.0186	0.0497	-0.0383	0.0029
Zanesville town	IN	0.0523	-0.0446	-0.0541	-0.0438
Linn Valley city	KS	0.0142	0.0566	-0.0293	0.0233
Blackey city	KY	-0.0823	-0.0025	0.0306	-0.0850
Buckhorn city	KY	-0.1570	0.0244	0.0452	-0.1020
Goshen city	KY	0.0510	-0.0067	0.0143	-0.0029
Robards city	KY	-0.0210	-0.0248	-0.0536	-0.0374
St. Gabriel town	LA	0.0339	-0.0288	0.0213	0.0303
Easthampton city	MA	0.0352	-0.0093	-0.0461	-0.0590
Chevy Chase View town	MD	-0.0419	-0.1612	0.0265	-0.0629
North Chevy Chase village	MD	-0.0507	-0.1158	0.0171	-0.0587
Village of Lake Isabella village	MI	0.0188	0.0179	-0.0364	0.0240
Cohasset city	MN	0.0050	-0.0004	-0.0618	-0.0463
Grant city	MN	-0.0070	-0.0776	-0.0432	0.0242
Oak Grove city	MN	-0.0277	0.0061	-0.0478	0.0034
Otsego city	MN	-0.0099	-0.0037	-0.0517	0.0072
Bull Creek village	МО	0.0977	0.0113	-0.0195	0.1279

Coney Island village	МО	-0.0010	0.0164	0.0100	0.0637
Dutchtown village	MO	0.0290	-0.0539	-0.0079	-0.0215
Grand Falls Plaza town	MO	0.1473	-0.0386	-0.0313	-0.0083
Green Park city	MO	0.1057	-0.0595	-0.0391	-0.0401
Highlandville city	MO	-0.0459	0.0031	-0.0007	0.0733
Innsbrook village	MO	-0.0163	0.0284	-0.0305	0.0245
Lake Lafayette city	MO	-0.0154	0.0140	-0.0413	-0.0216
Loma Linda town	MO	0.0173	0.0063	-0.0276	0.0041
McCord Bend village	MO	-0.0359	-0.0015	0.0063	0.0744
Miramiguoa Park village	MO	-0.0862	0.0519	0.0181	-0.0206
Pinhook village	MO	-0.0962	0.0373	0.0440	-0.0661
Rives town	MO	-0.0504	-0.0588	-0.0347	-0.0142
West Alton city	MO	0.0069	-0.0469	-0.0474	0.0037
Wildwood city	MO	0.0302	0.0844	-0.0272	-0.0269
Farmington town	MS	0.0502	-0.0272	-0.0425	-0.0353
Glen town	MS	-0.0408	-0.0176	-0.0341	-0.0030
Snow Lake Shores town	MS	-0.0459	0.0611	-0.0523	-0.0781
Colstrip city	MT	-0.1602	0.0625	-0.0671	-0.0706
Badin town	NC	0.0602	-0.0721	-0.0175	-0.0632
Bermuda Run town	NC	0.0673	-0.0572	-0.0090	0.0168
Bethania town	NC	0.0613	-0.1035	-0.0065	-0.0235
Boardman town	NC	-0.1212	-0.0331	0.0207	0.0219
Bogue town	NC	-0.0322	0.0325	-0.0363	0.0104
Carolina Shores town	NC	0.1127	-0.0158	-0.0624	0.1189
Cedar Rock village	NC	0.0431	-0.0966	-0.0469	-0.0073
Chimney Rock village	NC	0.0481	0.0053	-0.0064	-0.0185
Flat Rock village	NC	0.0225	-0.0199	-0.0203	0.0249
Forest Hills village	NC	-0.0484	-0.0585	0.0438	-0.0559
Green Level town	NC	0.0415	-0.0155	-0.0424	0.0219
Hemby Bridge town	NC	0.0098	0.0210	0.0042	0.0210
Lake Park village	NC	0.0261	0.0543	0.0071	0.0210
Lewisville town	NC	0.0492	-0.0150	-0.0276	-0.0120
Marvin village	NC	-0.0035	0.0193	-0.0218	0.0597
Mineral Springs town	NC	-0.0317	-0.0007	-0.0249	0.0401
Momeyer town	NC	0.0666	-0.0390	-0.0057	-0.0229
North Topsail Beach city	NC	-0.0167	0.0465	-0.0152	-0.0074
Northwest city	NC	0.0098	-0.0312	-0.0425	0.0578
Oak Ridge town	NC	0.0191	-0.0013	-0.0302	0.0099
Peletier town	NC	-0.0290	0.0399	-0.0255	0.0330
Pleasant Garden town	NC	0.0442	-0.0174	-0.0284	0.0058
Sandyfield town	NC	-0.0441	-0.0902	0.0020	-0.0455
Sedalia town	NC	0.0670	-0.0843	-0.0634	0.0376
St. James town	NC	-0.0572	0.0267	-0.0322	0.0770
Summerfield town	NC	0.0251	0.0072	-0.0362	0.0083
Swepsonville town	NC	0.0574	-0.0687	-0.0302	-0.0032
Chopoditino town		0.0077	0.0001	0.0017	0.0002

Tobaccoville village	NC	0.0256	-0.0340	-0.0374	-0.0045
Trinity city	NC	0.0677	-0.0604	-0.0333	-0.0153
Unionville town	NC	0.0175	0.0012	-0.0297	0.0460
Wentworth town	NC	0.0152	-0.0153	-0.0335	-0.0261
Wesley Chapel village	NC	0.0188	0.0072	-0.0358	0.0516
Whitsett town	NC	0.0405	-0.1254	-0.0338	-0.0120
Wilson's Mills town	NC	-0.0081	0.0329	-0.0274	0.0648
Caldwell borough	NJ	0.0729	0.0149	0.0501	-0.0978
Essex Fells borough	NJ	-0.0041	-0.1261	0.0031	-0.0657
Glen Ridge borough	NJ	0.0279	-0.0517	0.0492	-0.1138
North Caldwell borough	NJ	0.0250	-0.0889	0.0229	-0.0527
Edgewood town	NM	-0.0578	0.0359	0.0208	0.0612
Elephant Butte city	NM	-0.0136	0.0200	0.0067	0.0336
Taos Ski Valley village	NM	-0.0307	-0.0337	-0.0513	0.0362
West Wendover city	NV	0.0586	0.0117	0.0169	0.1635
Airmont village	NY	0.0175	-0.0736	0.0078	-0.0357
East Nassau village	NY	0.0221	-0.1435	-0.0178	-0.0653
Kaser village	NY	0.0972	0.1698	0.4378	-0.1540
West Hampton Dunes village	NY	-0.4022	0.0544	-0.0511	0.0590
Highland Hills village	OH	0.0372	-0.0481	0.0106	-0.0286
Holiday City village	OH	-0.1132	0.0123	-0.0084	-0.1250
New Franklin village	ОН	0.0335	-0.1059	-0.0353	-0.0374
Atwood town	OK	0.0010	-0.0490	-0.0032	-0.0806
Central High town	OK	-0.0155	-0.0574	0.0073	-0.0328
Fort Coffee town	OK	-0.0188	-0.0428	-0.0322	0.0189
Horntown town	OK	-0.0724	-0.0855	-0.0427	-0.0408
Pocasset town	OK	0.0129	0.0038	0.0101	-0.0184
Sawyer town	OK	-0.1237	0.0455	0.0150	-0.0486
Schulter town	OK	0.0132	-0.0549	-0.0024	-0.0505
Spaulding town	OK	-0.1416	-0.0667	0.0617	-0.1203
Swink town	OK	-0.2511	0.0482	0.1420	-0.0558
Bear Creek Village borough	PA	-0.0050	-0.0580	-0.0156	-0.0578
