## SUBURBAN NEW URBANIST ENVIRONMENTS: THE RESIDENT EXPERIENCE

# by

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New Urbanists promote development modeled upon neighborhoods that are high-density and mixed-use with connected streets so that residents will drive less and have a strong sense of community. Little is known about whether New Urbanist environments provide the envisioned change in living experience for those who reside there. This study assesses changes in the living experience of residents of a suburban New Urbanist environment located in Eugene, Oregon, relative to their living experience in their previous residential environment. Findings reveal that respondents drive less for some but not all types of trips. There are no significant changes in sense of community. Changes in housing density and land-use mix are found associated with driving behavior change.

Change in the enjoyment of the walking environment is found associated with changes in levels of resident interaction and feelings of sense of community.

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vii

For my extraordinary mother.

# TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION	1
Background	1
Purpose of Study	2
Methodology	3
Findings	4
Importance	5
Structure of Thesis	5
II. LITERATURE REVIEW	6
Suburban Evolution	6
New Urbanist Critique of Suburban Environment	10
New Urbanism: Normative Goals	16
Critique of New Urbanism	19
Limitation of Existing Research	24
III. METHODOLOGY	25
The Study Area	25
Data Collection	30
Limitation of Research	32

	ix
Chapter	Page
Analysis	33
IV. FINDINGS	34
Background	34
Changes in Residential Living Experience	43
Binary Logistic Regression	47
V. DISCUSSION	51
Affordability	51
Diversity	52
Travel Behavior	52
Sense of Community	54
Recommendations	55
Future Research	56
APPENDIX: SURVEY	57
Arlie & Company Cover Letter	58
Researcher Cover Letter No.1	59
Questionnaire	60
Questionnaire Reminder	64
Researcher Cover Letter No.2	65
BIBLIOGRAPHY	66

# LIST OF FIGURES

Figu	are	Page
2.1	Comparison of suburban (left) and New Urbanist (right) street systems	. 18
3.1	Crescent Village Vicinity Map	. 26
3.2	Crescent Village Site Plan	. 29
3.3	Crescent Village Town Center	. 30
4.1	Factors Considered in Decision to Move to Crescent Village	. 40

# LIST OF TABLES

Tabl	e	Page
4.1	Respondent Age	35
4.2	Respondent Ethnicity	35
4.3	Respondent Education	35
4.4	Respondent Employment	36
4.5	Respondent Household Income	36
4.6	Respondent Household Size	36
4.7	Respondent Household Type	37
4.8	Respondent Automobile Ownership	37
4.9	Comparison of Sample Population with Census Data	38
4.10	Characteristics of Respondents' Previous Residences	39
4.11	Neighborhood Characteristics of Crescent Village	41
4.12	Characteristics of Respondents' Crescent Village Residences	42
4.13	Cost of Respondents' Housing in Crescent Village	43
4.14	Population Diversity in Crescent Village	44
4.15	Transportation Choices	45
4.16	Commute to Work	45
4.17	Sense of Community	47
4.18	Binary Logistic Regression: Drive Less	48

#### CHAPTER I

#### INTRODUCTION

### Background

In the early 1800s, American suburbs were a refuge for those wealthy enough to escape their older, inner city neighborhoods. The suburbs gradually evolved into low-density, automobile-dependent, homogenous havens for the middle class. Now a growing movement of New Urbanists is finding fault with modern-day suburbs for failing to provide a range of affordable housing options, fostering ethnic and economic segregation, being automobile dependent and inhospitable to alternative forms of transportation, and lacking an appreciable sense of community.

New Urbanists would have suburbs reconfigured along the lines of small towns with compact (i.e., high-density), mixed-use, pedestrian friendly neighborhood development oriented around a clearly defined center and interspersed with open space and parks. These developments would provide a range of housing types and price levels within walking distance of the activities of daily living and connected to the world at large by public transit. According to New Urbanists, these physical design features would result in affordable, diverse neighborhoods in which residents would enjoy a strong sense of community and be less reliant upon automobiles. Critics suspect that the changes proposed by New Urbanists may actually result in homogenous, upscale enclaves in

which residents may not experience a stronger sense of community relative to traditional suburban development, and may not reduce, and may even increase, their personal automobile use (Day 2003; Harvey, 1997; Holcombe, 2004; Landecker, 1996; Lehrer & Milgrom, 1996; Southworth, 1997; Southworth & Pathasarathy, 1997; Talen, 1999; Thompson-Fawcett, 1996; Southworth, 1997; Winstanley, Thorns, & Perkins, 2003).

Existing research indicates that suburban New Urbanist environments appear to perform better than traditional suburban environments in some respects. For example, residents of these environments have been found to travel fewer vehicle miles, walk and bike more, and have a greater sense of community than their traditional suburban counterparts (Kim & Kaplan, 2004; Lund, 2003; Rodriguez, Khactak, & Evenson, 2006). Contrary to New Urbanist goals, however, these environments have been found to be homogenous, exclusive, middle to upper class enclaves, in which real estate sells at a premium (Eppli & Tu, 1999; Marcuse, 2000; Marshall, 1996; Thompson-Fawcett, 1996). Due to methodological limitations (e.g., cross-section research), existing studies often stop short of revealing whether New Urbanist environments can provide the envisioned change in living experience and behavior for those who reside there.

# Purpose of Study

The purpose of this study is to assess changes in specific aspects of the living experience of residents of a suburban New Urbanist environment relative to their living experience in their previous residential environment, and to identify the factors responsible for any such changes. Specifically, this study will answer two research questions:

- How do specific aspects of the living experience (i.e., perceptions of affordability
  of housing and diversity of population, and travel behavior and sense of
  community) of residents of a suburban New Urbanist environment differ from
  those aspects of their living experience in their previous residential environment?
- What factors (i.e., physical characteristics of the built environment, personal demographics) contribute to any changes in the travel behavior and sense of community of these residents?

### Methodology

Data collection was accomplished using the single-case research design method, an "empirical inquiry that investigates a contemporary phenomenon within its real-life context" (Yin, 2003, p. 13). A self-administered survey was distributed to all residents of Crescent Village, a suburban New Urbanist environment in close proximity (five miles) to the University of Oregon, Eugene, and thus accessible to the researcher. Close-ended and open-ended questions elicited information about the residents' perceptions of the affordability of housing and diversity of population in Crescent Village, and their travel behavior and sense of community while living there. They were also asked their perception of these aspects of their previous residential environment and their experience while living there. In this study, these perceptions were compared, and an attempt was made to identify factors that contributed to any change in the residents' travel behavior and sense of community, including physical characteristics of the built environment and personal demographics. Univariate analysis, mean analysis, and binary logistic

regressions were used in the analysis of the data. A low survey response rate is a limitation of this research.

### Findings

The sample population is predominantly young, white, affluent, well educated, and residing in small childless households. To date, Crescent Village includes only market-rate apartments and town homes. Close to half (48.7 percent) of respondents indicated that the cost of their housing in Crescent Village was more than in their previous neighborhood.

Respondents continue to be strongly reliant on personal automobiles. Seventy-seven percent of respondents, however, currently use alternative forms of transportation (i.e., public transit, walking, or cycling) to go to a restaurant or café, an increase of 64.1 percent relative to their experience in their previous residence (12.8 percent). Changes in housing density and land-use mix were found to be associated with changes in driving behavior. If the housing density in Crescent Village were greater than in the respondent's previous neighborhood, it would be likely that the respondent would drive more. If the land-use mix in Crescent Village were greater than in the respondent's previous neighborhood, it would be likely that the respondent would drive less.

On average, the "sense of community" ratings assigned by all respondents to their living experiences in Crescent Village and in their previous neighborhoods were low and did not vary significantly, indicating they felt a similarly weak sense of community in both locations. Change in the enjoyment of the walking environment was found to be associated with change in levels of resident interaction. If a respondent's enjoyment of

walking in Crescent Village were greater than in his or her previous neighborhood, it was likely that there was an increase in the respondent's interaction with residents of Crescent Village, relative to interaction with residents in his or her previous residential environment.

## Importance

Little is known about whether New Urbanist environments provide the envisioned change in living experience for those who reside there. Existing research into suburban New Urbanist environments tends to compare the behavior of a subset of a population in a suburban New Urbanist environment with that of a subset of a population in a traditional suburban environment. This study adds to the existing body of research by comparing specific aspects of the living experience of residents in a suburban New Urbanist environment to those aspects of their living experience in their previous residential environment, while identifying factors responsible for any changes.

#### Structure of Thesis

Chapter II contains a review of relevant literature. In Chapter III, a description of the study area and population is followed by a discussion of data collection and analysis methodology. Chapter IV contains the analysis findings. A discussion of the analysis findings is presented in Chapter V.

#### CHAPTER II

#### LITERATURE REVIEW

This chapter first describes the evolution of American suburbs. Next, the objections of New Urbanists to the suburban environment are presented. This includes their belief that the suburbs fail to provide a range of affordable housing options, foster ethnic and economic segregation, are automobile dependent and inhospitable to alternative forms of transportation, and lack an appreciable sense of community. The goals of New Urbanists for the suburban environment are then described, followed by a discussion of dissenting views, and the results of existing research on New Urbanist suburban environments.

#### Suburban Evolution

The migration of urban residents to the suburbs began in the early Nineteenth Century. Affluent residents of older inner-city neighborhoods viewed relatively undeveloped land near the city as a place they could connect with nature and escape the problems of urban life that included congestion, pollution, epidemics, and economic stress (Hayden, 2003; Baldassare, 1992). Individuals relocating to the suburbs faced another problem, however, that of living in social isolation. The issue of social isolation was particularly acute for women, self-described as residing in "Lonelyville," who were left alone in their homes during the day, while their husbands commuted to the city for

work (Hayden, 2003, p. 43). This problem was addressed in the 1850's with the development of affluent suburban communities that incorporated communal open space and were nestled in natural environments (Hayden, 2003).

Successful "streetcar suburbs" were developed along expanding transit lines in the early 1900s. These bedroom communities offered a variety of housing options and easy access to central city employment for skilled workers and the modest middle-class (Hayden, 2003; Baldassare, 1992).

This was the beginning of a period of rapid, unplanned growth during which entrepreneurs purchased and subdivided properties increasingly distant from the central city. They carved these properties into large lots with which they could maximize profits. This resulted in low-density developments, but a decline in unprofitable communal open space. New lot owners built their own single-family detached housing, leading to the creation of the mail-order housing industry. This contributed to housing standardization and the downfall of local vernacular building practices.

In the 1950s and 1960s, suburbs grew rapidly, encouraged by the need for housing for returning World War II veterans, increased automobile ownership, and federal highway construction, mortgage interest income tax deductions, and mortgage insurance and loan programs (Hayden, 2003; Baldassare, 1992). Open land was developed at a rapid rate. From 1960 to 1990, developed land in metropolitan areas doubled, though the metropolitan population increased by less than 50 percent (Dutton, 2000, p. 16). By 1990, sixty percent of the population of metropolitan areas lived in suburbs (Dutton, 2000, p. 16).

