# The Changing Role of Downtowns:

## An Examination of the Condition of Cities and Methods to Reinvent the Urban Core

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(ABSTRACT)

Downtowns across America are changing as a result of suburbanization trends. Population shifts and changing land consumption patterns caused by advancements in technology, such as the internet, along with social and economic factors, alter the downtown dynamic. The city used to represent the nucleus for all commercial, residential, and industrial activities. Currently, cities are re-evaluating their land uses to determine the best methods to attract people back to the urban core and to regain the vitality that once defined city life.

Efforts to redevelop downtowns typically assume the characteristics of place-based strategies by following either infrastructure strategies or consumer strategies. The former method is more traditional, with attention given to specific land uses, such as residential, retail, or entertainment activities. Essentially, infrastructure strategies rely on the "build it and they will come" motto. Consumer strategies strive to attract young professionals, single-parent families, and "empty nesters" for urban living by accentuating amenities unique to the city lifestyle.

Roanoke, Virginia serves as a case study for evaluating suburbanization trends and methods of redevelopment for a small- to medium-sized city. By calculating and analyzing household and office employment projections, the Roanoke market shows signs of strength in young household creations and Central Business District office employment. With a residential market on the rise and downtown office employment growing, adaptive reuse of urban space may prove to be Roanoke's method of reinventing itself by orchestrating a consumer-based redevelopment effort.

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# INTRODUCTION

Downtowns across America are changing as a result of suburbanization trends. Population shifts and changing land consumption patterns caused by advancements in technology, such as the internet, along with social and economic factors, alter the downtown dynamic. The city used to represent the nucleus for all commercial, residential, and industrial activities. Currently, cities are re-evaluating their land uses to determine the best methods to attract people back to the urban core and to regain the vitality that once defined city life. The most recent endeavors incorporate a mix of uses from residential, retail, commercial, cultural, entertainment, and government, in an effort to make downtown a place of vitality. The major forces behind this movement are local business leaders, art lovers, university students, medical facility users, downtown residents, and those seeking entertainment.

In the days when department stores dominated the downtown retail, downtowns also dominated the region. In the 1950s urban centers controlled nearly all of the retail market. In the 1960s the downtown domination began to slip as cheaper land for retail developed around inner-ring suburbs. The next decade brought with it a renewed energy to sustain the city, by building municipally owned convention centers, large scale office projects, and mixed use corridors. Their efforts succeeded in terms of bringing people to the area; however, the people and their limited visitation time did not have enough impact to outweigh the forces driving the decentralization of the economy.

Efforts to redevelop downtowns typically assume the characteristics of place-based strategies by following either infrastructure strategies or consumer strategies. The former method is more traditional, with attention given to specific land uses, such as residential, retail, and entertainment activities. Essentially, infrastructure strategies rely on the “build it and they will come” motto. Consumer strategies strive to attract young professionals, single-parent families, and "empty nesters" for urban living by accentuating amenities.

Land use dynamics are difficult to predict; however, by identifying trends and making adjustments to policy or perceptions to reflect the changing trends, a downtown can be very successful and healthy. Perhaps Bradley, Berens, and McCarthy (1993)

clarify this point best when discussing the state of downtowns, "…it is important to remember that center cities are struggling to redefine themselves, not keep alive" (p. 3-4).

Roanoke, Virginia serves as a case study for evaluating suburbanization trends and methods of redevelopment for a small- to medium-sized city. By calculating and analyzing household and office employment projections, the Roanoke market shows signs of strength in young household creations and Central Business District (CBD) office employment. With a residential market on the rise and downtown office employment growing, adaptive reuse of urban space may prove to be Roanoke's method of reinventing itself by orchestrating a consumer-based redevelopment effort.

This paper contributes to the analysis of downtown evolution as a result of suburbanization trends. It examines the current state of CBDs while making attempts to sustain the urban core. A discussion of redevelopment trends lends credit to the up and coming methods while indicating which efforts no longer display revitalization potential. Expected findings include a shift in downtown dynamics to attract young households opposed to the previous efforts to attract industry to the CBD. Further, expected findings anticipate a consumer-based approach towards marketing downtown as an amenity rich location for young households.

## PAPER OVERVIEW

The first section of this paper discusses national trends in land use to include a broad scale examination of suburbanization in our culture and the reasons for decentralization. Next, a review of current redevelopment efforts in CBDs while placing particular emphasis on the place-based model of development provides in sight towards national trends. The paper examines two place-based efforts, infrastructure strategies and consumer strategies. The review of infrastructure strategies includes an evaluation of retail, residential, and social projects. The consumer-based approach highlights two economic theorists, Michael Porter and Richard Florida.

The second portion of the paper utilizes Roanoke, Virginia as a case study. The city and the MSA provide an opportunity to quantifiably illustrate land use trends. Further, the case study offers a platform to discuss methods of downtown revitalization suitable for small to medium-size shrinking central business districts with expanding metropolitan areas through decentralization. The paper concludes with a set of recommendations based on the literature reviewed and the case study which can enhance and ultimately create stronger downtown markets across the country.

# SUBURBANIZATION

Prior to analyzing specific downtown issues, it is important to understand land use trends in a historical context and at a national scale. Upon the settlement of the United States and for decades thereafter, people lived in compact urban centers, for convenient access to goods and services. At that time, cities developed around vital ports to receive imports from foreign countries to sustain life in a relatively undeveloped and unexplored country. As industrial technology progressed, significant changes in the American landscape developed. For example, the invention of the automobile enabled people to be independent of public transportation, ultimately providing autonomy and efficiency with private transportation, therefore people moved away from cities to the suburbs.

Webster's Dictionary defines a suburb as, "An outlying part of a city or town; a smaller place immediately adjacent to a city, typically residential." Suburbanization is the common term in defining relocation from an urban center to a suburb and a trend occurring with high frequency. This behavior drastically affects our lives and is most visible through the changing roles of downtowns across America.

## Population Trends

Possibly the best method to understand suburbanization is quantitatively through data collected by the United States Bureau of Census. In 2000, The Bureau of Census calculated 271 metropolitan areas, 253 Metropolitan Statistical Areas (MSAs) and 18 Consolidated Metropolitan Statistical Areas (CMSAs). The Office of Management and Budget determines MSAs based on the concept of a core area with a large population nucleus. Included in MSAs are adjacent communities with a high degree of economic and social integration with the core. Qualification of an MSA requires a city with 50,000 or more inhabitants, or the presence of an Urbanized Area (UA) and a total population of at least 100,000. A Primary Metropolitan Statistical Area (PMSA) meets the requirements of a MSA and has a population of one-million or more with significant commuting interchange. When two or more PMSAs are identified, the larger area for which they are a part of is designated CMSA.

### Land Consumption

At the time of the 2000 decennial census, the United States population was 265 million people with 80 percent (212 million) living in metropolitan areas. Metropolitan

areas blanket roughly 16 percent of the United States (Black, 1997). Examination of expanding metropolitan areas paints the decentralization portrait vividly. Since the 1970's and 1980's the majority of metropolitan areas had 80 percent of all new building permits sought for office, residential, industrial, and retail construction occur in the suburbs (Black, 1997). Take into consideration the lack of density to which suburban development occurs, expansion of metropolitan areas grows exponentially. The Northern Illinois Planning Commission discovered Chicago's population increased four percent, while their metropolitan area grew more than 46 percent spatially during the 1980's. San Diego, California also experienced an increase in their metropolitan land consumption. Between 1980 and 1990, the City grew by 644,000 people and added 79 square miles to their metropolitan area (Census, 1994). Not only are people moving out to the suburbs, but more land is required due to density regulations, leading to rapid consumption and further decentralization.

**Population Shifts**

A major transfer in urban structure is occurring in the United States, primarily due to industry and population changes.

**Table 1. Regional Distribution of U.S. Metropolitan Population, 1950-2000**

| Census Region | 1950 | 1960 | 1970 | 1980 | 1990* | 2000 |
|---|---|---|---|---|---|---|
| Northeast | 34% | 31% | 29% | 26% | 22% | 19% |
| Midwest | 29% | 28% | 28% | 27% | 25% | 23% |
| South | 23% | 24% | 25% | 28% | 32% | 35% |
| West | 14% | 17% | 19% | 21% | 22% | 22% |

Source: Census Bureau

The trend from 1950 to 2000 reveals a steady decrease for metropolitan areas in the Northeast and the Midwest, while the South and West are noticing consistent increases in their metropolitan areas (Table 1). The Northeast and Midwest declined from 63 percent of the metropolitan population share to 45 percent between 1950 and 1996. The South and West regions grew from less than 40 percent share to 55 percent (Table1).