Awendaw town	SC	-0.0144	0.0121	-0.0424	0.0260
Reidville town	SC	-0.0042	-0.0461	-0.0269	-0.0177
Rockville town	SC	0.0413	-0.1421	-0.0328	-0.0273
Coopertown town	TN	0.0042	0.0229	-0.0382	0.0332
Hickory Withe town	TN	-0.0241	0.0262	-0.0344	0.0100
Louisville city	TN	-0.0215	-0.0020	-0.0190	0.0130
Midtown city	TN	0.0733	-0.0613	0.0013	-0.0284
Nolensville town	TN	0.0015	-0.0142	-0.0570	0.0777
Plainview city	TN	-0.0104	0.0378	-0.0220	0.0317
Pleasant View city	TN	-0.0078	0.0438	-0.0340	0.0298
Sunbright city	TN	-0.1242	0.0301	0.0383	-0.0501
Thompson's Station town	TN	-0.0230	-0.0156	-0.0358	0.0706
Three Way city	TN	0.0148	0.0039	-0.0413	0.0103

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Unicoi town	TN	0.0379	-0.0205	0.0257	0.0022
Anderson city	TX	-0.0678	-0.0638	0.0204	-0.0143
Bear Creek village	TX	-0.0168	-0.0683	-0.0194	0.0637
Bishop Hills town	TX	0.0541	-0.0570	0.0153	-0.0219
Cross Timber town	TX	-0.0309	-0.0157	-0.0110	0.0043
Fairchilds village	TX	0.0014	-0.0128	-0.0003	0.0873
Granjeno city	TX	0.0715	-0.2508	0.2752	0.1236
Hawk Cove city	TX	-0.0463	0.0269	0.0329	-0.0091
Highland Haven city	TX	-0.0339	0.0129	-0.0137	0.0383
Industry city	TX	-0.0435	-0.0326	0.0208	0.0174
Ingleside on the Bay city	TX	0.0270	0.0056	0.0233	-0.0065
Kempner city	TX	0.0370	0.0169	-0.0053	0.0248
Liberty Hill city	TX	-0.0322	0.0460	0.0280	0.1035
Los Indios town	TX	-0.0458	-0.0739	0.2298	0.1238
Millican town	TX	-0.0419	-0.0836	0.0283	0.0543
Palisades village	TX	-0.0266	-0.0193	-0.0170	0.0027
Paradise city	TX	0.0044	-0.0609	0.0080	0.0071
Penitas city	TX	-0.0153	-0.0967	0.1556	0.1492
Progreso city	TX	-0.0897	-0.0792	0.2549	0.1373
Ravenna city	TX	-0.0555	0.0062	0.0013	-0.0454
Red Lick city	TX	0.0243	-0.0164	-0.0226	-0.0013
Rio Grande City city	TX	-0.0108	-0.0558	0.2154	0.1068
Santa Clara city	TX	0.0902	-0.0621	0.0003	0.0320
Sullivan City city	TX	-0.0434	-0.0624	0.2084	0.1550
Sunset city	TX	-0.0827	0.0351	0.0418	-0.0745
Talty city	TX	-0.0929	0.0698	-0.0254	0.0712
The Hills village	TX	0.0106	0.0282	0.0104	0.0428
Eagle Mountain town	UT	-0.0390	0.0774	-0.0005	0.0529
Herriman town	UT	-0.0166	0.0637	-0.0178	0.0317
Holladay city	UT	0.0979	-0.0276	0.0015	-0.0279
Marriott-Slaterville city	UT	0.1078	-0.0432	-0.0233	0.0117
Saratoga Springs town	UT	-0.0326	0.0686	0.0204	0.0394
Taylorsville city	UT	0.1320	0.1522	0.0319	-0.0440
West Haven city	UT	-0.0073	0.0139	-0.0317	0.0259
Clinchco town	VA	-0.2471	0.0030	0.0565	-0.0912
Burien city	WA	0.0673	0.0641	0.0134	-0.0473
Covington city	WA	0.0286	0.0628	-0.0214	-0.0220
Edgewood city	WA	0.0192	-0.0181	-0.0302	-0.0145
Federal Way city	WA	0.0957	0.2319	0.0036	-0.0518
Kenmore city	WA	0.0196	0.0527	-0.0073	-0.0247
Lakewood city	WA	0.0772	0.1427	0.0251	-0.0349
Maple Valley city	WA	0.0152	0.0947	-0.0109	-0.0076
Newcastle city	WA	0.0136	0.0320	-0.0274	-0.0044
Sammamish city	WA	0.0016	0.0873	-0.0178	-0.0215
SeaTac city	WA	0.0483	0.0699	-0.0083	-0.0254

Shoreline city	WA	0.0671	0.1008	0.0062	-0.0648
University Place city	WA	0.0550	0.0851	0.0004	-0.0233
Woodinville city	WA	0.0040	0.0388	-0.0233	0.0022
Pewaukee city	WI	0.0640	-0.0863	-0.0293	-0.0053
Weston village	WI	0.0731	0.0386	-0.0584	-0.0358
Carpendale town	WV	0.0465	-0.0489	-0.0404	-0.0214
Jefferson town	WV	0.1104	-0.0185	0.0720	-0.0529
Pleasant Valley city	WV	0.0488	-0.0210	-0.0125	-0.0412
Whitehall town	WV	0.0712	0.0187	-0.0054	-0.0215

## APPENDIX C. NATIONAL NIM TYPOLOGY AND WEIGHTED COMPOSITE PC SCORES

NIMs	STATE	Weighted Composite PC Score
EXCLUSIVE	ENCLAVE	NIMS
Laguna Woods city	CA	1.18
Malibu city	CA	1.02
Key Biscayne village	FL	0.99
St. James town	NC	0.93
Bonita Springs city	FL	0.90
Marco Island city	FL	0.89
Sunny Isles Beach city	FL	0.80
Lone Tree city	СО	0.78
Flat Rock village	NC	0.76
North Chevy Chase village	MD	0.75
The Hills village	TX	0.73
Bermuda Run town	NC	0.73
Carolina Shores town	NC	0.72
Exclusive Enclave Mean		0.86
SUBURBAN SI	ETTLEME	NT NIMS
Mountain Village town	CO	0.69
Chevy Chase View town	MD	0.68
Calabasas city	CA	0.67
Taos Ski Valley village	NM	0.63
Fairfield Bay city	AR	0.63
Pinecrest village	FL	0.62
Palm Coast city	FL	0.62
Essex Fells borough	NJ	0.60
North Caldwell borough	NJ	0.60
Islamorada, Village of		
Islands	FL	0.60
Highland Hills village	OH	0.58
Weston city	FL	0.56
Highland Haven city	TX	0.53
Sammamish city	WA	0.52
Rockville town	SC	0.50
Cedar Rock village	NC	0.49
Groton Long Point borough	CT	0.49
Rio Grande City city	TX	0.48
Egegik city	AK	0.48
De Bary city	FL	0.47
Anthonyville town	AR	0.47

Glen Ridge borough	NJ	0.47
Laguna Hills city	CA	0.45
Newcastle city	WA	0.45
St. Gabriel town	LA	0.44
False Pass city	AK	0.42
Fort Coffee town	OK	0.41
Shoreline city	WA	0.40
Wellington village	FL	0.39
Forest Hills village	NC	0.38
Chino Hills city	CA	0.38
Trout Valley village	IL	0.38
Innsbrook village	MO	0.37