Post World War II suburban developments were often built by large-scale developers who subdivided huge tracts of land and relied upon the scale of the development to yield large profits (Hayden, 2003). Growth in automobile ownership facilitated the siting of these developments in locations far from the central city and underserved by public transportation. Levittown, a large Long Island suburb constructed in 1949, was one such development. It featured a curvilinear street system and mass-produced, single-family, detached, "cookie-cutter" houses, each placed in the center of a spacious lot bordered by white picket fencing (Hayden, 2002). Developers anticipated that these suburban developments would be home to traditional households consisting of a "male breadwinner, female housewife, and their children" (Hayden, 2002, p. 21). Indeed, droves of traditional middle-class and some working-class urban residents moved to these developments in search of privacy, home ownership, and space to raise children. Household breadwinners, who were often male, commuted for work to the city by automobile.

Soon industrial activities, offices, and retail outlets began to relocate to the suburbs. Although traditionally central city functions, they relocated to realize cost savings and be in proximity to customers and labor pools (Baldassare, 1992; Bressi, 1994; Duany, Plater-Zyberk, & Speck, 2000). In the suburbs, industrial and commercial activities could take advantage of real estate subsidies, relatively lower rents, labor costs, and taxes, and easy access to the rapidly expanding network of interstate highways.

With this relocation, the suburbs became a place of both residence and work.

Commuting patterns shifted from suburb-to-city to suburb-to-suburb (Baldassare, 1992;

Duany et al., 2000). Soon, suburban manufacturing plants, business parks, and office towers also appeared. There was a proliferation of strip development, an assortment of retail and service establishments oriented to and lining arterial roads. Shopping malls, "big box" stores, and outlet malls followed. These non-residential developments, designed to accommodate consumers and employees who traveled by automobile, were located near major arterials and included an abundance of parking (Baldassare, 1992; Duany et al., 2000).

Development in the suburbs since the late 1900s maintains the post World War II tradition of low-density. Euclidian land-use zoning regulations, originally implemented to avoid the problems of urban environments by separating residential areas from incompatible uses (i.e., noxious industry), continue to separate land uses. Development tends to proceed in piecemeal fashion, sometimes resulting in a nonintegrated collection of disparate single-use pods. Private space is often prioritized with less thought given to communal open space. Civic institutions may be nondescript and placed where convenient rather than meaningful.

These suburban environments tend to be de-centered, dispersed, and lacking clear boundaries. The dispersed low-density suburban built form is unsupportive of public transit, thus forcing reliance on personal automobiles for mobility. Sprawling suburban landscapes are connected by hierarchical street systems consisting of networks of small feeder streets punctuated by cul-de-sacs and funneling traffic to a few major arterials.

Although similar in built form to post World War II predecessors, suburbs in the late 20<sup>th</sup> century and onward house markedly different populations. In 2000, traditional

families accounted for only one-fourth of all suburban households, a number that is expected to continue to decline (Schmitz et al., 2003, p. 3). Non-traditional and small households, on the other hand, are growing in number. The majority of suburban households are married couples with no children, other types of non-traditional families, and non-family cohabitants (Schmitz et al., 2003, p. 3). Suburban populations are also becoming more diverse with regard to age. Where once young traditional families were in the majority, now all age cohorts are present, with many residents choosing to age in place.

# New Urbanist Critique of Suburban Environment

Contemporary suburban environments are the bane of the growing New Urbanism movement that emerged in the 1980s and 1990s. New Urbanism is a physical planning and urban design philosophy that encompasses the complimentary philosophies of neotraditional and traditional neighborhood design and transit-oriented development. This movement draws inspiration from Ebenezer Howard's Garden Cities, the City Beautiful and New Town movements, Jane Jacobs, and Leon Krier. Early pioneers include Andres Duany and Elizabeth Plater-Zyberk (proponents of traditional neighborhood design), and Peter Calthorpe (proponent of transit-oriented development). In 1993, these architects help found the Congress for New Urbanism (CNU), a non-profit organization intended to consolidate and make more effective the efforts of those seeking the creation of livable, walkable, ecologically-oriented communities.

In 1993, the CNU held its first congress, which was attended by 100 people (CNU history, n.d.). The CNU currently has members in 49 states and 20 countries, including

more than 3,100 architects, planners, developers, engineers, investors, government officials, and citizen activists (CNU history, n.d.; CNU who we are, n.d.). New Urbanism's success is further evident in the increasing number of New Urbanist-related publications, New Urbanist-based government guidelines and planning processes, and the more than 210 New Urbanist developments under construction or completed in the United States (CNU history, n.d.).

Proponents of New Urbanism fault suburban environments for failing to provide affordable housing, fostering a segregated human environment, being automobile dependent and inhospitable to alternative forms of transportation, and possessing a weak, if not nonexistent, sense of community (Calthorpe, 1993; Duany et al., 2000). In the discussion presented below, I elaborate on those critiques of the suburban environment made by the New Urbanists.

#### Costly Suburban Housing

New Urbanists assert that suburban home ownership is an unobtainable goal for an increasing number of both single and double wage-earner lower- and middle-income households. This was not the case in past decades when multitudes of single-earner middle-income and some lower-income households moved to the suburbs to realize the American Dream of privacy, home ownership, and space to raise children. In the years following WWII, inexpensive land, mass-produced housing, tax incentives, and federal mortgage insurance and loan programs made the American Dream affordable (Baldassare, 1992). In 1990, however, only 25-percent of all families could afford a median-priced single-family home, down from 50-percent in 1970 (Calthorpe, 1993, p.

19). Suburban industrialization, employment growth, and land-use regulations that constrain the housing supply (e.g., growth management policies) have increased competition for suburban land and housing. This has led to an increase in market prices, which - combined with rising home building costs and mortgage interest rates - has increased the cost of suburban home ownership (Baldassare, 1992). Housing affordability is further constrained by the steep cost of owning and operating an automobile, a must-have item for residents of automobile-dependent suburbs that costs them an estimated minimum of \$6,000 per year (Duany et al., 2000, p. 56).

New Urbanists cite land-use zoning regulations that further hinder the development of affordable housing (i.e., housing affordable for those with moderate or low incomes), and reference two forms of affordable housing that are often prohibited - live/work units that combine residential and commercial space (e.g., apartment-above-the-store), and residential conversion of outbuildings (e.g., garage apartment, granny unit) (Duany et al., 2000). Live/work units allow owners to realize cost savings stemming from the financing of home and business with one home mortgage, and the reduction, if not elimination, of a daily commute. Outbuildings provide affordable housing in single-family neighborhoods, and the rent received offsets the costs associated with the main house (Duany et al., 2000).

Consumers daunted by the rising costs of home ownership and the lack of affordable options frequently relocate to less expensive housing in older inner ring suburbs or on the suburban fringe. Developers continue to build at the suburban fringe, anticipating continued consumer preference for low-density single-family development.

These contributions from both the demand and supply sides result in the growth of suburban sprawl and the length of commutes.

# Segregated Human Environment

New Urbanists assert that suburban housing is clustered according to type, size, and price, resulting in a socially segregated environment. Zoning regulations that mandate minimum lot sizes and exclude multi-family housing, for example, keep more affordable, higher-density housing separate from less-affordable, lower-density traditional suburban housing (Benfield, Raimi, & Chen, 1999; Duany et al., 2000). Attempts to integrate affordable housing into existing higher cost development is often met with strong opposition from residents who wish to preserve the exclusivity of their neighborhood (Duany et al., 2000). Proponents of New Urbanism claim that this spatial segregation leads to a disconnected built environment and a segregated human environment that is divided along age, income, and ethnic lines (Bressi, 1994; Congress for the New Urbanism, 2001; Duany et al., 2000). It is believed that residing in any one of these homogenous enclaves will lead to a decline in one's understanding of difference, of the importance of common ground, and of civic responsibility (Bressi, 1994; Duanyet al., 2000).

### Automobile Dependence

New Urbanists fault suburban environments for requiring reliance on personal automobiles. This is linked to problems related to traffic congestion, impaired mobility, and personal autonomy. The low-density sprawling character of the suburban built form

necessitates traveling great distances to accomplish the needs of daily life (e.g., work, socializing, shopping, dining, recreation). These needs are typically not within walking distance, and those that are within walking distance often lack amenities (e.g., sidewalks, connectivity, safe crossings) that encourage pedestrian travel. Public transit is often inadequate, if not completely lacking (Benfield et al., 1999; Calthorpe, 1993; Duany et al., 2000). Absent alternatives, suburbanites rely on personal automobiles to meet their transportation needs. Empirical research has found that people in low-density environments make more vehicle trips, and drive more vehicle miles per person and household, than do people in compact (high-density) environments, where vehicle usage declines by some 20 to 40 percent (Benfield et al., 1999, p. 36).

Reliance on personal automobiles is linked to traffic congestion on the small looping streets or the one major arterial into which they feed and which serves as a main thoroughfare in a given suburban pod. This funneling of traffic to major arterials creates points of traffic congestion, especially in those suburbs that use a single arterial for all thru-traffic (Duany et al., 2000). Ever-increasing automobile usage also contributes to congestion on road systems that were originally intended for a lesser load. Building new roads does not resolve this congestion as drivers flock to the new capacity until it also becomes congested (Benfield et al., 1999).

New urbanists believe suburban reliance on personal automobiles adversely affects those who are too poor, too old, or too young to drive. Those who are too poor to drive find themselves concentrated in inner-city neighborhoods, unable to pursue the opportunities available to those who can drive to or commute from the suburbs (Duany et

al., 2000). Those too old or too young to drive suffer impairment of their mobility and even of their personal autonomy (Bressi, 1994; Duany et al., 2000). Those elderly who do not have family or hired assistance to transport them may even be forced to leave their traditional suburban homes and relocate to alternative housing (e.g., retirement community) (Duany et al., 2000). Children have no choice but to be reliant upon their parents for their mobility needs, and those parents that choose to privilege those needs, often do so to the detriment of their own professional careers (Duany et al., 2000).

### Weak Sense of Community

New Urbanists assert that suburban environments engender little to no sense of community. This is attributed, in part, to a lack of communal space (e.g., parks, open space, schools, libraries, town halls) in which people can gather for community and culture (Calthorpe, 1993; Duany et al., 2000). Communal spaces that do exist are considered to be too dispersed and unremarkable to be meaningful and useful. The segregated nature of the human environment is blamed for impeding the interaction of diverse peoples and the creation of the community vitality prevalent in more urban areas.

The personal automobile, a socially isolating environment on which so many suburbanites rely, is yet another obstacle to the formation of community. The average American spends 70 minutes per day in his or her car (Schmitz et al., 2003, p. 20). New Urbanists believe that time spent commuting in personal automobiles would be better spent interacting in community with other people. In addition, suburban residents who are unable to drive are socially isolated and forced to be dependent upon the services of others. The dearth of pedestrian accessible activities, meaningful destinations, and safe,

comfortable, interesting streets is believed to discourage interaction between suburbanites and threaten the sociability and community cohesion that such interaction would otherwise engender.