Not only are people moving in our country in the larger context from region to region, but a tremendous amount of the population is shifting from cities to suburban locations. Table 2 below illustrates the percent of suburban and city dwellers from 1960 to 1990. The table also includes income percentages for the same population.

**Table 2. Share of Metropolitan Population and Income in Cities and Suburbs**

| | Population % | | Income % | |
|---|---|---|---|---|
| Decade | Cities | Suburbs | Cities | Suburbs |
| 1960 | 44 | 56 | 45 | 55 |
| 1970 | 40 | 59 | 39 | 61 |
| 1980 | 36 | 64 | 33 | 67 |
| 1990 | 34 | 65 | 30 | 70 |

Source: US Department of Commerce, Census Bureau

In 1960 only a 10 percent difference for population and income existed between cities and suburbs, and more significantly, it was close to a 50 percent split. In 1990 the differential between cities and suburbs increased to 30 percent for the population and a 40 percent for income. The latter of the two percentages indicates the high wage employees live in the suburbs. The table reveals a steady trend over thirty years long with a 16 percent change in the population moving from the cities to the suburbs. A more striking number is calculated for income, with a 27 percent change between suburban and city residents. The major reasons for the shifting dynamics of population in our country will be explored in the next section. It is important to note that while suburbanization appears to be gaining momentum, regional shifts across our country are occurring as well; more than likely as a result of similar issues.

## Reasons for Suburbanization

Associating suburbanization with a single force is not possible; rather it is a combination of technology, social, and economic forces. (Leinberger & Dunphy, 1993). By examining all three forces, an understanding for their interconnected impact resulting in new roles for downtown is apparent.

### Technology Factors

As already addressed through the construction of railroads, industrial technology bestowed autonomy to the common citizen who could afford railroad tickets and later, automobiles, thereby freeing themselves of public transportation. As the reliance on public transportation passed, land development rapidly occurred. One program which greatly contributes to the suburbanization of America is the federally funded highway system. The highway system, paid for by taxes and significant subsidies from the federal government, permits easy access from central cities to suburban properties. With rapid

independent transportation provided by the automobile, anyone who could afford to move from the central city, fled to seek a different lifestyle.

Another major technological advancement which is currently impacting employment trends across the country is the telecommunications industry. Leinburger and Dunphy (1993) describe the impact which telecommunications has on the employment market, "Postindustrial businesses tend to create jobs in research and development, marketing, and distribution, as well as management, professional services, and finance. While manufacturing is still an important part of our economy, accounting for approximately 25 percent of the gross domestic product (the same amount it represented in 1950), it now accounts for only 15 percent of the workforce (compared with 45 percent in 1950)" (p. 1). This statement makes it clear the employment market is shifting from urban manufacturing and most likely towards suburban technology companies.

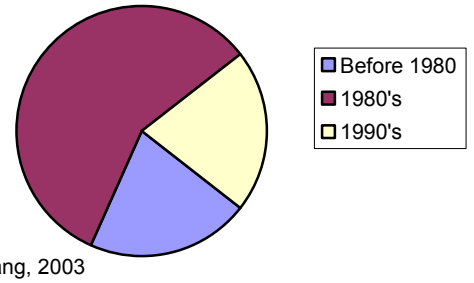
The telecommunication industry is also revolutionizing the work place via the internet. Electronic file sharing permits people to operate satellite offices in suburbs, closer to their employees, at a much cheaper rate, rather than renting office space in a downtown center. Also, hiring employees on a contractual or telecommunication basis lessens the need to expand office requirements in an expensive downtown market, and permits the new employee to work in a suburban office or home.
However, the U.S. Department of Transportation forecasted telecommuting employees to skyrocket with the advent of personal computers, rather the numbers increased only slightly. Bradley, Berens, and McCarthy (1993) found that between 1980 and 1990, employed people working from home rose by 1 million although it only equates to 3 percent of the total work force telecommuting. They believe the forecasters did not take into consideration how much people enjoy the stimulation of downtown and interacting with others in an office environment.

The impact telecommunication has on the location of office space is significant. Property values in suburban areas are much cheaper than urban cores and technology developments provided a vehicle for office uses to vacate the downtown core. Bradley, et al. (1993) found office rents in suburban settings to be roughly $1.50 per square foot less than urban office space. Suburban office renters frequently do not pay parking costs,

pay less in taxes, and are closer to their employees, therefore making a suburban move for a company a financially sound business decision.

The suburban benefits and technological advancements shifted the office market from the CBD across the nation. Lang (2000) quantifies the suburban flight, "In 1979, 74 percent of office space was found in central cities, and only 26 percent was found in the suburbs. By 1999, central city share of office space dropped to 58 percent while the suburban share grew to 42 percent. If we remove Manhattan from the central city totals, the office space gap between cities and suburbs closes to near parity" (p. 3). The suburban shift in office markets parallels the telecommunication advancements in business practices. Figure 1 below illustrates the building timeline of suburban office construction. Only 21% of the suburban office market construction occurred before 1980, while the 1980s and 1990s combined for the remaining 79 percent.

**Figure 1: 1999 Suburban Office Space Inventory**




Source: Lang, 2003

The practical reasoning for suburban office moves from the CBD worked for Chrysler as they moved their corporate headquarters and its two million square foot R&D center to Auburn Hills, Michigan, 25 miles away from Detroit. This location is five miles further out than the city where most of the suburban office development located in the 1980's. Chrysler considered the added costs of locating their office downtown, and a suburban move proved to be a value saving opportunity.

Technological advancements created an abundance of opportunities for businesses and people; however, the downtowns across our country suffered. By adapting to technology and the businesses that use it, downtowns can redirect market forces back to the urban center.

**Social Factors**

Downtowns face numerous social problems on a daily basis, ranging from poverty, homelessness, lack of employment, and crime, all influence suburbanization to some degree and contribute to declining downtown activity. Many of these social forces cause middle class families to leave downtown explains Leinberger and Dunphy (1993), "The social problems of the American central city have certainly helped drive employment into the suburbs over the last two decades, which in turn has encouraged further movement of the middle class out of the central city" (p. 1).

The flight of the middle class from the city often causes repercussions not directly visible to the downtown. When a portion of a population moves from the downtown, as Pack (2002) points out, the city experiences a declining tax base. Many important and crucial programs seek funding through municipal budget allocations. With lower income families occupying the downtowns, tax bases erode while a large portion of tax supported program consumers represent the population downtown. Essentially, funneling money toward social programs causes the city to fall short of other responsibilities, such as public infrastructure.

Bradley, Berens, and McCarthy (1993) further elaborate on the social concerns for downtown, "Children who cannot be adequately educated or cared for will cripple the capacity of cities to improve existing conditions. In 1991, an estimated 36 million people were living in poverty, about 42 percent of them in the center cities" (p. 3). These numbers depict how severe the problem is for people living in cities and the cities trying to offer the support these people need with a limited taxable base. By reinventing the central city to cater towards taxable enterprises, social concerns can receive more attention with a higher tax base remaining in the downtown.

**Economic Factors**

The suburbanization experienced due to economic factors typically is not as visible as technological and social factors, although the results can be. A significant issue for the many low-income families living in downtowns, as discussed above, is locating employment which pays enough to better their financial situation. When the middle class left the downtown with employment following, all that remains are service-based jobs such as, hotel staff, maintenance personnel, and food services. This issue raises the concern of imbalance between the location of jobs for low-income families and their

budget allocated for housing. Leinberger and Dunphy (1993) discuss the thinning effect of employment opportunities for low-income individuals, and accessing jobs outside the downtown, "The movement of 80 to 100 percent of all new jobs over the last two decades to the inner suburbs has typically created a difficult commute for the inner-city low-income wage earner…" (p. 4). The effects of job quality and location are creating a working class poor.