Foxfield town	СО	0.37
Bear Creek Village borough	PA	0.36
Pike Road city	AL	0.35
Marvin village	NC	0.35
Vidette city	GA	0.35
Lake Forest city	CA	0.34
Kenmore city	WA	0.32
Gordonville town	AL	0.32
Woodinville city	WA	0.31
Windsor town	CA	0.31
Airmont village	NY	0.31
Marathon city	FL	0.30
Caldwell borough	NJ	0.30
Wildwood city	MO	0.29
Indian Springs Village town	AL	0.29
Elephant Butte city	NM	0.29
South Fork town	CO	0.28
Lakewood city	WA	0.28
Federal Way city	WA	0.27
University Place city	WA	0.27
Truckee town	CA	0.27
Holladay city	UT	0.26
Sedalia town	NC	0.24
West Hampton Dunes		
village	NY	0.24
Twin Groves town	AR	0.22
Aventura city	FL	0.19
Grant city	MN	0.19
Burien city	WA	0.19
Buellton city	CA	0.18
American Canyon city	CA	0.18
Macedonia town	AL	0.17
Canyon Lake city	CA	0.17

Murrieta city	CA	0.17		
Murrieta city Cherokee Village city	AR	0.17		
	TX	0.16		
Anderson city Northwest city	NC	0.16		
•	TX			
Sullivan City city	IL	0.15 0.15		
West Peoria city	TX	0.15		
Bear Creek village				
Sahuarita town	AZ	0.14		
Calimesa city	CA	0.14		
Kaser village	NY	0.14		
Spanish Fort city	AL	0.14		
Awendaw town	SC	0.13		
Lake Park village	NC TV	0.12		
Granjeno city	TX	0.11		
Fort Myers Beach town	FL	0.10		
Pinhook village	MO	0.10		
Yucca Valley town	CA	0.10		
North Topsail Beach city	NC TV	0.09		
Bishop Hills town	TX	0.09		
Deltona city	FL	0.08		
Sandyfield town	NC	0.08		
Summerfield town	NC	0.08		
Loma Linda town	MO	0.07		
Oak Ridge town	NC	0.07		
Pewaukee city	WI	0.06		
Lewisville town	NC	0.05		
SeaTac city	WA	0.05		
Green Level town	NC	0.05		
Bethania town	NC	0.05		
Maple Valley city	WA	0.05		
Millican town	TX	0.04		
Parkline city	ID	0.04		
Citrus Heights city	CA	0.04		
Village of Lake Isabella	MI	0.04		
Timberlane village	IL	0.04		
Jefferson town	WV	0.03		
Unicoi town	TN	0.03		
Suburban Settlment Mean		0.29		
PERIPHERAL (				
Coney Island village	MO	0.01		
Thompson's Station town	TN	0.01		
Progreso city	TX	0.01		
Linn Valley city	KS	0.00		
Colstrip city	MT	0.00		

Oakley city	CA	0.00
Swepsonville town	NC	0.00
Pilot Point city	AK	0.00
Wesley Chapel village	NC	-0.01
Carey city	ID	-0.01
Easthampton city	MA	-0.02
Winfield town	IN	-0.02
Edgewood city	WA	-0.03
Penitas city	TX	-0.03
West Wendover city	NV	-0.03
Green Park city	MO	-0.04
Badin town	NC	-0.04
Godfrey village	IL	-0.05
Whitehall town	WV	-0.06
Red Lick city	TX	-0.06
Goshen city	KY	-0.06
Snow Lake Shores town	MS	-0.06
Chimney Rock village	NC	-0.07
Taylorsville city	UT	-0.08
Hickory Withe town	TN	-0.08
Ringwood village	IL	-0.08
Lily Lake village	IL	-0.09
Highland city	AR	-0.09
Covington city	WA	-0.10
Boardman town	NC	-0.10
Chelsea town	AL	-0.10
Saratoga Springs town	UT	-0.11
Grand Falls Plaza town	MO	-0.12
Talty city	TX	-0.14
Cohasset city	MN	-0.14
Pleasant Valley city	WV	-0.14
Ingleside on the Bay city	TX	-0.14
Three Way city	TN	-0.15
Buckhorn city	KY	-0.15
Lithia Springs city	GA	-0.16
Louisville city	TN	-0.16
Graham city	GA	-0.16
East Nassau village	NY	-0.16
Avon town	IN	-0.17
Santa Clara city	TX	-0.18
Edgewood town	NM	-0.18
Pleasant Garden town	NC	-0.18
Nolensville town	TN	-0.19
New Franklin village	OH	-0.20
Weston village	WI	-0.22

Wilson's Mills town         NC         -0.22           Sawyer town         OK         -0.22           Industry city         TX         -0.22           Greenwood village         IL         -0.23           Shasta Lake city         CA         -0.23           Mineral Springs town         NC         -0.25           Herriman town         UT         -0.25           Volo village         IL         -0.25           Star city         ID         -0.26           Whitsett town         NC         -0.26           Marriott-Slaterville city         UT         -0.26           Memby Bridge town         NC         -0.26           Wentworth town         NC         -0.26           Wentworth town         NC         -0.28           Pleasant View city         TN         -0.28           Coopertown town         TN         -0.28           Unionville town         NC         -0.28           Los Indios town         TX         -0.29           Liberty Hill city         TX         -0.29           Liberty Hill city         TX         -0.29           Leo-Cedarville town         IN         -0.30           Momeyer town </th
Industry city