#### New Urbanism: Normative Goals

New Urbanists would have suburbs reconfigured along the lines of small towns with compact (i.e., high-density), mixed-use, pedestrian friendly neighborhood development oriented around a clearly defined center and interspersed with open space and parks. These developments would provide a range of housing types and price levels within walking distance of the activities of daily living and connected to the world at large by public transit (Calthorpe, 1993; Congress for the New Urbanism, 2001; Duany et al., 2000). According to New Urbanists, these physical design features would result in affordable, diverse neighborhoods in which residents would enjoy a strong sense of community and be less reliant upon personal automobiles.

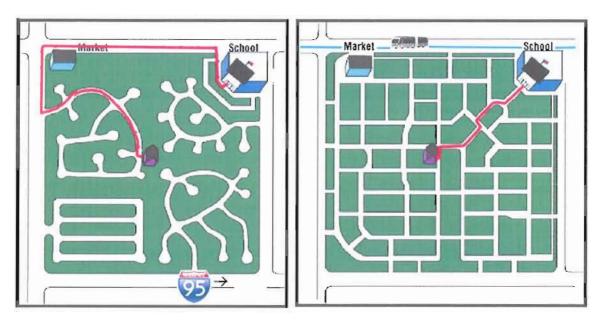
# Diversely Populated Affordable Neighborhoods

New Urbanists believe that appropriate suburban development must provide service accessibility and affordable housing. Neighborhoods should be compact and provide a mix of uses such that the needs of daily life (e.g., work, socializing, shopping, dining, recreation) are within a five to ten minute walk or transit ride of housing (Calthorpe, 1993; Duany et al., 2000). Market-rate and affordable housing in various price ranges and types, including live/work units, outbuildings, apartments, and townhouses, can be integrated in these neighborhoods to meet the needs of the

nontraditional households, small families, and aging residents of modern-day suburbs (Calthorpe, 1993; Congress for the New Urbanism, 2001; Duany et al., 2000). As envisioned, these mixed-use, integrated neighborhoods could foster integrated populations by bringing together people of diverse ages, races, and incomes, thus rectifying the social segregation of traditional suburban environments (Congress for the New Urbanism, 2001).

### Reduced Automobile Usage

New Urbanists believe service accessibility and pedestrian friendly environments can reduce reliance on personal automobiles. Neighborhoods that are compact and contain a mix of uses can provide the needs of daily life within a five to ten minute walk or transit ride of housing. Development of sufficient density will support public transit. Streets developed as an interconnected grid system of short blocks can make travel efficient, alleviate traffic congestion, reduce automobile trip quantity and length, and support pedestrianism (see Figure 2.1) (Congress for the New Urbanism, 2001; Duany et al., 2000). Significant provisions can be made to encourage safe and enjoyable pedestrian travel. Narrow streets and on-street parallel parking can slow traffic and provide a barrier for pedestrians on adjacent sidewalks. Off-street parking can be located to the rear of buildings that are human-scaled and abut landscaped sidewalks, creating safe, interesting, comfortable pedestrian environments, and putting "eyes on the street" (Calthorpe, 1993; Duany et al., 2000, p. 73).



**Figure 2.1.** Comparison of suburban (left) and New Urbanist (right) street systems. From "A Fix for Bad Roads: Don't Make More," by Andrew Smith, 2009, *Seattle Transit Blog*. Retrieved October 14, 2009, from http://seattletransitblog.com/index.php?s=nimbys

# Sense of Community

New Urbanists believe that elements that contribute to a strong sense of community can be fostered by appropriate development. Integrated, mixed-use neighborhoods can facilitate interaction amongst diverse peoples, supporting personal and civic bonds (Congress for the New Urbanism, 2001). Reduced reliance on personal automobiles can provide residents with more time to be social (Congress for the New Urbanism, 2001). Pleasant, pedestrian orientated streets can create social space that will provide opportunities for unplanned social interaction and the sociability that such interaction engenders. Vernacular architecture and building practices can contribute to a sense of place and community identity. Prominently placed public spaces (e.g., parks, plazas) and community facilities (e.g., community centers, schools, churches, libraries)

serve as points of civic focus, contributing to community identity and fostering a sense of democracy (Bressi, 1994). Open space can connect and define neighborhoods, reinforcing sense of place and community identity.

## Critique of New Urbanism

Critics suspect that the changes proposed by New Urbanists may actually result in homogenous, upscale enclaves in which residents may not experience a stronger sense of community relative to traditional suburban development, and may not reduce, and may even increase, their personal automobile use. Existing research indicates that suburban New Urbanist environments do realize some of the New Urbanist goals.

## Homogenous Populations

Critics believe that New Urbanist environments may be homogeneously populated. This prediction of homogeneity is linked to the New Urbanist goal of "community," an experience of social wholeness and symmetry in which participants share common problems and interests. Critics question whether the creation of "community" is a desirable goal, one that residents want and need (Harvey, 1997). Critics believe that community obstructs, rather than facilitates, the progressive social change that is envisioned by New Urbanists. Critics describe communities as fundamentally exclusionary, idealizing the fusion of participants while actually working to exclude those perceived as different in order to maintain social cohesion (Day, 2003; Lehrer & Milgrom, 1996).

The prediction of homogeneity is also linked to New Urbanism's grounding in late Eighteenth Century - early Nineteenth Century small towns, built forms that were traditionally segregated along socioeconomic and ethnic lines (Lehrer & Milgrom, 1996; Rutheiser, 1997). With this foundation, the development philosophy is fated, in the eyes of some critics, to be "culturally biased in favor of the dominant classes and races of the model period" in a manner that will determine the communities that populate New Urbanist developments (Lehrer & Milgrom, 1996, p. 61). Furthermore, New Urbanism is seen as appealing to white-collar professionals, leading to the formation of "exclusionary enclaves" in these developments (Lehrer & Milgrom, 1996, p. 64).

Anecdotal evidence suggests that New Urbanist developments are often homogenous, exclusive, middle to upper-class enclaves (Marcuse, 2000; Marshall, 1996; Thompson-Fawcett, 1996). The limited empirical evidence available seems to support this idea. Markovich and Hendler (2006) found that the residents of the suburban New Urbanist development of Cornell Community in Ontario, Canada, were predominantly white, educated, and upper-middle-class. A study of four New Urbanist communities found consumers willing to pay a premium (\$5,000-\$30,000) for a residence in a New Urbanist development rather than the same residence in a surrounding area (Eppli & Tu, 1999).

#### Upscale Development

Critics believe obstacles related to both supply and demand hinders the integration of affordable housing into New Urbanist projects. New Urbanist projects are typically undertaken by for-profit private developers who may fail to develop affordable

housing when confronted by the challenges of project financing, market dynamics, construction costs, community resistance, and insufficient public subsidy (Johnson & Talen, 2008, p. 586). In addition, vernacular architecture and building practices have been found to increase construction costs, contributing to the pricing of low-income residents out of New Urbanist developments (Audirac & Shermyen, 1994, p. 169).

The integration of affordable housing is further challenged by negative perceptions of the core New Urbanist ideas of socioeconomic integration and higher density development. Audirac and Shermyen (1994) note, "suburban residents typically oppose all new higher-density development containing a substantial proportion of rental units" (p. 169).

While a survey of 220 New Urbanist developers in 35 states did find that more than half of the 84 respondents had included affordable housing in their projects, half of this subgroup of respondents did so at the behest of governing regulations (Johnson & Talen, 2008). Local financial incentives and regulatory changes were identified as means of encouraging the inclusion of affordable housing in future developments.

# Long Live the Personal Automobile

Critics suspect that residents of New Urbanist developments may not reduce, and may even increase, their personal automobile use. It is believed that high residential mobility and the placement of walkable New Urbanist developments in sprawling suburbia are not conducive to reducing reliance on personal automobiles (Southworth, 1997; Winstanley, Thorns, & Perkins, 2003). Holcombe (2004) doubts consumers' willingness to substitute walking and public transit for personal automobile travel,

arguing that personal automobiles offer the ultimate in privacy, comfort, and flexibility. Holcombe (2004) points to the single digit percentage of commuters that ride mass transit as evidence of the preference for personal automobiles. Others, echoing the adage "build it and they will come," believe that the construction of New Urbanist grid street systems will facilitate automobile usage, going so far as to predict that the New Urbanist form will result in shorter (i.e., cheaper) trips and therefore potentially more vehicle miles traveled (Landecker, 1996).

Research has found that residents of suburban New Urbanist developments walk and cycle on destination/utilitarian trips within their neighborhoods more often than do their traditional suburban counterparts (Lund, 2003; Rodriguez, Khactak, & Evenson, 2006). Local access to facilities and services has been linked to increased pedestrian travel for destination trips (Lund, 2003). Residents have been found to travel fewer vehicle miles (Rodriguez et al., 2006). Markovich and Hendler (2006), however, found that residents remain strongly reliant on personal automobiles. Rodriguez, Khactak and Evenson (2006) did not find residents to be more active than their traditional suburban counterparts.

### Sense of Community

Critics believe that residents of New Urbanist environments may not experience a stronger sense of community than do residents of traditional suburban development.

Critics fault the presumption that sense of community will follow from the alteration of the physical environment (Lehrer & Milgrom, 1996; Southworth & Pathasarathy, 1997;

Winstanley et al., 2003). Critics argue that community cannot be spatially determined, but is the result of a social experience, taking shape and evolving over time.

Critics also suggest that the goal of a strong sense of community is ignorant of contemporary realities (Southworth & Pathasarathy, 1997; Winstanley et, al., 2003). Southworth and Pathasarathy (1997) point out that technological advances have dramatically improved "communication and human capacity to conquer space and time," reducing the need for public spaces that facilitate human interaction (p. 13). Thompson-Fawcett (1996) questions the likelihood that residents will meet and greet each other as they walk to local neighborhood shops when they can easily drive to large discount stores that provide greater variety and lower prices (p. 315). Critics believe it is more appropriate to say that New Urbanism creates opportunities for communality, which may or may not lead to community (Talen, 1999; Winstanley et al., 2003).

Research has found that residents of suburban New Urbanist environments experience a greater sense of community and express a stronger attachment to their community than do their traditional suburban counterparts (Kim & Kaplan, 2004).

Residents who walk were found to be more likely to engage in unplanned interaction with neighbors and to form social ties (Lund, 2003). Local access to parks and/or retail shopping areas has been linked to higher frequency of neighborly behavior. Research has found, however, that personal attitudes, not the built environment, play a significant role in resident behavior. Residents were more inclined to identify community gatherings and organizations than modifications to the built environment as means to improve community interaction (Lund, 2003; Markovich & Hendler, 2006).

### Limitation of Existing Research

Existing research into suburban New Urbanist environments tends to compare the behavior of a subset of a population in a suburban New Urbanist environment with that of a subset of a population in a traditional suburban environment. Little is known about whether suburban New Environments provide the envisioned change in living experience for those who reside there. This is significant in that one premise of the New Urbanism movement is that people's behavior and experience will change for better once they relocate to the New Urbanist environment.

The purpose of this study is to assess changes in the living experience of residents of a suburban New Urbanist environment relative to their living experience in their previous residential environment, and to identify the factors responsible for any such change.

In Chapter III, a description of the study area and population is followed by a discussion of data collection and analysis methodology.