Another group of people which experience economic struggles due to suburbanization are single parent households. In 1991, Bradley, Berens, and McCarthy (1993) found that married couple households earned a median income of $41,260 while single parent households made $13,092 (less than 30 percent). This disparity of incomes forces single parents to locate to either densely populated urban centers, or more likely, residential communities outside the city, closer to work in older rental housing stock.

All of the reasons for suburbanization, technology, social factors, and economics have an impact on the central city. The current objective is not to compete with the trend of suburbanization by producing a similar product in central cities rather, reinvent downtown to be a place which offers unique experiences. The critical concept a community must comprehend to accomplish this task is to subside the opportunistic greenfield wave of development and place their efforts towards identifying what works for their downtown market.

## REDEVELOPMENT OF THE CENTRAL BUSINESS DISTRICT

Due to the effects experienced by the decentralization of economies retreating to the urban fringe and further out to suburban locations, central business districts across the country are currently seeking methods to redevelop and attract people back to the urban center. Many medium to large cities currently represent the "corporate center" with skyscrapers and white collared employees occupying the downtown during business hours (Robertson, 1995). A problem associated with downtown being primarily a location for business is the limited hours of people utilizing the local markets, often leaving the streets empty at night. Jane Jacobs (1961) succinctly commented on this issue, "A central business district that lives up to its name and is truly described by it is a dud" (p. 165). Since the mid 1990s, the majority of cities involved in downtown redevelopment seek to make their urban center a multipurpose place, not just to accommodate the daily business employees. This section of the paper examines the current methods of redevelopment and discusses which methods provide the most successful approach to revitalizing the central city.

Based on a review of current redevelopment trends, the majority of projects follow a place-based model either concentrating on infrastructure strategies or consumer strategies. Certainly overlap is apparent considering sense of place is not present without people, while people are not attracted without the establishment of a sense of place. When examining the two methods, infrastructure strategies are the more traditional, with the "build it and they will come" attitude, while consumer strategies are more recent with an emphasis on developing specific market segments catered to the desires of potential consumers. This section of the paper reviews the two popular strategies of place-based CBD redevelopment efforts, infrastructure strategies and consumer strategies.

### Infrastructure Strategies

Infrastructure strategies usually identify the success of a redevelopment effort with physical improvements such as the construction of a museum, or a residential property. Currently this approach relies on shifting the opinion of downtown from being the entire self sustaining community to the multifaceted center says Palma (1992, p. 3), "More emphasis [is] placed on downtowns as mixed-use centers that include cultural events, city and county government facilities, family entertainment and outing activities

and residential areas, in addition to retail and office facilities." Review of the infrastructure redevelopment strategies include retail, residential, and social efforts, all of which contribute significantly towards making the downtown experience unique.

**Retail**

Since the 1950s cities continuously have struggled to fight the powerful draw suburban malls have on the middle class retail market. In an effort to compete, proponents of downtown retail utilize five redevelopment strategies for retail, pedestrian malls, festival market places, indoor shopping centers, and mixed-use centers. (Robertson, 1997). Mathis DeVito (1980), a former president of the well-established Rouse Development Company is a firm believer in infrastructure redevelopment efforts, particularly those revolving around retail. He states, "the essential glue of the city, the fuel that will truly fire the renaissance…is the strong return of retailing to the downtown. Retailing has a life and vigor night and day, seven days a week. It has universal appeal. Everyone shops-executives, workers, students, tourist. Retailing relates to every other function of the city. It stimulates and strengthens other businesses such as banking, accounting, publishing, or insurance. It provides a broad job base…" (p. 180). Robertson explores DeVito's strong sentiment for retail redevelopment being the catalyst for downtown rejuvenation by reviewing four types of retail projects in comparison to the successful suburban mall.

The first shopping design Robertson evaluates is the pedestrian mall. The pedestrian mall began to take form in downtowns across the country in 1960, with the construction of over 200 to date. These retailing sectors consist of a few blocks of mostly exclusive pedestrian access. The design concept took off and received with great enthusiasm until the 1990s. Robertson (1997) points out the pedestrian mall is not a bad concept, rather for it to work properly one of two key elements must be present, "After more than three decades of implementation, it has become clear the successful pedestrian malls need to be either in close proximity to the office/financial core in large cities or in university towns possessing high levels of pedestrian traffic" (p. 383). As Robertson comments, the pedestrian mall requires a dense consumer market adjacent to the site or failure is likely.

A second retail redevelopment strategy Robertson reviews is festival markets. These spaces typically consume industrial buildings, warehouses, or railroad stations, which requires extensive adaptive reuse work, but offers a truly unique shopping experience. As Robertson (1997) describes, the festival market took shape in San Francisco in 1964 with the conversion of an old chocolate factory at the popular tourist destination, Fisherman's Warf. It now houses specialty shops, restaurants, local craft vendors, and entertainment space. Robertson (1997) places warning towards constructing festival markets, "Prerequisites for success include a large regional population base from which to draw visitors, a historical waterfront, warehouse, and/or industrial district within close walking distance of the downtown core, and an already strong tourist base. Festival markets require a high volume of visitors because expenditures per visitor are usually lower than for conventional shopping malls" (p. 391). The festival market provides a truly unique retail experience; however, not all cities have the topographical advantages of a waterfront or warehouse district in close proximity to consumers. Site selection is critical when determining the festival market as a potential anchor for revitalization.

The downtown indoor shopping center is the next closest retail structure in comparison to the suburban mall. The only physical difference is the vertical space requirements opposed to the horizontal space consumption. Major retailers are more willing to locate in the downtown indoor shopping center because calculating the potential market is easier and consistent. Two major draw backs do exist, downtown sites of this scale are often costly to acquire and redevelop, and accommodating personal vehicles is difficult (Robertson, 1997). In considering the downtown indoor shopping center as a redevelopment effort, attention to the market size required to sustain the facility is a significant concern.

The last of the four retail efforts Robertson discusses are mixed-use centers. The concept behind these developments incorporates a captive market to its retail element. Frequently these projects blend office space, hotels, convention centers, transportation hubs, and restaurants into their retail scheme. This model is successful by appreciating the ready market it creates; however, it is important to look beyond the immediate market and draw consumers in from outside the district (Robertson, 1997). Mixed-use centers

are the latest wave in terms of retail redevelopment strategies and have yet to stand the test of time.

Another significant retail project providing vitality in the central city is the farmer's market. These retailing opportunities are usually open air, seasonal, and frequently offer more than food. The economic importance of these markets is significant. They provide prospects to new businesses, keep local and tourist money circulating in the region, and display small enterprises which can grow (Gratz & Mintz, 1998). Most importantly, the markets create a vibrant atmosphere in a contained space. The energy spawned from a market causes a spillover effect into surrounding establishments such as restaurants and retail stores. Cities are also realizing the low cost associated with providing space for markets. Since markets require little municipal funding, any central city can host a market.

It is important to make market-based decisions when implementing a retail plan in order to capitalize fully on vitality. For instance, smaller metropolitan areas may not want to invest in a festival market due to a low captive market; however, the farmer's market can draw crowds on a semi-regular basis and contribute to the livelihood of downtown. For retail to be a self sustaining infrastructure redevelopment approach, significant consideration to the market potential is critical.

**Residential**

Before a center city commences a residential redevelopment project it is crucial to identify the consumers of urban residences. Three primary markets exist; young, childless professionals; single parents; and "empty nesters". All three markets seek the city residential experience for a variety of reasons, and responding to those reasons is vital to sustaining residential revitalization.

While young professionals typically seek urban living for amenities such as night life, market forces direct the single parent to lower rent markets in urban settings and "empty nesters" often look for ease in property maintenance. A primary influence to these three market segments in locating downtown is due to income. Young professionals just starting a career are likely to rent a property before purchasing. Single parents usually have a lower household income to support a family and they face difficulties securing mortgages so the rental market provides opportunities. Many

"empty nesters" are retired and live on fixed incomes. Considering the three market segments all have limited income, the downtown residential market provides opportunities. To provide for people who are limited in their housing choices by income constraints, many programs exist to ensure their living arrangements are provided for and frequently occur simultaneously with the reinvention of a central city.