Greenwood village         IL         -0.23           Shasta Lake city         CA         -0.23           Mineral Springs town         NC         -0.25           Herriman town         UT         -0.25           Volo village         IL         -0.25           Star city         ID         -0.26           Whitsett town         NC         -0.26           Marriott-Slaterville city         UT         -0.26           Memby Bridge town         NC         -0.26           Wentworth town         NC         -0.28           Pleasant View city         TN         -0.28           Coopertown town         TN         -0.28           Unionville town         NC         -0.28           Us Indios town         TX         -0.29           Liberty Hill city         TX         -0.29           Liberty Hill city         TX         -0.29           Leo-Cedarville town         IN         -0.30           Momeyer town         NC         -0.30           Tobaccoville village         NC         -0.30           Dasher town         GA         -0.30           Fountain Lake town         AR         -0.31           West Haven
Shasta Lake city         CA         -0.23           Mineral Springs town         NC         -0.25           Herriman town         UT         -0.25           Volo village         IL         -0.25           Star city         ID         -0.26           Whitsett town         NC         -0.26           Marriott-Slaterville city         UT         -0.26           Marriott-Slaterville city         UT         -0.26           Hemby Bridge town         NC         -0.26           Wentworth town         NC         -0.26           Wentworth town         NC         -0.28           Pleasant View city         TN         -0.28           Pleasant View city         TN         -0.28           Coopertown town         NC         -0.28           Unionville town         NC         -0.28           Los Indios town         TX         -0.29           Liberty Hill city         TX         -0.29           Liberty Hill city         TX         -0.29           Leo-Cedarville town         IN         -0.30           Momeyer town         NC         -0.30           Tobaccoville village         NC         -0.30 <td< td=""></td<>
Mineral Springs town         NC         -0.25           Herriman town         UT         -0.25           Volo village         IL         -0.25           Star city         ID         -0.26           Whitsett town         NC         -0.26           Marriott-Slaterville city         UT         -0.26           Hemby Bridge town         NC         -0.26           Hemby Bridge town         NC         -0.28           Pleasant View city         TN         -0.28           Pleasant View city         TN         -0.28           Coopertown town         TN         -0.28           Unionville town         NC         -0.28           Los Indios town         TX         -0.29           Liberty Hill city         TX         -0.29           Liberty Hill city         TX         -0.29           Leo-Cedarville town         IN         -0.30           Momeyer town         NC         -0.30           Tobaccoville village         NC         -0.30           Dasher town         GA         -0.30           Fountain Lake town         AR         -0.31           West Haven city         UT         -0.31           Swink t
Herriman town
Volo village         IL         -0.25           Star city         ID         -0.26           Whitsett town         NC         -0.26           Marriott-Slaterville city         UT         -0.26           Hemby Bridge town         NC         -0.28           Wentworth town         NC         -0.28           Pleasant View city         TN         -0.28           Coopertown town         TN         -0.28           Unionville town         NC         -0.28           Los Indios town         TX         -0.29           Liberty Hill city         TX         -0.29           Liberty Hill city         TX         -0.29           Leo-Cedarville town         IN         -0.30           Momeyer town         NC         -0.30           Tobaccoville village         NC         -0.30           Dasher town         GA         -0.30           Fountain Lake town         AR         -0.31           West Haven city         UT         -0.31           Swink town         OK         -0.32           Briarcliff town         AR         -0.32           Bogue town         NC         -0.32           Oak Grove city
Star city         ID         -0.26           Whitsett town         NC         -0.26           Marriott-Slaterville city         UT         -0.26           Hemby Bridge town         NC         -0.28           Wentworth town         NC         -0.28           Pleasant View city         TN         -0.28           Coopertown town         TN         -0.28           Unionville town         NC         -0.28           Los Indios town         TX         -0.29           Liberty Hill city         TX         -0.29           Leo-Cedarville town         IN         -0.30           Momeyer town         NC         -0.30           Momeyer town         NC         -0.30           Tobaccoville village         NC         -0.30           Dasher town         GA         -0.30           Fountain Lake town         AR         -0.31           West Haven city         UT         -0.31           Swink town         OK         -0.32           Briarcliff town         AR         -0.32           Bogue town         OK         -0.32           Oak Grove city         MN         -0.32           Central High town