### **CHAPTER III**

#### **METHODOLOGY**

This chapter first describes the study area for this research. Data collection and analysis methodology are then discussed.

### The Study Area

Crescent Village is located on a 40-acre greenfield site in the northeast of the City of Eugene, Lane County, Oregon. The Village is approximately five miles from downtown Eugene and one mile from a major highway (Beltline Highway) linking it to the nearby City of Springfield and affording easy access to Interstate 5 (see Figure 3.1). The surrounding neighborhood is populated by predominately college-educated professional homeowners and is one of the fastest growing and wealthiest neighborhoods in the City (About the area, n.d.). Population growth rates are expected to reach 15 to 17 percent between 2005 and 2010 (About the area, n.d.). Household incomes are 37% higher than the City average, and 2004 housing prices are 25% higher than the County average (About the area, n.d.).



Figure 3.1. Crescent Village Vicinity Map. From Google Earth.

Adjacent to Crescent Village, on the east and west, are neighborhoods of detached single-family homes. To the north are vacant lands. To the south are apartment buildings and commercial development. Twelve major industrial firms and corporate offices are located in close proximity to the Village, including The Register Guard Printing and Corporate Offices, Levi Strauss Billing Center, Comcast Cable Television Offices, IP/Koke Printing, Chambers Communications (KEZI TV), and Peacehealth Hospital at Riverbend (About the area, n.d.). A variety of retail and service establishments are located within one-half mile of the Village's town center, including a café, sandwich shop, jeweler, banks, medical offices, pharmacy, general merchandise and office supply retailers, pet store, and Costco, a membership warehouse club. In total, about 5,000 people are employed by businesses within a one-mile radius of the Village (About the area, n.d.).

Crescent Village is a planned unit development (PUD). PUD is a zoning technique that allows for creative approaches to development (Hoch, Dalton, & So, 2000, p. 357). The City of Eugene's PUD regulations provide leeway in site design, mix of land uses, and environmental impacts allowed on land for which development is proposed that will be of "at least equal quantity to [that] achieved through traditional lot development" and compatible with the surrounding area (City of Eugene, 2009, p. 9-485). The intent of the City's PUD regulations is to spur development that encourages alternatives to the automobile, provides housing to meet the needs of all income levels, conserves resources, and preserves and enhances natural areas (City of Eugene, 2009). In accordance with PUD regulations and guided by the principles of New Urbanism and the Smart Growth movement, the Village master plan is for a compact, pedestrian-friendly neighborhood with a mix of housing, commercial, retail, and recreational uses. As envisioned by Arlie & Company, the Eugene-based developer of Crescent Village, this will be a neighborhood that "fosters an enhanced sense of community," where "wide sidewalks, inviting urban parks and plazas, and pedestrian-friendly streets create a lively atmosphere where people can meet, share experiences, and develop friendships and memories" (Guiding principles, n.d.). Guiding principles for the project include:

- 1. A compact, well-planned village that utilizes land and resources efficiently and retains a sense of openness and livability.
- 2. Fewer and more efficient roads and utilities to preserve open space and conserve resources.

- A mix of housing, commercial, retail, and recreational uses to create a lively, socially-diverse community in which residents and employees can take care of many daily activities within walking distance.
- 4. A pedestrian-friendly site design with integrated bus stops and bike racks to reduce reliance on automobiles and promote the use of mass transit, thus reducing traffic congestion and emissions.
- 5. Buildings, streets, and open spaces designed and detailed at the 'human scale' to enhance the pedestrian experience (Guiding principles, n.d.).

Arlie & Company is committed to making Crescent Village an environmentally friendly development that includes energy efficient and water conserving features, low-VOC emitting floor and wall coverings, locally sourced building materials, native plant landscaping, and gardens that filter storm-water on site (Green facts, n.d.). The Inkwell, a five-story multi-occupant office building located in the Village's town center, earned Gold Certification for Core and Shell by the United States Green Building Council's Leadership in Energy and Environmental Design (LEED<sup>TM</sup>) Green Building Rating System. The offices of Arlie & Company, located in the Inkwell, earned Platinum Certification for Commercial Interiors, the highest level LEED certification.

When complete, Crescent Village will be a mixed-use urban neighborhood containing retail and office space, apartments, condominiums, town and row houses, live/work units, and park space oriented around a high-density mixed-use town center (see Figure 3.2). The master plan includes a 50,000 square-foot anchor site, located west of the town center, that Arlie & Company desires to have developed as a grocery store.

Preliminary plans called for 631 housing units, 32,000 square-feet of specialty retail, 115,000 square-feet of commercial, 102,000 square-feet of general office space, and 30,000 square-feet of medical-dental offices (Harwood, 2004). Phased construction commenced in late 2004 and full build-out is expected by 2012 (Russo, 2002).



**Figure 3.2.** Crescent Village Site Plan. From "Crescent Village Eugene's Urban Village: Town Center Retail & Restaurant Opportunities." Retrieved October 14, 2009, from http://www.crescent-village.com/real estate flyer.pdf

To date, approximately one-third of Crescent Village has been constructed. Thirty-one three-story town houses, ranging in size from 2,300 to 2,700 square feet, were completed and went on the market in March 2007 (Bjornstad, 2007). Three of the six buildings to comprise the town center are complete, including the Inkwell, a five-story multi-occupant office building, and two mixed-use buildings containing first-floor commercial space below three floors of apartments (see Figure 3.3). In total, 102 apartments, including studio and one, two, and three bedroom units, have been available

in the town center since October 2007. Commercial space in the town center is currently home to five eating establishments, a day spa and salon, a concierge service, and a women's clothing store. The Inkwell currently houses the offices of Arlie & Company, a doctor's office, and a financial services provider.



**Figure 3.3.** Crescent Village Town Center. From Rowell Brokaw Architects. Retrieved October 14, 2009, from http://www.rowellbrokaw.com/Portfolio/Mixed-Use/index.html

# Data Collection

Data was collected in a survey of occupied households in Crescent Village. Schutt (2006) defines survey research as the "collection of information from a sample of individuals through their responses to questions" (p. 234). A well-designed survey can collect data on a range of topics from a large number of people at relatively low cost, thus

enabling representative sampling of large populations (Schutt, 2006). Survey research methodology is widely accepted and growing in popularity among researchers in numerous disciplines, including the social sciences (Schutt, 2006, p. 234).

In September 2009, the survey instrument, a self-administered questionnaire, was distributed to the 112 residences - 20 town houses and 92 apartments – that were occupied in Crescent Village. Questionnaires were delivered by hand to the door of each residence by the researcher or members of the Crescent Village Leasing Office staff. Follow-up reminders encouraging residents to complete and return their questionnaires were delivered by hand three weeks later. A second copy of the questionnaire was delivered by hand four weeks later. Five weeks were allowed for the return of completed questionnaires. A total of 39 of the 112 questionnaires were returned, representing a response rate of 34.8 percent.

The questionnaire consisted of a mix of 19 close-ended, open-ended, Likert-scale, and fill-in-the-blank questions organized into seven sections (see Appendix: Survey).

Data regarding both the Crescent Village residence and previous residence of each respondent was collected. Part I of the questionnaire contained questions pertaining to housing characteristics (e.g., housing type, tenure type and length, and environment). Part II contained questions pertaining to neighborhood characteristics (e.g., housing density, accessibility, diversity, housing costs). Part III contained questions pertaining to reasons for having moved to Crescent Village. Part IV contained questions pertaining to travel behavior, sense of community, resident interaction, and living experience satisfaction.

Part V contained Likert-scale questions pertaining to residential preferences. Part VI

contained questions pertaining to knowledge and beliefs about residential development.

Part VII collected demographic data, including age, gender, ethnicity, marital status, education, employment, household income, household size and composition, and number of automobiles owned.

Attached to the questionnaire were a letter of introduction from Arlie & Company, cover letter from the researcher, and pre-addressed return envelope (see Appendix: Survey). The letter from Arlie & Company introduced the researcher and encouraged residents to complete and return the questionnaire. The researcher's cover letter explained the purpose of this study, stated that participation was voluntary and anonymous, and informed recipients that completing and returning the questionnaire constituted their consent to participate. Respondents were instructed to return their completed questionnaire, in the pre-addressed envelope provided, to the Crescent Village Leasing Office located in Crescent Village. If returning it after business hours, respondents were instructed to place their completed survey in the mail slot.

#### Limitation of Research

A low survey response rate is a limitation of this research. Nonresponse can introduce bias into research findings, as nonrespondents are often different (e.g., age, gender, education) from respondents (Schutt, 2006). To minimize the effect of this limitation, attempts were made to maximize the survey response rate. All households were surveyed. Attached to the questionnaire were letters from Arlie & Company and the researcher encouraging resident participation in the study. A pre-addressed envelope was included to facilitate the ease of questionnaire return. Reminders were distributed to

encourage resident participation. A second copy of the questionnaire was distributed to all households. Even with these efforts, however, only 39 of 112 questionnaires were returned, representing a response rate of 34.8 percent.

# Analysis

Survey data was aggregated using Microsoft Office Excel. All surveys completed by respondents 18 years of age or older and missing only an insignificant number of answers were included. Missing answers were labeled "NR" (no response). Surveys missing a significant number of answers were excluded. Survey data was analyzed using SPSS (Statistical Package for Social Sciences). Univariate analysis and mean analysis were used to describe the characteristics of the sample population, and to investigate whether respondents' perceived specific aspects of their living experience (i.e., perceptions of affordability of housing and diversity of population, and travel behavior and sense of community) had changed following their move to Crescent Village, and if so, how these aspects had changed. Binary logistic regression analysis was used to examine factors that may have contributed to changes in respondents' travel behavior and sense of community, including physical characteristics of the built environment and personal demographics. Chapter IV contains the analysis findings.

#### **CHAPTER IV**

#### **FINDINGS**

This chapter first details the background of respondents to the survey questionnaire. Next, is a description of the changes in the residential living experience of these respondents, followed by a discussion of the physical characteristics of the residential living environment that may have contributed to the changes in the residential living experience.

# Background

Survey questionnaires were distributed to all 112 occupied households in Crescent Village. The return sample of 39 respondents represents a response rate of 34.8 percent.

Women account for 60.5 percent of respondents, and men 39.5 percent.

The sample population is predominately young, white, affluent, well educated, and residing in small, childless households. Respondents range from 19 to 67 years of age. The majority is within 18 to 35 years of age (53.8 percent) (see Table 4.1) and is white (84.6 percent) (see Table 4.2).

Table 4.1. Respondent Age.

Age	Frequency	Percent
18-25	10	25.6
26-35	11	28.2
36-45	3	7.7
46-55	7	17.9
56-65	6	15.4
66-75	2	5.1
Total	39	100.0

Table 4.2. Respondent Ethnicity.

Ethnicity	Frequency	Percent
White	33	84.6
Hispanic or Latino	2	5.1
Asian	2	5.1
Other	2	5.1
Total	39	100.0

The majority (74.4 percent) of respondents has a Bachelor's, Master's, or professional degree (see Table 4.3). Just under half (43.6 percent) are employed as trained professionals (see Table 4.4). Two-thirds (66.6 percent) reported a household income of at least \$60,000 per year (see Table 4.5).