Federal government departments such as HUD, along with state and municipal housing authorities, offer creative tools to assist developers and families in making housing affordable. One popular means of funding expensive infrastructure projects or downtown residential efforts is through Tax Increment Financing (TIF). When a city establishes a TIF zone, the developer can apply for the amount of money their project can generate in taxes and apply those funds to the cost of construction. After construction is complete, disbursement of taxes carries on as usual. TIF programs are successful because it defrays the building costs of a project which the consumer absorbs. This creative financing scheme works well for the high costs associated with redevelopment of urban properties and projects slated for residential uses.

Another creative financing method for residential redevelopment is tax-exempt bonds. The bonds come in the form of a grant with restrictions such as designating a certain percentage of the project to affordable homes (Colley, 2000). Housing affordability measures are debatable, with the general consensus being a family's gross income less than 70 percent of the region's median household income. Tax-exempt bond programs identify the significance of a balanced neighborhood, by providing affordable housing and allowing for market rate properties. By creating a mixed income neighborhood, the initial public investment in the bond serves a variety of residents, particularly those in need of affordable housing.

The TIF program and tax-exempted bonds assist in facilitating the redevelopment process and permits the selling of the end product at a reasonable price on the market. Not all programs function in an indirect manner. HUD provides a Section 8 Rental Housing Certificate Program to people who qualify for affordable housing. This program directly places a subsidy in the hand of the consumer who then gives the certificate to a participating property manager. The certificate guarantees the federal government will

subsidize up to 30 percent of the rent for the unit. Section 8 Certificate programs help to bridge the gap for people making low wages but can not afford the market rent.

The types of residential developments gaining popularity in downtown cover the range from rental apartments to condominium ownership, affordable units all the way to luxury lofts. In Cleveland, Ohio as Brown and Laumer (1995) note, warehouse conversion to residential use is popular with multiple projects contributing 3,300 units to the CBD by the year 2000. Further, in Dallas, Texas the help of tax abatements and government subsidies assisted with the construction and planning of almost 5,000 units. This is a substantial project considering residential uses were sparse just three years earlier.

Residential development in central cities is a critical step towards reinventing the urban core. Utilizing creative financing can attract "city dwellers" and provide housing opportunities for people who can not afford to live in the suburbs. Most importantly, attracting residents to the central city creates a sense of vitality essential to revitalization.

**Social**

The social amenities which downtown redevelopment efforts target are rather diverse. Simply adding a park offers people a place to interact; indicating the area is full of activity and community involvement. Creating a landscape conducive to social interaction is very important to a successful redevelopment project. People will not invest in a residential project unless necessary shops and entertainment opportunities are present (Burdick & Kawahara, 2002). In many ways, creating the social atmosphere to inspire residential redevelopment is easier than building residential units with a promise of retail or social projects planned for the future. To account for the social amenities required by potential residents, redevelopment plans should encourage social and residential construction in conjunction.

One significant trend in social redevelopment in downtown is the renovation or creation of cultural institutions. Cultural institutions play an integral role in downtowns for three reasons, the first being audiences are attracted to the area where cultural institutions locate (Strom, 2002). Downtowns are the most appropriate location for cultural amenities due to surrounding land uses such as, restaurants, retail, and wealth generating employees to consume cultural amenities.

The second reason for cultural amenities is tourism. Cultural institutions rely heavily on tourists to support the daily operation of facilities; in particular, special exhibits typically attract more people from outside the host city than local residents. For example, the Los Angeles County Museum of Art hosted a Van Gogh exhibit in 1999 and they report that more than 55 percent of the paying audience came from beyond the county (Strom, 2002). The last reason cultural institutions are an important element in redevelopment is corporate sponsorships. Companies frequently donate to institutions in their direct community (Strom). Cultural amenities can benefit from locating in close proximity to major downtown companies by securing funding to support their operation and the downtown employer gains visibility in their market.

Cultural institutions are more successful when visitors have multiple entertainment opportunities nearby, when visitors out number the local residents attending exhibits, and companies in the area contribute donations. For the above three reasons, cultural institutions can play an integral role in the revitalizing the central city.

Entertainment centers are another popular trend to reinvent the central city with social amenities. Two of the most frequently constructed amenities are Family Entertainment Centers (FECs) and Urban Entertainment Centers (UECs). The FECs and UECs are different concepts than the traditional amusement park. Interactive video games with cutting-edge technology and traditional games fill large open spaces, often warehouse conversions. The most noticeable difference between FECs/UECs and amusement parks is the scale. Amusement parks average 35 acres, while FECs average less than an acre (Hunter & Bleinberger, 1996).

The FEC is a logical redevelopment starter project considering the amount of social stimulus it provides the local market, along with bringing regional tourist to the city (table 3).

**Table 3. Distance attendees live from FECs**

| | |
|---|---|
| 0 to 5 miles | 30.9% |
| 5 to 10 miles | 26.2% |
| 10 to 15 miles | 9.2% |
| 15 to 20 miles | 5.8% |
| more than 20 miles | 27.8% |

Source: IAAPA

FECs draw more than 50 percent of their market from the immediate market of within 10 miles. They also draw an important quarter of their business from regional tourist traveling over 20 miles. Not only do FECs retain money in the local market and provide social activities downtown, it also draws people to an area.

The sister development type to FECs are Urban Entertainment Centers (UECs). The UEC is very similar to the FEC, with the difference primarily being in the programming for night-time entertainment. UECs typically locate in medium to large size cities and reuse warehouse or industrial space. The vastness these buildings provide accommodates the numerous bulky interactive electronic games, traditional billiards hall, dance club space, and multiple restaurants included in UECs. The UECs are essentially the one-stop-shop for night-time entertainment in downtowns. As Hunter and Bleinberger (1997) state, UECs can serve as the catalyst for redevelopment projects, "Entertainment companies view UECs as an effective tool for penetrating new and concentrated markets. As entertainment products increase in number and require clustering with other attractions to achieve profitable attendance levels, a UEC can be the best location for new entertainment zones" (p. 11).

Redevelopment efforts which begin with a social function have a self-sustaining quality since people will travel to participate in a cultural experience or to recreate with their family. From the previous examples, social amenities located in downtowns stimulate tourism and can potentially spur retail and other development activities.

When examining methods to reinvent central cities, it is common to find one market apprehensive towards initiating an investment without the guarantee of other markets to follow in support. Burdick and Kawahara (2002) make this clear when giving advice in a revitalization article, stating that "Retail and entertainment businesses are not interested in locating downtown unless residents are there. Residents are reluctant to commit to a high-priced condominium until vital retail shops and restaurants abound" (p. 9). The next portion of the paper reviews consumer strategies to reinvent central cities and takes into account the need to have multiple markets present to sustain a redevelopment effort.

## Consumer Strategies

Consumer-based strategies made popular by the theories of Michael Porter and Richard Florida depict the successful CBD redevelopment effort as identifying the existing market and the potential demand for space, and ultimately catering to a new downtown clientele. Both Porter and Florida place particular emphasis on analyzing the market prior to attracting businesses or drafting a downtown master plan.

It was not until the mid-1990s that the economic developer learned of another means to stimulate change than by the typical "build it and they will come" attraction method. Richard Florida (2003) acknowledges the traditional tools, "Generally speaking, the conventional wisdom in my field of regional development has been that companies, firms, and industries drive regional innovation and growth, and thus an almost exclusive focus in the literature on the location and, more recently, the clustering of firms and industries" (p. 3). With Michael Porter's work, *New Strategies for Inner-City Economic Development* and Richard Florida's *The Creative Class*, the two authors reveal an innovative perspective on redevelopment for downtown, consumer-based initiatives. The new approach Porter and Florida bring to the redevelopment arena serve as an option to cities with shrinking CBDs and provide insight as to how cities can reinvent themselves.

**Rise of the Creative Class**

Through his interviews and articles, Florida defines the creative class as being people who power regional economies by creating meaningful new forms of technology, art, and business. The jobs in the creative class range from the super-creative scientists, poets, designers, university professors, to the creative, high-tech, financial, and legal professionals. Currently, Florida calculates the creative class to include 38.3 million Americans, almost 30 percent of the labor force, whereas in 1980 they made up less than 20 percent. Further and most important to cities, Florida's research by constructing a series of indexes (Bohemian, Creativity, Gay, and High-tech) found that highly educated people were attracted to places which are inclusive and diverse (Florida, 2002).