Whitsett town         NC         -0.26           Marriott-Slaterville city         UT         -0.26           Hemby Bridge town         NC         -0.28           Wentworth town         NC         -0.28           Pleasant View city         TN         -0.28           Coopertown town         TN         -0.28           Unionville town         NC         -0.28           Los Indios town         TX         -0.29           Liberty Hill city         TX         -0.29           Leo-Cedarville town         IN         -0.30           Momeyer town         NC         -0.30           Tobaccoville village         NC         -0.30           Dasher town         GA         -0.30           Fountain Lake town         AR         -0.31           West Haven city         UT         -0.31           Swink town         OK         -0.32           Briarcliff town         AR         -0.32           Bogue town         NC         -0.32           Oak Grove city         MN         -0.32           Central High town         OK         -0.33           Schulter town         OK         -0.34           Horntown town
Marriott-Slaterville city         UT         -0.26           Hemby Bridge town         NC         -0.28           Wentworth town         NC         -0.28           Pleasant View city         TN         -0.28           Coopertown town         TN         -0.28           Unionville town         NC         -0.28           Los Indios town         TX         -0.29           Liberty Hill city         TX         -0.29           Leo-Cedarville town         IN         -0.30           Momeyer town         NC         -0.30           Momeyer town         NC         -0.30           Tobaccoville village         NC         -0.30           Dasher town         GA         -0.30           Fountain Lake town         AR         -0.31           West Haven city         UT         -0.31           Swink town         OK         -0.32           Briarcliff town         AR         -0.32           Bogue town         NC         -0.32           Oak Grove city         MN         -0.32           Central High town         OK         -0.33           Blackey city         KY         -0.33           Schulter town
Hemby Bridge town         NC         -0.26           Wentworth town         NC         -0.28           Pleasant View city         TN         -0.28           Coopertown town         TN         -0.28           Unionville town         NC         -0.28           Los Indios town         TX         -0.29           Liberty Hill city         TX         -0.29           Leo-Cedarville town         IN         -0.30           Momeyer town         NC         -0.30           Tobaccoville village         NC         -0.30           Dasher town         GA         -0.30           Fountain Lake town         AR         -0.31           West Haven city         UT         -0.31           Swink town         OK         -0.32           Briarcliff town         AR         -0.32           Bogue town         NC         -0.32           Oak Grove city         MN         -0.32           Central High town         OK         -0.33           Blackey city         KY         -0.33           Schulter town         OK         -0.34           Spaulding town         OK         -0.34           Horntown town         O
Wentworth townNC-0.28Pleasant View cityTN-0.28Coopertown townTN-0.28Unionville townNC-0.28Los Indios townTX-0.29Liberty Hill cityTX-0.29Leo-Cedarville townIN-0.30Momeyer townNC-0.30Tobaccoville villageNC-0.30Dasher townGA-0.30Fountain Lake townAR-0.31West Haven cityUT-0.31Swink townOK-0.32Briarcliff townAR-0.32Bogue townNC-0.32Oak Grove cityMN-0.32Central High townOK-0.33Blackey cityKY-0.33Schulter townOK-0.34Spaulding townOK-0.34Horntown townOK-0.34West Alton cityMO-0.34Fargo cityGA-0.35Clinchco townVA-0.35
Pleasant View city         TN         -0.28           Coopertown town         TN         -0.28           Unionville town         NC         -0.28           Los Indios town         TX         -0.29           Liberty Hill city         TX         -0.29           Leo-Cedarville town         IN         -0.30           Momeyer town         NC         -0.30           Tobaccoville village         NC         -0.30           Dasher town         GA         -0.30           Fountain Lake town         AR         -0.31           West Haven city         UT         -0.31           Swink town         OK         -0.32           Briarcliff town         AR         -0.32           Bogue town         NC         -0.32           Oak Grove city         MN         -0.32           Central High town         OK         -0.33           Blackey city         KY         -0.33           Schulter town         OK         -0.34           Spaulding town         OK         -0.34           Horntown town         OK         -0.34           West Alton city         MO         -0.35           Clinchco town         VA </td