Table 4.3. Respondent Education.

Education	Frequency	Percent
High School Diploma	1	2.6
Some College/Associate (2 yr.) Degree	7	17.9
Bachelor's Degree	11	28.2
Master's or Professional Degree	18	46.2
Other	2	5.1
Total	39	100.0

Table 4.4. Respondent Employment.

Employment	Frequency	Percent
Management	9	23.1
Trained Professional	17	43.6
Skilled Laborer	1	2.6
Self-Employed	4	10.3
Retired	4	10.3
Student	3	7.7
Other	1	2.6
Total	39	100.0

Table 4.5. Respondent Household Income.

<b>Household Income</b>	Frequency	Percent
Less than \$14,999	2	5.1
\$15,000-\$29,999	6	15.4
\$30,000-\$44,999	2	5.1
\$45,000-\$59,999	2	5.1
\$60,000-\$74,999	7	17.9
\$75,000-\$99,999	5	12.8
\$100,000-\$149,999	6	15.4
\$150,000 or more	8	20.5
No Response	1	2.6
Total	39	100.0

Respondent households range in size from one to five members (see Table 4.6). The majority (89.7 percent) consists of one to two members. Single persons with no children account for 41 percent of the respondents, and married persons with no children 31 percent (see Table 4.7).

Table 4.6. Respondent Household Size.

Household Size	Frequency	Percent
1 Member	19	48.7
2 Members	16	41.0
3 Members	1	2.6
4 Members	2	5.1
5 or More Members	1	2.6
Total	39	100.0

Table 4.7. Respondent Household Type.

Household Type	Frequency	Percent
Single without Children	16	41.03
Married without Children	12	30. <b>7</b> 7
Married with Children	3	7.69
Divorced without Children	5	12.82
Divorced with Children	2	5.13
Domestic Partner without Children	1	2.56
Total	39	100

Respondent households own up to four automobiles (see Table 4.8). The majority (87.2 percent) owns one to two automobiles. Five percent of households do not own an automobile.

Table 4.8. Respondent Automobile Ownership.

<b>Automobiles Owned</b>	Frequency	Percent
0 Autos	2	5.1
1 Auto	17	43.6
2 Autos	17	43.6
3 Autos	2	5.1
4 Autos	1	2.6
Total	39	100.0

Using Census 2000 data to compare the sample population to the population of the block group (U.S. Census, 2000c; 2000d), City of Eugene (U.S. Census, 2000a), and State of Oregon (U.S. Census, 2000b) in which the study area is located, the sample population is found to be younger, as likely to be white, more likely to have a Bachelor's, Master's, or professional degree, more likely to be affluent (66.6 percent reported a household income of at least \$60,000 per year), more likely to reside in a small, childless household, and more likely to rent rather than own a home (see Table 4.9).

Table 4.9. Comparison of Sample Population with Census Data.

	Sample	Census Tract 22.02	City of	
Demographic	Population	Block Group 3	Eugene	Oregon
Median Age	33	46.2	34.7	37.8
Ethnicity - White	84.6%	92.2%	86.5%	86.2%
Education - Bachelor of Arts or Higher	74.4%	27.2%	39.5%	28.0%
Median Household Income		\$43,009	\$42,398	\$49,863
Average Household Size	1.69	2.36	2.26	2.49
Households with Children Under 18 Years of Age	12.8%	27.1%	27.5%	33.4%
Owner Occupied Households	12.8%	87.2%	51.2%	64.4%
Renter Occupied Households	87.2%	12.8%	48.8%	32.9%

#### Previous Residence

The majority (51.3 percent) of respondents owned their previous residence (see Table 4.10). Previous residences were an attached single-family dwelling (10.3 percent), an apartment (33.3 percent), or a detached single-family dwelling (48.7 percent), located in a rural (12.8 percent), urban (33.3 percent), or suburban environment (41.0 percent) (see Table 4.10). The length of tenure in previous residences ranged from seven months to twenty years. The majority (56.4 percent) of respondents resided in their previous residence less than five years (see Table 4.10). Less than thirty percent of respondents resided in their previous residence for ten years or more.

Table. 4.10. Characteristics of Respondents' Previous Residences.

Characteristic	Frequency	Percent
Tenure Type		
Rent	14	35.9
Own	20	51.3
Live With Parent	2	5.1
No Response	3	7.7
Total	39	100.0
Housing Type		
Apartment	13	33.3
Attached SFD	4	10.3
Detached SFD	19	48.7
No Response	3	7.7
Total	39	100.0
Environment		
Urban	13	33.3
Suburban	16	41.0
Rural	5	12.8
No Response	5	12.8
Total	39	100.0
Length of Tenure		
Less than 1 Year	1	2.6
1-2 Years	7	17.9
2-5 Years	14	35.9
5-10 Years	6	15.4
10 or More Years	_11	28.2
Total	39	100.0

# The Move to Crescent Village

Respondents rated on a scale of zero to ten the importance of sixteen considerations in their decision to move to Crescent Village (see Figure 4.1). Based on their response, the top five considerations were quality of housing (M = 8.41), style of housing (M = 8.26), physical character (M = 8.21), ability to walk to shops and restaurants (M = 7.97), and safety (M = 7.62). The five lowest scoring considerations were diversity of population, (M = 4.87), lot size (M = 3.97), access to public transit (M = 3.24), quality of schools (M = 2.39), and suitability for raising children (M = 2.18).

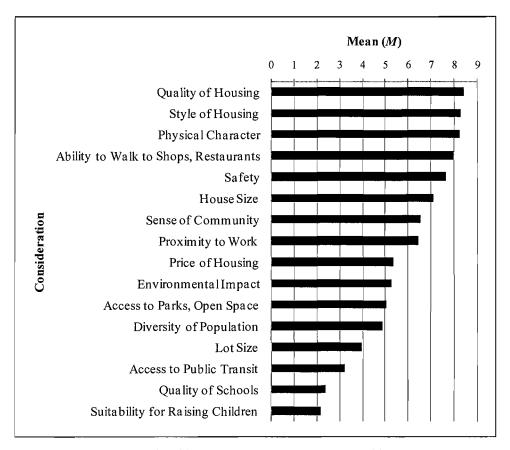


Figure 4.1. Factors Considered in Decision to Move to Crescent Village.

Respondents described Crescent Village as a suburban (17.9 percent) or an urban environment (71.8 percent) (see Table 4.11). The majority of respondents indicated that housing density (56.4 percent), housing type diversity (59 percent) and access to non-residential places (66.7 percent) in Crescent Village were greater than in their previous neighborhoods (see Table 4.11). The majority indicated that access to parks and open space (74.4 percent), enjoyment of walking (51.3 percent), and access to public transit (64.1 percent) in Crescent Village were about the same or less than in their previous neighborhood (see Table 4.11).

Table 4.11. Neighborhood Characteristics of Crescent Village.

Neighborhood Characteristic	Frequency	Percent
Housing Density		
Less Than Previous Neighborhood	12	30.8
About The Same	5	12.8
More Than	22	56.4
Total	39	100.0
Housing Type Diversity		
Less Than Previous Neighborhood	10	25.6
About The Same	5	12.8
More Than	23	59.0
No Response	1	2.6
Total	39	100.0
Access to Non-Residential Places		
Less Than Previous Neighborhood	5	12.8
About The Same	8	20.5
More Than	26	66.7
Total	39	100.0
Access to Parks, Open Space		
Less Than Previous Neighborhood	11	28.2
About The Same	18	46.2
More Than	10	25.6
Total	39	100.0
Enjoyment of Walking		
Less Than Previous Neighborhood	8	20.5
About The Same	12	30.8
More Than	19	48.7
Total	39	100.0
Access to Public Transit		
Less Than Previous Neighborhood	10	25.6
About The Same	15	38.5
More Than	11	28.2
No Response	3	7.7
Total	39	100.0

# Crescent Village Residence

The majority of respondents currently rents (87.2 percent) and resides in apartments in Crescent Village (82.1 percent) (see Table 4.12). Respondent length of tenure in Crescent Village ranges from one month to three years. The majority (97.5

percent) of respondents has resided in Crescent Village for less than two years, with 51.3 percent having residing there for less than twelve months (see Table 4.12). Respondents' planned length of tenure in Crescent Village ranges from zero months to twenty or more years. The majority (64 percent) of respondents plans to reside in Crescent Village for less than five years (see Table 4.12). Less than twenty percent plan to remain for ten years or more.

Table 4.12. Characteristics of Respondents' Crescent Village Residences.

Characteristic	Frequency	Percent
Tenure Type		
Rent	34	87.2
Own	5	12.8
Total	39	100.0
Housing Type		
Apartment	32	82.1
Detached SFD	7	17.9
Total	39	100.0
Environment		
Urban	28	71.8
Suburban	7	17.9
No Response	4	10.3
Total	39	100.0
Length of Tenure		
Less than 1 Year	20	51.3
1-2 Years	18	46.2
2-5 Years	1	2.6
Total	39	100.0
Planned Length of Tenure		
Less than 1 Year	7	17.9
1-2 Years	11	28.2
2-5 Years	7	17.9
5-10 Years	3	7.7
10 or More Years	6	15.4
No Response	5	12.8
Total	39	100.0

# Changes in Residential Living Experience

# **Affordability**

New Urbanists believe that appropriate development should provide market-rate and affordable housing in various price ranges and types. To date, Crescent Village includes market-rate apartments and townhomes. The majority (51.2 percent) of respondents indicated that the cost of their housing in Crescent Village, as a percentage of their household income, was about the same as or less than in their previous neighborhood (see Table 4.13). Close to half (48.7 percent) of respondents indicated that the cost of their housing in Crescent Village was more than in their previous neighborhood.

Table 4.13. Cost of Respondents' Housing in Crescent Village.

Cost of Housing	Frequency	Percent
Less Than Previous Neighborhood	13	33.3
About The Same	7	17.9
More Than	19	48.7
Total	39	100.0

# **Diversity**

New Urbanists believe that mixed-use, integrated neighborhoods could foster integrated populations by bringing together people of diverse ages, races, and incomes. The sample population is predominantly young, white, affluent, well educated, and residing in small childless households. The majority of respondents indicated that family type, income, ethnic, and age diversity in Crescent Village was about the same as or less than in their previous neighborhood (see Table 4.14).

Table 4.14. Population Diversity in Crescent Village.

Diversity	Less Than Previous Neighborhood (% of Respondents)	About the Same As Previous Neighborhood (% of Respondents)	More Than Previous Neighborhood (% of Respondents)
Family Type	43.6	12.8	38.5
Income	33.3	33.3	30.8
Ethnic	28.2	30.8	33.3
Age	17.9	33.3	43.6

#### Travel Behavior

New Urbanists believe that service accessibility and pedestrian friendly environments can reduce reliance on personal automobiles. Forty-one percent of respondents stated that they now drive less than they did while living in their previous residence.