Richard Florida (2003, p. 8) provides insightful trends which describe the geography of the creative class.

- The creative class is converging on "creative centers", much preferred over the typical corporate communities in the suburbs.

- Creative centers display the most economic vitality with high concentrations of creative people, and where innovative and high-tech industries are growing.
- Creative centers are thriving due to creative people attracted to an area and starting creative industries. Creative centers are not supported by traditional economic means, transportation and natural resources, nor are they thriving due to significant government incentives.
- The creative class is moving to cities to validate their creativity with other like minded people.

Numerous cities view the creative class as untapped economic development potential. Across the country cities are doing what they can to promote their regions as places where creativity and culture thrive. In particular, cities make attempts to follow the three "T's" that Florida places at the root of all creative class destinations--technology, talent, and tolerance. Most recently, Cincinnati drafted a 42-page Creativity City Plan, designed to attract the creative class to its city with emphasis on a bus line which connects cultural institutions, night-life establishments, and inner-ring neighborhoods along with a $1.3 million dollar greenway extending from downtown to the airport (Malanga, 2004). Efforts such as Cincinnati's to provide infrastructure improvements go beyond the typical infrastructure "build it and they will come" concept. The city began the project with a direct attempt to be more marketable to creative people, ultimately instituting a consumer strategy towards place development.

Malanga is a recent critic of Florida's research indicating the economies studied to do not perform over time; longevity is yet to be determined. The majority of data utilized stems from the 1990 and decennial 2000 census so it does not represent industries after the internet bubble burst (Malanga, 2004). Taking these critiques into consideration, the creative class still commands attention because young, creative household shifts towards cities is a reality as witnessed in the City of Roanoke case study.

**Inner-City Competitiveness**

By juxtaposing Florida's creative class theory with Michael Porter's inner city economic development literature, the two authors reveal similar theories to reinvent central cities. One aspect of economic development theory the two agree upon is

diminishing the use of government incentives for new businesses. Porter (1997) makes this clear, "Our strategy begins with the premise that a sustainable economic base can be created in inner-cities only as it has been elsewhere: through private, for-profit initiatives, and investments based on economic self-interest and genuine competitive advantage instead of artificial inducements, government mandates, or charity" (p. 12). Florida (2003) addresses the same issue of government incentives. "According to this conventional view, the economic importance of a place is tied to the efficiency with which one can make things and do business. Governments employ this theory when they use tax breaks and highway construction to attract business. But these cost-related factors are no longer as crucial to success" (p. 6). Neither Porter nor Florida feel government incentives are beneficial to the new downtown business. Porter believes the incentives detract from the overall success of the region because giving incentives to a narrow scope in the region limits the success of other businesses. Florida disagrees with government incentives for a different reason, work force retention. Governments offering funds to businesses should redirect it towards the amenities the employees seek within a community, thereby sustaining a productive work force opposed to creating a company dependant on subsidies.

Another point the two theorists agree upon is clustering to build success. Florida discusses the lifestyle of the people within the creative class desiring to cluster themselves with other creative class members which achieves a deep talent pool. Porter also discusses clustering, but in a different light. He addresses the importance of clustering in terms of heightened success due to physical location, whereas Florida's theory follows a sociological framework.

Porter's theory moves beyond the consumer-based strategy of advertising, which Florida's is heavily rooted in, to discuss the inner-city's competitive advantage. There are four parts which compose the competitive advantage, strategic location, proximity to regional clusters, unmet local demand, and human resources (Porter, 1997). Even as technology changes, there are benefits to locating downtown and having a central place to conduct business with firms on the periphery. Cities can also select from a captive employment market while a demand exists for downtown services.

Both Michael Porter and Richard Florida consider inner-city development very important issues confronting the next stage of our economy. Perhaps the two theorists view the role of the inner-city differently in that Porter believes the city always possessed many items critical to successful development while Florida attempts to attract a new urban dweller. Although the path to their economic development plans may vary, they both express importance in analyzing the market then, advertising to the potential consumer. Economic developers are acknowledging both of their theories and matching strategies to their particular city's need. Conducting an evaluation of the two theories could prove to be a valuable exercise for a city such as Roanoke, Virginia from the perspective of consumer strategies. The Southwestern portion of Virginia has 40,000 college students which is a captive market of soon to be young professionals, one of the three major market segments moving to downtown. The next section of this paper explores Roanoke, Virginia as a case study for suburbanization and potential revitalization efforts in a central city.

# CASE STUDY-ROANOKE, VIRGINIA

Roanoke, Virginia is located in the southwest portion of the state in the Blue Ridge Mountains. As of the 2000 Census, the city has a population of 95,000 surrounded by a MSA of 236,000 people. The three largest employment sectors are services (38.8%), retail trade (13.9%), and manufacturing (11.8%). Carilion Health System is the region's largest employer (9,724), followed by Advance Auto Parts (1,940). The state's largest University, Virginia Tech, is 45 minutes away while there are 18 other colleges and universities within an hour's drive. Roanoke is in close proximity to three major interstates, (81, 77, and 64) and has a regional airport which provides non-stop flights to nine major cities. Reviewing household and office employment data reveals trends of suburbanization confronting the City. Much of the data reflects a downtown in need of revitalization, while some aspects show a promising central city with foundations necessary to support redevelopment of the CBD.

## Housing Demand Analysis

The City of Roanoke is projected to decline slightly as shown in Table 4 between 2000-2010 and 2010-2020. An increase of 240 households is projected for 2000-2010 while a decrease of 340 households is projected for 2010-2020. The owner occupied properties will see a consistent rise in demand of 335 units (2000-2010) and 260 units (2010-2020), totaling almost 600 additional units in the next twenty years.

**Table 4. Total Households by Tenure, Roanoke 2000-2010**

| | 2000 | 2010 | 2020 | 2000 to 2010 % Change | 2010 to 2020 % Change |
|---|---|---|---|---|---|
| Total | 42,003 | 42,243 | 41,900 | 0.6% | -0.8% |
| Owner | 23,632 | 23,969 | 24,228 | 1.4% | 1.1% |
| Renter | 18,371 | 18,275 | 17,672 | -0.5% | -3.3% |

Source: Census Bureau and VCHR Projections

Nearly one-in-three homeowners and half of all renters in the metropolitan area will live in Roanoke by 2020 (Table 5). The owner share is anticipated to decline from 35.1% in 2000 to 29.3% in 2020, and the renter share is expected to decline from 59.3% in 2000 to 50.6% in 2020.

**Table 5. Roanoke as a Percent of MSA 2000-2020**

| | 2000 | 2010 | 2020 | 2000 to 2010 % Change | 2010 to 2020 % Change |
|---|---|---|---|---|---|
| Total | 42.7% | 38.5% | 35.7% | -9.8% | -7.4% |
| Owner | 35.1% | 31.3% | 29.3% | -10.9% | -6.1% |
| Renter | 59.3% | 55.5% | 50.6% | -6.5% | -8.8% |

Source: Census Bureau and VCHR Projections

To better understand Roanoke's declining share of housing demand, examination of households by age, type, and tenure indicates the groups of people leaving the city. Since most new household formation occurs among persons below the age of 35, the number of households in this age category in any given census primarily represents new households that had to be absorbed in the housing market over the past ten years.

The 2000 census reported 10,307households under age 35 in the City of Roanoke. The household category under the age of 35 is projected to increase slightly to 10,328 households by 2020 (Table 6). The older adult population, age 55 and over, presents an increase in both other families (related non-married families) and non-families. This increase is attributable to a cohort effect, whereby the baby-boomer generation ages and their cohort progresses through life. Projected total losses in households for the city are limited to husband and wife families along with other families.