Coopertown town         TN         -0.28           Unionville town         NC         -0.28           Los Indios town         TX         -0.29           Liberty Hill city         TX         -0.29           Leo-Cedarville town         IN         -0.30           Momeyer town         NC         -0.30           Tobaccoville village         NC         -0.30           Dasher town         GA         -0.30           Fountain Lake town         AR         -0.31           West Haven city         UT         -0.31           Swink town         OK         -0.32           Briarcliff town         AR         -0.32           Bogue town         NC         -0.32           Oak Grove city         MN         -0.32           Central High town         OK         -0.33           Blackey city         KY         -0.33           Schulter town         OK         -0.34           Horntown town         OK         -0.34           West Alton city         MO         -0.35           Peletier town         NC         -0.35           Clinchco town         VA         -0.35
Unionville town         NC         -0.28           Los Indios town         TX         -0.29           Liberty Hill city         TX         -0.29           Leo-Cedarville town         IN         -0.30           Momeyer town         NC         -0.30           Tobaccoville village         NC         -0.30           Dasher town         GA         -0.30           Fountain Lake town         AR         -0.31           West Haven city         UT         -0.31           Swink town         OK         -0.32           Briarcliff town         AR         -0.32           Bogue town         NC         -0.32           Oak Grove city         MN         -0.32           Central High town         OK         -0.33           Blackey city         KY         -0.33           Schulter town         OK         -0.34           Spaulding town         OK         -0.34           Horntown town         OK         -0.34           West Alton city         MO         -0.35           Peletier town         NC         -0.35           Clinchco town         VA         -0.35
Los Indios town         TX         -0.29           Liberty Hill city         TX         -0.29           Leo-Cedarville town         IN         -0.30           Momeyer town         NC         -0.30           Tobaccoville village         NC         -0.30           Dasher town         GA         -0.30           Fountain Lake town         AR         -0.31           West Haven city         UT         -0.31           Swink town         OK         -0.32           Briarcliff town         AR         -0.32           Bogue town         NC         -0.32           Oak Grove city         MN         -0.32           Central High town         OK         -0.33           Blackey city         KY         -0.33           Schulter town         OK         -0.34           Spaulding town         OK         -0.34           Horntown town         OK         -0.34           West Alton city         MO         -0.34           Fargo city         GA         -0.35           Peletier town         NC         -0.35           Clinchco town         VA         -0.35
Liberty Hill city Leo-Cedarville town IN -0.30 Momeyer town NC -0.30 Tobaccoville village NC Dasher town GA Fountain Lake town West Haven city UT -0.31 Swink town OK Briarcliff town AR -0.32 Bogue town NC -0.32 Oak Grove city MN -0.32 Central High town OK Spaulding town OK -0.34 Spaulding town OK -0.34 West Alton city MO -0.35 Clinchco town VC -0.35
Leo-Cedarville town         IN         -0.30           Momeyer town         NC         -0.30           Tobaccoville village         NC         -0.30           Dasher town         GA         -0.30           Fountain Lake town         AR         -0.31           West Haven city         UT         -0.31           Swink town         OK         -0.32           Briarcliff town         AR         -0.32           Bogue town         NC         -0.32           Oak Grove city         MN         -0.32           Central High town         OK         -0.33           Blackey city         KY         -0.33           Schulter town         OK         -0.34           Spaulding town         OK         -0.34           Horntown town         OK         -0.34           West Alton city         MO         -0.34           Fargo city         GA         -0.35           Peletier town         NC         -0.35           Clinchco town         VA         -0.35