The number of respondents who currently drive to work, access services, access parks and open space, and shop remains largely unchanged relative to their experience in their previous residence (see Table 4.15). The number of respondents who currently use alternative forms of transportation (i.e., public transit, walking, or cycling) to go to a restaurant or cafe increased 64.1 percent relative to their experience in their previous residence (12.8 percent). The number of respondents who currently use alternative forms of transportation to access parks and open space increased 5.2 percent relative to their experience in their previous residence.

Table 4.15. Transportation Choices.

Destination	Crescent Village (% of Respondents)	Previous Residence (% of Respondents)	Change (CV% - PR%)
Commute to Work			
Drive	84.6	82.1	2.5
Alternative Transport <sup>1</sup>	10.3	10.3	0
Access Services			
Drive	84.6	84.6	0
Alternative Transport <sup>1</sup>	10.3	10.2	0.1
Dine at Restaurant, Café	_		- '
Drive	23.1	87.2	<b>-64.</b> 1
Alternative Transport <sup>1</sup>	76.9	12.8	64.1
Acces Park, Open Space			_
Drive	43.6	48.7	-5.1
Alternative Transport <sup>1</sup>	56.5	51.3	5.2
Go Shopping			
Drive	87.2	84.6	2.6
Alternative Transport <sup>1</sup>	12.9	15.4	-2.5

<sup>&</sup>lt;sup>1</sup>Public Transit, Walking, Cycling.

The average commute of respondents decreased relative to their experience in their previous residence (see Table 4.16). Mileage decreased 4.7 miles, and driving minutes decreased 5.7 minutes. A paired-samples t test, indicates ( $p \le .05$ ) that this decrease is meaningful and not the result of sampling error.

Table 4.16. Commute to Work.

Commute	Crescent Village Mean (M=)	Previous Residence Mean (M=)	Change (CV M - PR M)	T-Test (p -value)
Miles	6.1237	10.8143	-4.69057	0.043
Driving Minutes	10.697	16.3788	-5.68182	0.016

# Sense of Community

New Urbanists believe that a strong sense of community can be fostered by integrated mixed-use neighborhoods that facilitate interaction amongst diverse peoples, supporting personal and civic bonds. Approximately 49 percent of respondents stated that

they feel that the sense of community in Crescent Village is stronger than the sense of community in their previous neighborhood. Forty-one percent stated that they interact with other residents of Crescent Village more than they interacted with the residents of their previous neighborhood.

Respondents rated their agreement, on a scale of zero to ten, with seven statements measuring four elements of sense of community (i.e., membership, influence, meeting needs, and shared emotional connection). The seven statements were drawn from the Sense of Community Index 2 (2008), a 24 item quantitative measure of sense of community that is widely accepted in the social sciences. Respondents assigned ratings in regard to both Crescent Village and their previous neighborhood.

One-third of respondents agreed with all seven statements, indicating that they felt a sense of community within Crescent Village (see Table 4.17). On average, the "sense of community" ratings assigned by all respondents to their living experiences in Crescent Village and in their previous neighborhoods were low and did not vary significantly, indicating they felt a similarly weak sense of community in both locations.

Respondents rated their satisfaction, on a scale of zero to ten, with their living experience in Crescent Village and in their previous neighborhood on a scale of zero to ten. The majority of respondents (94.9 percent) indicated that they were satisfied with their living experience in Crescent Village, an eighteen percent increase relative to their experience in their previous neighborhood. The average rating assigned to the Crescent Village living experience was 8.36, an increase of 1.18 over the rating assigned to the

previous neighborhood living experience (7.18). A paired-samples t test indicates (p > 0.05) that this decrease is not statistically significant.

Table 4.17. Sense of Community.

Element of Sense of Community	Crescent Village (%) Agree	Previous Neighborhood (%) Agree	Crescent Village Mean (M)	Previous Neighborhood Mean (M)	Change (CV M - PN M)	T-Test (p-value)
Membership						
I recognize most of the members of my neighborhood.  I invest time and effort into being a member of my	38.5	59	4.74	6.45	-1.711	0.008
neighborhood.	33.3	23.1	4.5	4.32	0.184	0.694
Influence						
I care about what other members of my neighborhood						
think of me.	38.5	41	5.34	5.63	-0.289	0.387
I have influence over what my neighborhood is like.	30.8	33.3	3.84	3.92	-0.079	0.884
Meeting Needs						
I value the same things as my neighbors.	46.2	35.9	5.97	5.24	0.73	0.174
Shared Emotional Connection						
Members of my neighborhood care about eachother.	30.8	43.6	5	5.53	-0.526	0.305
I interact with other members of my neighborhood a lot						
and enjoy spending time with them.	38.5	33.3	4.34	4.26	0.079	0.885

# Binary Logistic Regression

New Urbanists believe that changing characteristics of the physical environment will lead to changes in residential living experience. Controlling for respondent age and gender, three binary logistic regressions were performed to assess how well five characteristics of the physical environment (housing density, land-use mix, access to parks and open space, enjoyment of walking, and access to public transit) contributed to changes in three aspects of the residential living experience (driving behavior, resident interaction and sense of community) of the respondents to the questionnaire.

The predictor variables were "Greater Housing Density," "Greater Land-Use Mix," "Greater Access to Parks," "Greater Enjoyment of Walking," and "Greater Access to Public Transit." Each predictor variable was coded. A "1" indicated that the

respondent stated that the physical characteristic was greater in Crescent Village (e.g., housing density is greater in Crescent Village) than in their previous neighborhood. A"0" indicated that the respondent stated that the physical characteristic was about the same as or less than in their previous neighborhood.

Dependent variables were "Drive Less," "More Resident Interaction," and "Stronger Sense of Community." Each dependent variable was coded. A "1" indicated that the respondent stated that the aspect of the residential living experience improved (i.e., respondent drives less, interacts more with other residents, or feels a stronger sense of community) in Crescent Village relative to their experience in their previous neighborhood. A"0" indicated that the respondent stated that the aspect of the residential living experience was about the same as or less than in their previous neighborhood.

# Driving Behavior

Changes in housing density and land-use mix were found to be strongly associated ( $p \le .05$ ) with driving behavior change (see Table 4.18). Change in the enjoyment of the walking environment was found to be marginally associated ( $p \le .10$ ) with driving behavior change.

Table 4.18. Binary Logistic Regression: Drive Less.

Variables	В	S.E.	Wald	df	Sig.	Exp(B)
Greater Housing Density*	-5.095	2.246	5.144	1	.023	.006
Greater Land-Use Mix*	4.166	1.942	4.600	1	.032	64.476
Greater Access to Parks	-1.680	1.493	1.266	1	.261	.186
Greater Enjoyment of Walking**	2.965	1.538	3.714	1	.054	19.396
Greater Access to Public Transit	2.460	1.558	2.492	1	.114	11.705
Age	018	.040	.192	1	.661	.983
Gender	.249	1.178	.045	1	.832	1.283
Constant	-2.499	2.550	.961	1	.327	.082
N=34; *P < .05, **P < .10; Cox & Snell R Sqaure: .44; Nagelkerke R Square: .60						

The predictor variable "Greater Housing Density" was inversely (B = -5.095) related to the dependent variable "Drive Less." If the housing density in Crescent Village were greater than in the respondent's previous neighborhood, it would be likely that the respondent would drive more.

The predictor variable "Greater Land-Use Mix" was positively related (B = 4.166) to the dependent variable "Drive Less." If the land-use mix in Crescent Village were greater than in the respondent's previous neighborhood, it would be likely that the respondent would drive less.

The predictor variable "Greater Enjoyment of Walking" was positively related (B = 2.965) to the dependent variable "Drive Less." If the respondent's enjoyment of walking in Crescent Village were greater than in their previous neighborhood, it would be likely that the respondent would drive less.

#### Resident Interaction and Sense of Community

Change in the enjoyment of the walking environment was found to be strongly associated ( $p \le .05$ ) with changes in levels of resident interaction and feelings of a sense of community (see Tables 4.19 and 4.20). Change in housing density was found to be marginally associated ( $p \le .10$ ) with change in feelings of a sense of community.

The predictor variable "Greater Enjoyment of Walking" was positively related to the dependent variables "More Resident Interaction" (B = 3.309) and "Stronger Sense of Community" (B = 2.534). If the respondent's enjoyment of walking in Crescent Village were greater than in their previous neighborhood, it would be likely that there would be

an increase in their interaction with residents of Crescent Village and an increase in their sense of community relative to their living experience in their previous neighborhood.

Table 4.19. Binary Logistic Regression: More Resident Interaction.

Variables	В	S.E.	Wald	df	Sig.	Exp(B)
Greater Housing Density	1.035	1.172	.780	1	.377	2.814
Greater Land-Use Mix	-1.707	1.426	1.433	1	.231	.181
Greater Access to Parks	1.550	1.129	1.884	1	.170	4.711
Greater Enjoyment of Walking*	3.309	1.350	6.006	1	.014	27.368
Greater Access to Public Transit	-,286	1.057	.073	1	.787	.751
Age	006	.032	.037	1	.847	.994
Gender	.387	.928	.174	1	.676	1.473
Constant	-2.157	2.062	1.094	1	.296	.116
N=35; *P < .05; Cox & Snell R Sqaure: .28; Nagelkerke R Square: .37						

Table 4.20. Binary Logistic Regression: Stronger Sense of Community.

Variables	В	S.E.	Wald	df	Sig.	Exp(B)
Greater Housing Density**	2.473	1.383	3.196	1	.074	11.857
Greater Land-Use Mix	.887	1.262	.495	1	.482	2.429
Greater Access to Parks	1.385	1.160	1.425	1	.233	3.994
Greater Enjoyment of Walking*	2.534	1.036	5.985	1	.014	12.605
Greater Access to Public Transit	-1.060	1.196	.785	1	.376	.347
Age	062	.039	2.474	1	.116	.940
Gender	827	1.086	.579	1	.447	.438
Constant	.435	1.724	.064	1	.801	1.546
N=35; *P < .05, **P < .10; Cox & Snell R Sqaure: .39; Nagelkerke R Square: .52						

The predictor variable "Greater Housing Density" was positively related (B = 2.473) to the dependent variable "Stronger Sense of Community." If the housing density in Crescent Village were greater than in the respondent's previous neighborhood, it would be likely that the respondent would have a greater sense of community relative to their living experience in their previous neighborhood.

A discussion of the relevance of these findings is presented in Chapter V.

#### CHAPTER V

#### DISCUSSION

This chapter first discusses the analysis findings in the context of the existing literature. Suggestions for future research are then presented.

# Affordability

Slightly less than half of the respondents indicated that the cost of their housing in Crescent Village, as a percentage of their household income, was higher than in their previous neighborhood. This finding supports existing research that found residents willing to pay a premium to reside in a New Urbanist development (Eppli & Tu, 1999).

Contrary to the goals of New Urbanism, Crescent Village was not found to contain affordable housing. This finding supports existing research that found for-profit private developers unlikely to develop affordable housing on their own accord. As reported by Audirac and Shermyen (1994), financial incentives and regulatory changes may be needed to encourage the inclusion of affordable housing. Arlie & Company, the developer of Crescent Village, cited difficulties posed by relevant government regulations as the reason they did not develop housing specifically affordable for those with moderate or low incomes (S. Dressekie, personal communication, November 5, 2009). Arlie & Company is planning to develop a range of housing types with prices that

vary according to their cost of construction. Those housing types that cost less to build will be more "affordable" than those that cost more to build.