**Table 6. Change of Households in Roanoke by Age, Type, and Tenure 2000-2020**

| | total households | | | | owner | | | |
|---|---|---|---|---|---|---|---|---|
| | HW | OF | NF | Total | HW | OF | NF | Total |
| 15 to 24 years | -115 | -238 | -299 | -652 | -35 | -16 | -21 | -72 |
| 25 to 34 years | 249 | 168 | 255 | 673 | 138 | 28 | 65 | 231 |
| 35 to 44 years | -925 | -646 | -765 | -2,336 | -719 | -267 | -299 | -1,284 |
| 45 to 54 years | -1,270 | -527 | -1,187 | -2,985 | -1,089 | -296 | -583 | -1,967 |
| 55 to 64 years | 751 | 263 | 769 | 1,783 | 676 | 167 | 393 | 1,237 |
| 65 to 74 years | 1,020 | 306 | 1,055 | 2,381 | 943 | 202 | 576 | 1,721 |
| 75 and older | 268 | 135 | 630 | 1,033 | 240 | 101 | 389 | 730 |
| Total | -22 | -538 | 457 | -103 | 155 | -80 | 521 | 596 |

Source: Census Bureau and VCHR projections

The MSA had 29,555 households under the age of 35 in 2000 (Table 7). Further, the MSA has more husband wife owners (62%) than the City (48%). A substantial increase of 1,606 new households is projected for 2020 (Table 8). Also significant, 50% of the total household's in the MSA are husband-wife families while the City is only comprised of 37% husband-wife families.

**Table 7. Households in the MSA by Age, Type and Tenure 2000**

| | total | | | owner | | |
|---|---|---|---|---|---|---|
| | HW | OF | NF | HW | OF | NF |
| 15 to 24 years | 860 | 1,310 | 2,263 | 239 | 119 | 181 |
| 25 to 34 years | 7,236 | 2,943 | 4,943 | 4,737 | 689 | 1,430 |
| 35 to 44 years | 11,394 | 4,259 | 4,969 | 9,785 | 2,186 | 2,252 |
| 45 to 54 years | 11,970 | 2,696 | 5,767 | 10,891 | 1,767 | 3,337 |
| 55 to 64 years | 7,897 | 1,542 | 4,442 | 7,439 | 1,141 | 2,802 |
| 65 to 74 years | 6,143 | 1,230 | 4,569 | 5,756 | 903 | 2,950 |
| 75 and older | 3,841 | 1,285 | 6,784 | 3,430 | 1,034 | 4,307 |
| Total | 49,341 | 15,265 | 33,737 | 42,277 | 7,839 | 17,259 |

Source: Census Bureau

**Table 8. Households in the MSA by Age, Type, and Tenure 2020**

| | total | | | owner | | |
|---|---|---|---|---|---|---|
| | HW | OF | NF | HW | OF | NF |
| 15 to 24 years | 979 | 1,491 | 2,577 | 272 | 136 | 206 |
| 25 to 34 years | 7,711 | 3,136 | 5,267 | 5,047 | 734 | 1,524 |
| 35 to 44 years | 7,382 | 2,760 | 3,219 | 6,339 | 1,416 | 1,459 |
| 45 to 54 years | 12,043 | 2,712 | 5,802 | 10,958 | 1,778 | 3,357 |
| 55 to 64 years | 14,119 | 2,757 | 7,942 | 13,300 | 2,040 | 5,010 |
| 65 to 74 years | 9,751 | 1,953 | 7,253 | 9,137 | 1,433 | 4,683 |
| 75 and older | 6,011 | 2,010 | 10,615 | 5,367 | 1,618 | 6,739 |
| Total | 57,995 | 16,819 | 42,675 | 50,420 | 9,155 | 22,978 |

Source: Census Bureau and VCHR projections

The household demand projections for the City of Roanoke and the MSA illustrate that husband-wife families prefer to live outside the city. The majority of household growth for the next twenty years will occur in the MSA while the younger households contribute largely to the growth. The City should look to develop housing opportunities and create jobs for households under the age of 35 due to the increase of household creation and the student market maturing into young professionals. Offering a housing solution and employment for these people could prove to reverse the outward migration to the MSA.

**Methodology**

The household projections calculated at the Virginia Center for Housing Research utilize data from the Census Bureau and the Virginia Economic Commission (VEC). Calculating the projections begins with obtaining Census data by householder age, type, and tenure along with VEC population projections to 2020. To derive headship rates for each age category and household type, divide the total population for each age category by the respective age/household type. Fitting the headship rate against a growth curve yields projected household demand.

## Office Employment Analysis

The office market in Roanoke exhibits many of the national trends of suburbanization. Table 10 shows the concentration of office building development in all three of the City's markets. The majority of office buildings constructed prior to 1980 is located in the central business district. Suburbanization trends began to influence the market in the 1980s with 16 buildings constructed in the suburbs, while the CBD only gained six. Since the 1980s the suburban market out paced the CBD by building 29 additional structures.

**Table 9. Number of Office Buildings Constructed**

| | CBD | North Suburban | South Suburban |
|---|---|---|---|
| Before 1980 | 15 | 4 | 10 |
| 1980s | 6 | 6 | 10 |
| 1990-present | 2 | 6 | 7 |

Source: Waldvogel, Poe & Cronk, Waldvogel Commercial Properties, Inc.

*Note: Survey only includes buildings 10,000 sf or greater

The suburban explosion of office construction can be deceiving because CBD office projects usually have more floors, equating to more square footage, whereas suburban structures often have less density. To clearly illustrate the suburban shift, square footage of construction by date demonstrates the CBD dominance prior to the 1980s (Table 11).

**Table 10. Square Footage of Office Space Constructed by Decade**

| | CBD | North Suburban | South Suburban |
|---|---|---|---|
| Before 1960 | 284,434 | 0 | 35,598 |
| 1960s | 58,000 | 52,462 | 0 |
| 1970s | 532,538 | 86,000 | 352,696 |
| 1980s | 386,504 | 305,043 | 450,879 |
| 1990s | 218,503 | 255,994 | 213,027 |
| 2000s | 20,000 | 25,515 | 135,500 |
| Total | 1,499,979 | 725,014 | 1,187,700 |

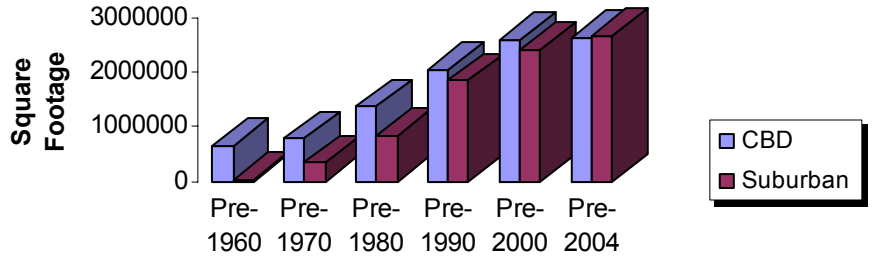
Source: Waldvogel, Poe & Cronk, Waldvogel Commercial Properties, Inc.

*Note: Survey only includes buildings 10,000 sf or greater

Before the 1980s the CBD built 62 percent of the office market and after the 1980s the suburbs built 66 percent of the market. To date, the CBD has less than half of the square footage of the total market (44%) (Figure 2). It is important to note, many buildings on the office surveys from Waldvogel, Poe & Cronk and Hall Associates list the building

rehabilitation date as the year structure built when the structure is likely twenty or more years old.

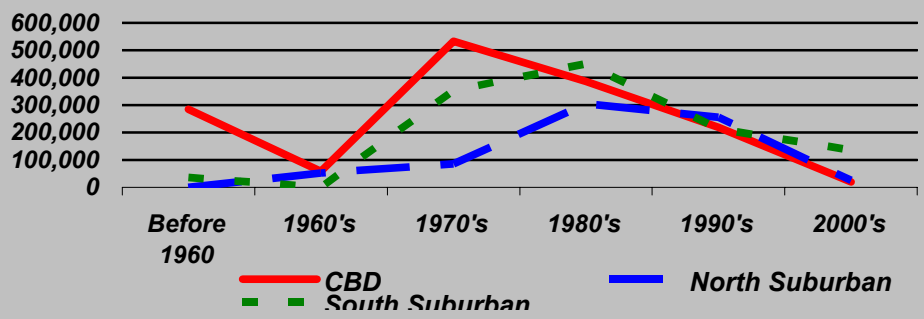
**Figure 2. CBD Office Market vs. Suburban Office Market**




Source: Waldvogel, Poe & Cronk, Waldvogel Commercial Properties, Inc. and Hall Associates