Momeyer town         NC         -0.30           Tobaccoville village         NC         -0.30           Dasher town         GA         -0.30           Fountain Lake town         AR         -0.31           West Haven city         UT         -0.31           Swink town         OK         -0.32           Briarcliff town         AR         -0.32           Bogue town         NC         -0.32           Oak Grove city         MN         -0.32           Central High town         OK         -0.33           Blackey city         KY         -0.33           Schulter town         OK         -0.34           Spaulding town         OK         -0.34           Horntown town         OK         -0.34           West Alton city         MO         -0.34           Fargo city         GA         -0.35           Peletier town         NC         -0.35           Clinchco town         VA         -0.35
Tobaccoville village         NC         -0.30           Dasher town         GA         -0.30           Fountain Lake town         AR         -0.31           West Haven city         UT         -0.31           Swink town         OK         -0.32           Briarcliff town         AR         -0.32           Bogue town         NC         -0.32           Oak Grove city         MN         -0.32           Central High town         OK         -0.33           Blackey city         KY         -0.33           Schulter town         OK         -0.34           Spaulding town         OK         -0.34           Horntown town         OK         -0.34           West Alton city         MO         -0.34           Fargo city         GA         -0.35           Peletier town         NC         -0.35           Clinchco town         VA         -0.35
Dasher town         GA         -0.30           Fountain Lake town         AR         -0.31           West Haven city         UT         -0.31           Swink town         OK         -0.32           Briarcliff town         AR         -0.32           Bogue town         NC         -0.32           Oak Grove city         MN         -0.32           Central High town         OK         -0.33           Blackey city         KY         -0.33           Schulter town         OK         -0.34           Spaulding town         OK         -0.34           Horntown town         OK         -0.34           West Alton city         MO         -0.34           Fargo city         GA         -0.35           Peletier town         NC         -0.35           Clinchco town         VA         -0.35
Fountain Lake town         AR         -0.31           West Haven city         UT         -0.31           Swink town         OK         -0.32           Briarcliff town         AR         -0.32           Bogue town         NC         -0.32           Oak Grove city         MN         -0.32           Central High town         OK         -0.33           Blackey city         KY         -0.33           Schulter town         OK         -0.34           Spaulding town         OK         -0.34           Horntown town         OK         -0.34           West Alton city         MO         -0.34           Fargo city         GA         -0.35           Peletier town         NC         -0.35           Clinchco town         VA         -0.35
West Haven city         UT         -0.31           Swink town         OK         -0.32           Briarcliff town         AR         -0.32           Bogue town         NC         -0.32           Oak Grove city         MN         -0.32           Central High town         OK         -0.33           Blackey city         KY         -0.33           Schulter town         OK         -0.34           Spaulding town         OK         -0.34           Horntown town         OK         -0.34           West Alton city         MO         -0.34           Fargo city         GA         -0.35           Peletier town         NC         -0.35           Clinchco town         VA         -0.35
Swink town         OK         -0.32           Briarcliff town         AR         -0.32           Bogue town         NC         -0.32           Oak Grove city         MN         -0.32           Central High town         OK         -0.33           Blackey city         KY         -0.33           Schulter town         OK         -0.34           Spaulding town         OK         -0.34           Horntown town         OK         -0.34           West Alton city         MO         -0.34           Fargo city         GA         -0.35           Peletier town         NC         -0.35           Clinchco town         VA         -0.35