# Diversity

The majority of respondents indicated that family type, income, ethnic, and age diversity in Crescent Village was about the same as or less than in their previous neighborhood. Contrary to New Urbanism's goal of diversity, the sample population in Crescent Village is predominantly young, white, affluent, well educated, and residing in small childless households. This finding is consistent with earlier anecdotal evidence and empirical research that found New Urbanist environments to be homogenous, exclusive, middle to upper-class enclaves (Marcuse, 2000; Markovich & Hendler, 2006; Marshall, 1996; Thompson-Fawcett, 1996). The sample population's homogeneity may be the result of Crescent Village being in an early stage development, however. As Crescent Village continues to develop new housing types, facilities, and services, its resident population may become more diverse.

#### Travel Behavior

The majority of respondents indicated that they continue to rely on personal automobiles to access destinations not available within Crescent Village (i.e., work, services, and shops). To access destinations (i.e., restaurant or café) that are available in Crescent Village, 76.9 percent of respondents currently use alternative forms of transportation (i.e., public transit, walking, or cycling), an increase of 64.1 percent relative to their experience in their previous residence (12.8 percent). This finding

supports existing research that found local access to facilities and services to be linked to increased pedestrian travel for destination trips (Lund, 2003).

Local access to a wide variety of facilities and services is made possible by the density of housing in a New Urbanist development, and both work together, ideally, to create an environment in which residents are less reliant on automobiles. This study did find that changes in land-use mix and housing density are linked to changes in respondent driving behavior. If the land-use mix in Crescent Village were greater than in a respondent's previous neighborhood, for example, it was likely that the respondent would drive less. If the housing density in Crescent Village were greater than in a respondent's previous neighborhood, however, it was likely that the respondent would drive more.

These apparently contradictory findings may reflect the broader context of Crescent Village, a high-density development located on a greenfield site in a low-density suburban environment. As Crescent Village is still in the early stages of development, residents must travel into the surrounding auto-dependent suburbs to meet many of the needs of daily life. As additional facilities and services become available in Crescent Village, residents may choose to use alternative forms of transportation to access those destinations, thus limiting their driving. In the meantime, these findings support the claims of critics of New Urbanism who suggest that the placement of a New Urbanist development in sprawling suburbia may not be conducive to reducing reliance on personal automobiles (Southworth, 1997; Winstanley, Thorns, & Perkins, 2003).

# Sense of Community

This study did not find significant changes in the respondents' sense of community in Crescent Village relative to that experienced in their previous residential environment. On average, "sense of community" ratings assigned by all respondents in regard to Crescent Village and in regard to their previous neighborhoods were low and did not vary significantly, indicating they felt a similarly weak sense of community in both locations. Respondents' short lengths of tenure in Crescent Village may have affected their sense of community. The majority (84.6 percent) of respondents has resided in Crescent Village for less than two years, with 48.7 percent having resided there for less than twelve months. Respondents may be so new to Crescent Village that they have not yet acclimated to the residential living experience there.

Change in the enjoyment of the walking environment was found to be associated with change in levels of resident interaction. If a respondent's enjoyment of walking in Crescent Village were greater than in his or her previous neighborhood, it was likely that there was an increase in the respondent's interaction with residents of Crescent Village, relative to interaction with residents in his or her previous neighborhood. This finding supports the belief that while New Urbanist environments create opportunities for communality, this may or may not lead to community (Talen, 1999; Winstanley et. al., 2003). The low ratings assigned by respondents to their "sense of community" in Crescent Village may indicate that the opportunities for communality in Crescent Village do not translate into a strong sense of community.

#### Recommendations

This study found Crescent Village to realize some of the New Urbanist goals.

Local access to facilities and services was found to contribute to a reduction in respondents' reliance on personal automobiles. An enjoyable walking environment was found to contribute to an increase in respondents' interaction with other residents of Crescent Village. Overall, the majority of respondents indicated that they were satisfied with their living experience in Crescent Village.

Crescent Village, a high-density environment, is a successful example of the type of development that will be needed if the City of Eugene is to realize its goal of not expanding its urban growth boundary. As residents of Eugene tend to be averse to such projects, especially in the downtown area, Crescent Village can be used as a model for appropriate and successful future development.

In the New Urbanist vision, specific elements of the built environment in Crescent Village should work to engender a stronger sense of community among its residents. This study found change in feelings of a sense of community to be linked only to change in the enjoyment of the walking environment. On average, "sense of community" ratings assigned by all respondents in regard to Crescent Village and in regard to their previous neighborhoods were low and did not vary significantly, indicating they felt a similarly weak sense of community in both locations. Arlie & Company may wish to consider implementing a social program (e.g., hosting community gatherings) to encourage the formation of community in Crescent Village.

This study did not find affordable housing in Crescent Village. Arlie & Company attributed this to difficulties posed by relevant government regulations. Relevant government agencies may wish to make regulatory changes to encourage and make possible the inclusion of affordable housing in future developments.

#### Future Research

This study furthers our understanding of the ways in which New Urbanist environments affect the living experience of residents relative to their previous residential environment. It also points to a number of areas of further research. At the time of this study, only one-third of Crescent Village was developed. As housing types, facilities, and services not currently available become available in Crescent Village, future research could explore how the resident population changes in composition, and how resident transportation behavior changes.

Change in the enjoyment of the walking environment was found to be associated with change in resident interaction. Future research could investigate how enjoyment of the walking environment contributes to resident interaction, including where and how the interaction is taking place.

Future research could also address the low survey response rate that is a limitation of this study. Future research could use an alternative data collection method (e.g., short interviews) in an attempt to elicit more responses.

# APPENDIX

# SURVEY

# Arlie & Company Cover Letter

September 14, 2009

Dear Crescent Village Resident,

I am writing to introduce Sarah Wilkinson, a graduate student from the University of Oregon Planning, Public Policy and Management Department.

Sarah is researching the living experiences of residents of new urbanist developments, such as Crescent Village. As part of her research, she is conducting a survey of the residents of Crescent Village. Sarah will use the results of this survey for her graduate thesis. A copy of the survey questionnaire is enclosed.

I encourage you to complete and return the enclosed survey questionnaire. In addition to informing Sarah's research, the results of this survey will enhance Arlie&Company's ability to provide you with a quality living environment and will inform future development within Crescent Village. Your survey responses are completely anonymous. Please return your completed survey to our Leasing Office located in Crescent Village (2763 Shadow View Drive), in the provided envelope. If outside business hours, you may place your completed survey through the mail slot.

If you have any questions regarding this research, please contact Sarah, 408.859.0664, or myself, 541.344.5500. Thank you in advance for assisting in this research of Crescent Village.

Sincerely,

Sadie Dressekie Marketing Director

#### Researcher Cover Letter No.1

Dear Crescent Village Resident,

You are invited to participate in a research project being conducted by Sarah Wilkinson, a graduate student from the University of Oregon Planning, Public Policy and Management (PPPM) Department. This research will help me to understand the living experience of residents of suburban new urbanist environments, such as Crescent Village, and identify contributing factors. I will use the results of this research for my graduate thesis.

All you need to do is complete this short questionnaire, which should take approximately 15 minutes. Your participation is voluntary. If you do not wish to participate, simply recycle the survey. Responses will be completely anonymous. Your name will not appear anywhere on the survey. Completing and returning the survey constitutes your consent to participate. Please return your completed survey to the Leasing Office, located in Crescent Village (2763 Shadow View Drive), in the provided envelope. If outside normal business hours, you may place your completed survey through the mail slot.

Keep this letter for your records. If you have any questions regarding the research, contact Sarah Wilkinson, PPPM Department, (408) 859-0664. Advisor: Dr. Yizhao Yang, PPPM Department, (541) 346-0833. If you have any questions regarding your rights as a research subject, please contact the Office for Protection of Human Subjects at the University of Oregon, (541) 346-2510. This Office oversees the review of the research to protect your rights and is not involved with this study.

Thank you for assisting with my research of Crescent Village.

Sincerety,

Sarah Wilkinson University of Oregon Dept. of Planning, Public Policy and Management

# Questionnaire

# We want to learn about your living experience.

	-	• •	
Part I: Housing characteristics 1. Describe your current and previous	e ranidareos		
Check the bor next to the electricion that best	describes your Crescent t		
	Crescent Village	Previous Residence	
A. Type of Housing:		_	
Apertment	H	H	
Manufactured Home	H	<b>├</b> ─	
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Own C. Type of Emiroment:	ш	Li	
Urban			
Suburton	$\vdash$	H	
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2. How long did you live in your prov	ious residence?	/yeses	
3. How long have you lived in Crence	nd Villana?		(morths
	•		
4. Hevr long do yeu hape to live in C	rescent Village?	/years	/morths
5. If considering moving from Cresco	ani Villago wiltrin ibe	ned live (5) years, what is	your reason(s) for serving?
	_		
Part II: Neighborhood character	ristics		
			rith those of your previous neighborhood?
"Previous neighborhood" reters to your neighbo Fit in the black with the number of the descript			
1. less than, 2. about the same as, 3.	-		
A. Housing density in Crescent Village is	that in a	ny previous naighborhood.	
			B-8-1
B. Access to non-residential places (e.g.,		-	hat in my previous neighborhood.
C. Access to parks, open space in Creso	ent Village is	that in my previous resignb	orkoad.
D. Enjoyment of malking in Crescard Villa	ge is h	ek in my previous neighbathood.	
E. Access to public fransit in Crescent Vi	loge isi	hatin my previous neighborhoo.	ı.
F. Housing type diversity in Crescent Will	age isBest	in my previous neighborhood.	
G. Family type diversity in Crescent Villa	ye is that	in my previous neighborhood.	
H. Income diversity in Crescent Village is	Ihat in m	y previous neighborhood.	
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J. Age diversity in Crescent Willage is	that in my p	arcions neighborhood,	
V do a supplier of housely U.	W	· n	4.11