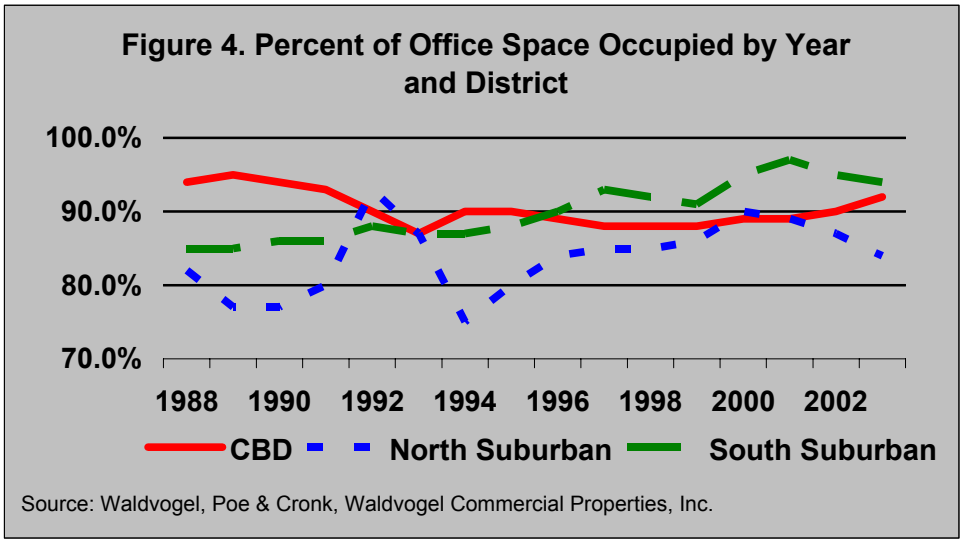
Figure 3 illustrates the suburban shift in square footage constructed in Roanoke. The CBD building trend increases and decreases earlier than the suburban trend displaying a shift in demand to the suburbs.

**Figure 3. Square Footage of Office Space by Year and District**




Source: Hall and Associates, 2004

The location of office construction shows real estate development trends while occupancy rates reflect consumption of the space built. Two markets in Roanoke, the CBD and South Suburban, have relatively consistent occupancy rates and they are on pace with national averages (Figure 4). Current national trends are 12 percent vacancy for CBD properties and 17 percent for suburban properties. Roanoke's CBD averages 90 percent occupancy as it comes off a recession and the suburban markets do not go below 84 percent occupancy. As a benchmark, the strongest office market in the country is Washington, DC at 94 percent occupancy (Cushman and Wakefield, 2004).




Since 1996 the South Suburban market has not gone below 90 percent occupancy, and the CBD market in only the past two years had occupancy of 90 percent or greater. This indicates a trend that the South Suburban market will continue to maintain its market share as will the CBD although the CBD appears to have lost part of its share its suburban competitors.

In conducting office space projections for the City of Roanoke, the high occupancy rates may not reflect the true market consumption. The 2003 Office market surveys report 2,605,974 square feet of office space in the CBD including owner occupied space. Considering the downtown employment is projected to be 5,476 in 2010 at highest, with the minimum square feet of office space consumed calculated to be 1,505,923 (Table 12), this equates to a surplus of 1,100,0516 square feet. The significant surplus in space indicates owner occupied buildings either consume large amounts of space or have high vacancies not reported. Two measures to resolve the surplus are to put more space on the market for lease, or increase employment in the owner occupied properties.

**Table 11. Office Space Projections 2010**

| | Employees | Minimum Square Feet | Surplus Including Owner Occupied | Surplus Excluding Owner Occupied |
|---|---|---|---|---|
| Low | 4,619 | 1,270,358 | 1,335,616 | 255,609 |
| Medium | 5,048 | 1,388,140 | 1,217,834 | 137,827 |
| High | 5,476 | 1,505,923 | 1,100,051 | 20,044 |

Source: Waldvogel, Poe & Cronk and Hall Associates, Waldvogel Commercial Properties, Inc.
VCHR projections

Table 12 also accounts for the office market excluding owner occupied space. In the scenario of removing owner occupied space from the projection, the office supply is closer to the relative demand. However, office employees' work in both owner occupied space and non-owner occupied space. While there is no way to differentiate between the numbers of office employees in either types of space, the table indicates a significant surplus of owner occupied space.

To best comprehend the surplus, historical employment data reveals almost two times as many downtown employees in 1995 (10,700) as reported in 2000(6,400). With the bank mergers in 1995, downtown employment for FIRE decreased dramatically. When projecting office space based on the 1995 employment data, assuming a minimum of 275 square feet per employee and 93 percent of employment in downtown is office, the supply is still greater than the demand. The downtown office market appears to be built for 12,000 employees, and the current market demand is under half that level.

Office employment for the downtown zip code 24011 based on the county business pattern is expected to increase; however, this comes without definitive evidence of the exact growth rate. When reviewing trend data it is difficult to accurately calculate the City's share due to changes made in the classification of industries. Although inconsistencies exist in the data, all sources reflect the City maintaining its share of the MSA's office employment with the currently available space sufficient to absorb a substantial increase in downtown office employment.

The office market serves as a key indicator towards suburbanization trends. If office markets weaken in CBDs, fewer people provide a sense of vitality to the area, and the central city begins to deteriorate by lack of use. Finding creative uses for vacant office space such as residential conversions for young households, can spur redevelopment efforts for an entire block. Capitalizing on existing properties by adjusting the use of office space for the untapped markets, the central city can once again be a place with vitality. The last section of this paper provides recommendations for the city of Roanoke in methods to reinvent their city and draws conclusions based on the data analyzed and the literature reviewed.

**Methodology**

The FIRE (finance, insurance, and real estate) industry largely operates out of office space and serves as a proxy to gauge the office market for a geographic location. To calculate office projections, Clapp (1993) provides a basic method to follow. Obtain employment by sector then estimate the percentage of office workers by industry. Multiplying these two variables derives the projected amount of office workers. An estimate of office space per employee multiplied by the projected office workers provides the minimum space needed to meet the demand.

The above office employment projections calculated at the Virginia Center for Housing Research utilize data from the Census Bureau and North American Industrial Classification System (NAICS). The Census Bureau produces County Business Patterns data which provides the number of employment establishments by zip code. Using the 24011 zip code covering the CBD isolates downtown Roanoke's office employment. Selecting establishments with office employees determined by the NAICS and calculating the percentage of each industry office use allows for accurate projections (VCHR). The County Business Patterns identify the amount of employers by industry in a given zip code. Multiplying the percent office workers per industry by the amount employers in the 24011 zip code by industry calculates total office employment. The total office employment multiplied by the 275 minimum square feet needed per employee yields the total office demand (Clapp, 1993).

To calculate growth rates, the VCHR extrapolated the City's percent share of the MSA office employment over a 31 year period (1969-2000) to derive the low projection of 5.4 percent. The high projection of 25 percent growth is interpretation of recent trend linesfrom County Business Patterns. An average between the two yields the medium projection of 15.2 percent. Considering the discrepancies between data sources, the low, medium, and high projections provide valid estimates based on a variety of data collection techniques by the different agencies.

## CONCLUSION

In order for central cities to sustain themselves, new approaches to land development must occur. Downtowns are no longer the sole provider for office space, retail, residential or entertainment. Larry Ford (2003) clearly states this issue and lends insight towards what successful downtowns should expect, "There is no doubt that the downtown is no longer *the* center of retailing and social life in most large metropolitan areas, but it is often the primary destination for tourists, conventioneers, high-level government and business decision makers, and those seeking cultural experiences and some types of recreation" (p. 1).

The new downtown must find ways to reinvent itself to attract people for a variety experiences which ultimately provide vitality to the urban core. The first step is to re-attract residential. As the household data for Roanoke projects, there are an abundance of young household creations occurring over the next 15 years. Culture, art, entertainment, and a sense of community are some of the items which inspire new markets to relocate downtown. Along with the young households entering the market, developers need to consider single-parent households and "empty nesters". Both of these markets seek living arrangements with little to no maintenance and enjoy close proximity to services. Young people alone can not fill the downtown residential market and methods to attract an older population of experienced workers will prove beneficial.

The Roanoke CBD office market is growing and new high tech employment opportunities are on the horizon. The second step should focus on Michael Porter's Inner City Competitiveness theory by utilizing an anticipated market demand for employment in the bio-medical industry.