Briarcliff town         AR         -0.32           Bogue town         NC         -0.32           Oak Grove city         MN         -0.32           Central High town         OK         -0.33           Blackey city         KY         -0.33           Schulter town         OK         -0.34           Spaulding town         OK         -0.34           Horntown town         OK         -0.34           West Alton city         MO         -0.34           Fargo city         GA         -0.35           Peletier town         NC         -0.35           Clinchco town         VA         -0.35
Bogue town         NC         -0.32           Oak Grove city         MN         -0.32           Central High town         OK         -0.33           Blackey city         KY         -0.33           Schulter town         OK         -0.34           Spaulding town         OK         -0.34           Horntown town         OK         -0.34           West Alton city         MO         -0.34           Fargo city         GA         -0.35           Peletier town         NC         -0.35           Clinchco town         VA         -0.35
Oak Grove city         MN         -0.32           Central High town         OK         -0.33           Blackey city         KY         -0.33           Schulter town         OK         -0.34           Spaulding town         OK         -0.34           Horntown town         OK         -0.34           West Alton city         MO         -0.34           Fargo city         GA         -0.35           Peletier town         NC         -0.35           Clinchco town         VA         -0.35
Central High town         OK         -0.33           Blackey city         KY         -0.33           Schulter town         OK         -0.34           Spaulding town         OK         -0.34           Horntown town         OK         -0.34           West Alton city         MO         -0.34           Fargo city         GA         -0.35           Peletier town         NC         -0.35           Clinchco town         VA         -0.35
Blackey city         KY         -0.33           Schulter town         OK         -0.34           Spaulding town         OK         -0.34           Horntown town         OK         -0.34           West Alton city         MO         -0.34           Fargo city         GA         -0.35           Peletier town         NC         -0.35           Clinchco town         VA         -0.35
Schulter town         OK         -0.34           Spaulding town         OK         -0.34           Horntown town         OK         -0.34           West Alton city         MO         -0.34           Fargo city         GA         -0.35           Peletier town         NC         -0.35           Clinchco town         VA         -0.35
Spaulding town         OK         -0.34           Horntown town         OK         -0.34           West Alton city         MO         -0.34           Fargo city         GA         -0.35           Peletier town         NC         -0.35           Clinchco town         VA         -0.35
Horntown town         OK         -0.34           West Alton city         MO         -0.34           Fargo city         GA         -0.35           Peletier town         NC         -0.35           Clinchco town         VA         -0.35
West Alton city         MO         -0.34           Fargo city         GA         -0.35           Peletier town         NC         -0.35           Clinchco town         VA         -0.35
Fargo city         GA         -0.35           Peletier town         NC         -0.35           Clinchco town         VA         -0.35
Peletier town         NC         -0.35           Clinchco town         VA         -0.35
Clinchco town VA -0.35
Cross Timber town TX -0.36
-0.00
Eagle Mountain town UT -0.36
Glen town MS -0.36
Holland city AR -0.36
Reidville town SC -0.36
Elmore town AL -0.37
Coker town AL -0.37
Fairchilds village TX -0.38

Kempner city	TX	-0.38
St. Joe town	AR	-0.38
Atwood town	OK	-0.38
Virgil village	IL	-0.39
Paradise city	TX	-0.39
Deatsville town	AL	-0.39
Carpendale town	WV	-0.40
Otsego city	MN	-0.41
Bismarck village	IL	-0.41
Bull Creek village	MO	-0.41
Highlandville city	MO	-0.41
McCord Bend village	MO	-0.42
Trinity city	NC	-0.42
Etowah town	AR	-0.42
Pocasset town	OK	-0.43
Horn Hill town	AL	-0.44
Lake View town	AL	-0.44
Sunbright city	TN	-0.46
Monrovia town	IN	-0.46
Midtown city	TN	-0.47
Coaling city	AL	-0.47
Plainview city	TN	-0.47
Sunset city	TX	-0.48
Farmington town	MS	-0.48
Hawk Cove city	TX	-0.50
Zanesville town	IN	-0.50
Robards city	KY	-0.51
Cedarville city	AR	-0.51
Caledonia village	IL	-0.51
North Bibb town	AL	-0.52
Ravenna city	TX	-0.53
Rehobeth town	AL	-0.53
Donaldson town	AR	-0.53
Miramiguoa Park village	MO	-0.54
Holiday City village	ОН	-0.56
Dutchtown village	MO	-0.57
Lake Lafayette city	MO	-0.59
Offerman city	GA	-0.59
Dodge City town	AL	-0.61
Palisades village	TX	-0.62
Rives town	MO	-0.62
Pleasant Groves town	AL	-0.63
Hytop town	AL	-0.66
Natural Bridge town	AL	-0.73
Springtown town	AR	-0.73

Peripheral Community	
Mean	-0.29