Roanoke's largest employer, Carilion Health Systems, is in the process of constructing a research facility in close proximity to downtown. The new Carilion Biomedical Institute is a partnership project between the health company, Virginia Tech and University of Virginia and it will serve as a high tech employer for hundreds of people near downtown. With the positive outlook for office employment and the construction of Carillion's Biomedical Institute, the employment opportunities which help sustain cities are present in Roanoke. With a ready market working within and immediately adjacent to the central city, energy spent attracting those employees will

undoubtedly result in an increased downtown population. Further, expanding on a bio-medical cluster adjacent to downtown is possible considering the resources Carillion is investing.

The third element of reinventing the downtown is creating an amenities package prescribed by Richard Florida's theory. As mentioned earlier, Cincinnati developed an extensive greenway system to lure people back to its downtown. Roanoke recently opened the O. Winston Link Railroad Museum and will be constructing an I-MAX theater in the coming year. The City should continue investigating the amenities which draw the downtown resident then promote them appropriately.

For the City of Roanoke to permit the transition to reinventing their core three recommendations follow. First, consideration towards facilitating the developers' needs is required. One issue to acknowledge when locating properties for redevelopment is the consumption of vertical office towers in the CDB leaving older horizontal space unused and hurdling towards degradation. An aggressive redevelopment program to include demolition will help developers reprogram the under utilized horizontal space surrounding the CBD. Further, it will assist adaptive reuse projects within the CBD. As described earlier, evidence suggests an over supply of office space and with companies preferring to locate in grade-A space, typically the vertical office tower, vacancies increase in the periphery. Roanoke should beware trends which indicate a shrinking CBD and attempt to locate uses for the less dense horizontal spaces.

Second, the City should to allow for flexible conversion of office space to residential or non-office employment opportunities. By drafting new building and zoning codes for the downtown area, adaptive reuse can be more feasible for developers and quickly alters the state of downtown. Lastly, the City should evaluate the downtown master plan (Outlook Roanoke Update) for centrality and connectivity. In order for Roanoke to be successful reinventing the downtown, proximity to amenities, services, and other residents is important. Clustering these downtown land uses and creating cohesion with the adjacent health employment sector generates a sense of vitality, and in turn stimulates an urban community.

One unanticipated finding spawning from discussion of this paper disserves further research, the idea of CBDs shifting. As CBDs once served as the prime location

for one industry, newer industries created on the periphery may cause the delineation of the CBD boundary to either expand or shift to incorporate the new use. The bio-medical industry in Roanoke displays such signs and the potential for further research is valid.

Many of the highlights for reinventing downtown Roanoke coincide with Richard Florida's Creative Class and Michael Porter's Inner-City Competitiveness theories. Roanoke is not an anomaly; many cities are struggling to redefine themselves as a result of suburbanization. It takes numerous people to be introspective and identify what the downtown market can support. There is no doubt the central city is permanently changed; however, through extensive market analysis and combining Richard Florida's and Michael Porter's theories, cities such as Roanoke have unlimited potential to chart their own course towards a new downtown.

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Virginia Employment Commission. www.vaemploy.com

# VITA


## Kevin Ryan Byrd

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## Education

Virginia Polytechnic Institute and State University Blacksburg, VA

**Masters in Urban and Regional Planning,** May 2004
Concentrations: Physical Land Development and Economic Development
**Awards:** *Most Outstanding Graduate Student by Virginia Chapter of APA*
*Virginia Citizens Planning Award for Dedication and Service to the Graduate Program*

Appalachian State University Boone, NC

**Bachelor of Science in Recreation Management,** December 2000
Double Concentration: Recreation and Parks Management and Outdoor Experiential Education
Minor: Community and Regional Planning
**Awards:** *Most Outstanding Program Graduate in Recreation and Parks Management*
*Who's Who Among Students in American Universities and Colleges Recipient*

## Career Experience

May 2003 – Present Virginia Center for Housing Research Blacksburg, VA

**Graduate Research Assistant**
Collect and analyze housing stock and population information using 1990 and 2000 census data, building permits and municipal plans. Forecast residential, retail and office requirements to 2010 using the Center's housing matrix. Successfully wrote proposals bringing two projects to the Center within one month. Co-authored of the Housing Market and Needs Condition Report for Chesterfield County, VA, along with the Affordable Housing Demand Assessment for the City of Richmond, Henrico and Chesterfield counties. Currently researching and drafting a Strategic Redevelopment Housing plan for Chesapeake, VA.

September 2002- May 2003 Virginia Outdoors Foundation Blacksburg, VA

**Conservation Easement Intern**
Collected property data and information needed to assess the significance of parcels for which conservation easements were desired by land owners. Coordinated with local municipalities, county and state agencies to locate parcels of land in need of conservation easements. Assisted in the drafting of easements prior to legal review. Recorded deeds with Clerks of Court Offices. Conducted site visits to evaluate the environmental and aesthetic qualities of the land.

May 2001-August 2002 Elam, Todd, d'Ambrosi L.A. and Urban Planning Cary, NC

**Planner / Studio Coordinator**
Created the Parks, Open Space, and Recreation Master Plan for Benson, NC. Assisted with the adoption process via the Town Council. Assisted with group facilitation of public input towards the plan and conceptual park designs. Assisted in the research, creation and adoption of the Morrisville Town Center Plan where an in-depth inventory was compiled to create a new-urbanism design for their town center. Facilitated public input sessions to identify the fundamental design techniques residents desired. Frequently collaborated with municipalities to assist our clients in the plan approval and permitting processes. Authored numerous proposals for public and private planning work, which included detailed budgeting and site visits. Created a project archive system for the firm and maintained the database, ultimately improving project recall efficiency. Coordinated and distributed all work orders from the partners to the studio staff. Ensured workload was distributed evenly and the studio staff was aware of deadlines. Regularly updated all marketing materials and communicated frequently with municipalities to gain leads in new RFP's.

Summer 2000 & Town of Cary Parks and Recreation Administration Office Cary, NC
Dec. 2000-May2001

**Parks and Greenways Planning Intern**

Directly assisted the principle planner with special projects. Wrote grants (TEA-21) to assist in the purchasing of open space and greenway corridors for the Town of Cary. Acquired $400,000 through the grant writing efforts. Authored Requests for Proposals for four greenway projects comprised of design and construction of over six miles of trails. Performed all proposed greenway and park mapping on Map Info. Professional GIS program. Reformatted and took digital photos for the Parks, Recreation and Cultural Resources web page. Assisted in rewriting the action standards for the department. Assisted with the Aquatic Feasibility Study that involved over 2,000 residents and swim teams.

## Honors

- Gamma Sigma Alpha national academic greek honor fraternity
- Order of Omega national honor fraternity for service, leadership and academics
- Dean's List Recipient Spring 2000 and Fall 2000
- Jaybe Hardy Memorial Scholarship offered through Pi Kappa Phi Fraternity, Spring 1999-Fall 2000. Amount: $1,000.00

## Related Skills

- Extensive: Word, Excel, and PowerPoint
- Experience with Front Page, Dream Weaver and Access
- TOPS® Trained Group Facilitator
- Eligible to sit for AICP Exam in November 2004
- Eligible to sit for the Real Estate Sales Person Exam, 2003-2004
- Arc View GIS
- Map Info. Professional GIS
- Deed recordation and research
- Successful proposal writing
- Public and Private Sector experience
- Well versed in the process of land development
- Digital photography
- Adobe Photo Shop
- All Internet tools

## Membership Organizations

- Urban Land Institute, 2003
- American Planning Association, 2003
- Graduate Urban Affairs and Planning Association, President 2002-2004
- Virginia Tech Graduate School Honor Court, Panelist 2003-2004
- Member of Pi Kappa Phi Fraternity since January 1997
  Elected Offices held: Chapter President, Chaplain, PUSH Chairman, Scholarship Chairman, New Member Educator, Inter-Fraternal Council Delegate 2 years, and Pledge Class President.

## Volunteer Experiences

- YMCA Basketball/Gym Supervisor, Fall/Winter 2001/2002
- YMCA 'We Build People' Fund Raising Campaign, Fall 2001
- Recreation activities for children with disabilities in the Watauga County Public School System, Spring 1999
- Young Life Camp Windy Gap, Weekend Wrangler for the High Ropes Course & Climbing Tower, Fall 1996-Fall 1997