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Part III: Moving decision 7. On a scale of 0 to 10, rate the importance of the following	ng considerations in your decision to move to Creacent Vittage,	
0 1 2 3 4 5 6 7 8 9 10 strengty-disagree control strengty agree		
A: Proyacel Character	J. Ability to Welk to Shaps, Restaurants	
B. Sense of Community	K. Price of Housing	
C. Diversity of Population	L Quality of Housing	
Subblily for Raising Children	14. Style of Housing	
E. Safety	N House Size	
F. Quality of Schools	O. Lot Size	
G. Access to Parks, Open Space	P. Environmental impact	
H. Proximity to Work	0. Other:	
L Access to Public Trensit		
Part IV. Residential experience  8. Which primary mode of transportation applies to the for	Bowing activities?	
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	Crescent Vitage Previous Residence	
A. Correstade to proce of work		
B. Access services (daycare, banking, etc.)		
C. Dire et restaurent, calé		
D. Access park, open space		
E. Go shopping		
9. From your Crescent Village residence, what is the dista	• •	
	miles	
10. From your previous residence, what was the distance	to your place of work?	
11. Overall, I drivenow than I did at my previous re	· ·	
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12. How was do the following statements represent how you accept 0 to 10, year your appearant with each of the following seek	ou feel about Creecent Village, your previous neighborhood?	
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B. I recognize most of the members of my neighborhood.		
C. I invest time and effort into being a member of my neighborhood		
D. I care about what other members of my neighborhood think of m	. 🗆 🗀	
E. I have influence over what my neighborhood is like.		
F. Vembers of my neighborhood care about each other.		
G. Firsteract with other members of my neighborhood a lot and enjo	y speruing time with them.	
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	interact with other residents of Creecent Village than I interacted with the residents of my previous neighborhood.  The tor of the statement that best coopelas this emisses.  Less about the same excre
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<b>15.</b> C	m a scale of 0 to 19, how would you rate your living experience in Crescent Village? 0 1 2 3 4 5 6 7 8 9 10 very distablified equinal very satisfied
16. C	हा a scale of 0 to 10, how would you rate your living experience in your previous neighborhood? 0 1 2 3 4 5 6 7 8 9 10 very dissellated central very satisfied
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	V. Residential preference
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	0 1 2 3 4 5 6 7 8 9 10  shortply disagree equital shortply agree  I have heard many negative views expressed about high-density mixed-use development.  I prefer to live in a neighborhood where most residents have similar lifestyles, values and customs as myself.
	0 1 2 3 4 5 6 7 8 9 10  strongly disagrees equinal strongly agree  I have heard many negative views expressed about high-density mixed-use development.  I prefer to live in a neighborhood where most residents have similar lifestyles, values and austoms as myself.  I prefer to live in a neighborhood that is quiet, peaceful and relaxing.
	0 1 2 3 4 5 6 7 8 9 10  abortally disappee equitable abortally agree  I have heard many negative views expressed about high-density mixed-use development.  I prefer to live in a neighborhood where most residents have similar iffestyles, values and customs as myself.  I prefer to live in a neighborhood that is quiet, pesselful and relating.  I prefer to live in a neighborhood where I can welk to local shope and restaurents.
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Part VI. Knowledge and beliefe about residential development
19. On a scale of 0 to 16, rate your agreement with each of the following statements.  0 1 2 3 4 5 6 7 8 9 10
storughy dis spree meatral storughy agree
Compact (high-density) mixed-use developments are a good place to five.  Living in compact mixed-use developments allows people water chances to intersel with other people.
H · · · · · · · · · · · · · · · · · · ·
Compact, mixed-use developments have diverse (e.g., age, gender, ethnicity, income, family type) populations.  Compact, mixed-use developments are an atfordable place to five.
People fiving in compact and mixed-use developments use private automobiles less. Thus compact and mixed-use developments have environmental
bereits.
The government should invest in public transposlation instead of building wave roads and highways.
Part VII. About yourself and your household
Your age:
Your gender:
Female Male
Your stansicity:  White Black or African American Hispariic or Latino Asian Other (specify):
Your marital status: Single Maried Civoxed Ytidowed
Your education:
Distinct consplete high school
Bachelor's degree Marster's or professional degree Other (specity):
Your employment:
Management Trained Professional Skilled Laborer Self-Employed
Refered Student Unemployed Direr (specify):
Household income level:  Less tran \$14,999 \$15,000-\$29,999 \$30,000-\$44,999 \$45,000-\$69,999
\$60,000-\$74,599 \$75,000-\$99,999 \$100,000-\$145,999 \$150,000 or more
Size of household:Andividuals
Number of adults in household:
Number of children (less than 18 years old) in household:
Number of automobiles owned by household:
Number of automobiles owned by household at previous residence:
Thank you for assisting with this research of Crescent Village!
Please return your completed survey to the Leasing Office, located in Crescant Village (2763 Shedow Drive), in the provided envelope.
If outside of normal business frours, you may place your completed survey through the mail slot.
Creament YYEspe Reades of Barvey 4 of 4

### Questionnaire Reminder

October 1, 2009

Re: University of Oregon Survey

Dear Resident.

My name is Sarah Wilkinson and I am a graduate student at the University of Oregon Department of Planning, Public Policy and Management. Last month, I distributed a survey to all residents of Crescent Village. This research will help me to understand the living experience of residents of suburban new urbanist environments, such as Crescent Village, and identify contributing factors. I will use the results of this research for my graduate thesis.

If you have already completed and returned my survey, I thank you for your participation. If you have not completed and returned my survey, I would appreciate you doing so. Your participation is voluntary. Your name will not appear anywhere on the survey. Responses will be completely anonymous. Completing and returning the survey constitutes your consent to participate. Please return your completed survey to the Leasing Office, located in Crescent Village (2763 Shadow View Drive). If outside normal business hours, you may place your completed survey through the mail slot. Extra copies of my survey are available at the Leasing Office.

If you have any questions regarding the research, contact Sarah Wilkinson, PPPM Department, (408) 859-0664. Advisor: Dr. Yizhao Yang, PPPM Department, (541) 346-0833. If you have any questions regarding your rights as a research subject, please contact the Office for Protection of Human Subjects at the University of Oregon, (541) 346-2510. This Office oversees the review of the research to protect your rights and is not involved with this study.

Thank you for assisting with my research of Crescent Village.

Sincerely,

Sarah Wilkinson University of Oregon Dept. of Planning, Public Policy and Management

#### Researcher Cover Letter No.2



# Help this graduate student finish her thesis!

Last month, she distributed a survey to all residents of Crescent Village. She has only one week left to collect the completed surveys. Unfortunately, she has not received enough of them to finish her thesis. She needs your help!

If you have already completed and returned your survey, Sarah is very grateful for your participation. Thank you! Please encourage your fellow residents to complete and return theirs!

if you have not completed and returned your survey, please do so! Your participation will enable Sarah to complete her graduate degree.

Another copy of the survey is enclosed with this message. Your participation is voluntary, and your response is absolutely and completely private and anonymous. Your name will not appear anywhere on the survey. Completing and returning the survey constitutes your consent to participate. Sarah will use the results of this research for her graduate thesis.

Please return your completed survey to the Leasing Office, located in Crescent Village (2763 Shadow View Drive) no later than October 16, 2009. After business hours, you may place your completed survey in the mail slot.

If you have any questions regarding this research, contact Sarah Wilkinson, PPPM Department, (408) 859-C664. Advisor: Dr. Yizhao Yang, PPPM Department, (541) 346-0833. If you have any questions regarding your rights as a research subject, please contact the Office for Protection of Human Subjects at the University of Oregon, (541) 346-2510. This Office oversees the review of the research to protect your rights and is not involved with this study.

Thank you so much for participating!

Sarah Wilkinson Department of Planning, Public Policy and Management University of Oregon

NAME:	PHONE NUMBER:	

#### **BIBLIOGRAPHY**

- About the area. (n.d.). Retrieved September 1, 2009, from Crescent Village: http://www.crescent-village.com/about\_the\_area.php5
- Audirac, I., & Shermyen, A. H. (1994). An evaluation of Neotraditional Design's social perscription: Postmodern placebo or remedy for suburban malaise? *Journal of Planning Education and Research*, 13, 161-173.
- Baldassare, M. (1992). Suburban communities. Annual Review of Sociology, 18, 475-494.
- Benfield, F. K., Raimi, M. D., & Chen, D. D. (1999). *Once there were greenfields*. Washington DC: Natural Resources Defense Council.
- Bjornstad, R. (2007, July 15). *Crescent rising*. Retrieved September 1, 2009, from Crescent Village: http://www.crescent-village.com/press\_NEWS\_07\_15\_07.php5
- Bressi, T. (1994). Planning the American Dream. In P. Katz, *The New Urbanism* (pp. xxv-xlii). Washington DC: McGraw-Hill.
- Calthorpe, P. (1993). *The next American metropolis*. New York: Princeton Achitectural Press.
- City of Eugene. (2009). Land Use. In City of Eugene Code. Eugene, OR: Author.
- CNU history. (n.d.). Retrieved September 1, 2009, from Congress for the New Urbanism: http://www.cnu.org/history
- CNU who we are. (n.d.). Retrieved September 1, 2009, from Congress for the New Urbanism: http://www.cnu.org/who\_we\_are
- Congress for the New Urbanism. (2001). *Charter of the New Urbanism*. Retrieved July 18, 2009, from http://www.cnu.org/sites/files/charter\_english.pdf
- Day, K. (2003). New Urbanism and the challenges of designing for diversity. *Journal of Planning Education and Research*, 23, 83-95.
- Duany, A., Plater-Zyberk, E., & Speck, J. (2000). Suburban nation: The rise of sprawl and the decline of the American Dream. New York: North Point Press.
- Dutton, J. A. (2000). New American urbanism. Milano, Italy: Skira.

- Eppli, M. J., & Tu, C. C. (1999). Valuing the New Urbanism: The impact of the New Urbanism on prices of single-family homes. Washington DC: Urban Land Institute.
- Green facts. (n.d.). Retrieved September 1, 2009, from Crescent Village: http://www.crescent-village.com/green\_facts.php5
- Guiding principles. (n.d.). Retrieved September 1, 2009, from Crescent Village: http://www.crescent-village.com/guiding principles.php5
- Harvey, D. (1997). The New Urbanism and the Communitarian Trap. *Harvard Design Magazine* (1), 1-3.
- Harwood, J. (2004, August 10). Work to begin on Crescent shopping center. Retrieved September 1, 2009, from Crescent Village: http://www.crescent-village.com/press NEWS 08 10 04.php5
- Hayden, D. (2003). Building suburbia: Green fields and urban growth. New York: Vintage Books.
- Hayden, D. (2002). Redesigning the American Dream: Gender, housing, family life. New York: W. W. Norton & Company.
- Hoch, C. J., Dalton, L. C., & So, F. S. (Eds.). (2000). *The practice of local government planning* (3rd ed.). Washington DC: International City/County Management Association.
- Holcombe, R. (2004). The New Urbanism versus the market process. *The Review of Austrian Economics*, 17 (2/3), 285-300.
- Johnson, J. S., & Talen, E. (2008). Affordable housing in New Urbanist communities: A survey of developers. *Housing Policy Debate*, 19 (4), 583-613.
- Kim, J., & Kaplan, R. (2004). Physical and psychological factors in sense of community: New Urbanist Kentlands and nearby Orchard Village. *Environment and Behavior*, *36*, 313-340.
- Landecker, H. (1996). Is New Urbanism good for America? Architecture, 68-70.
- Lehrer, U. A., & Milgrom, R. (1996). New (sub)urbanism: Countersprawl or repackaging the product. *Capitalism Nature Socialism*, 7 (2), 49-64.
- Lund, H. (2003). Testing the claims of New Urbanism. APA Journal, 69 (4), 414-429.

- Marcuse, P. (2000). The New Urbanism: The dangers so far. DISP (140), 4-6.
- Markovich, J., & Hendler, S. (2006). Beyond "soccer moms:" Feminist and New Urbanist critical approaches to suburbs. *Journal of Planning Education and Research*, 25, 410-427.
- Marshall, A. (1996). *Suburb in disguise*. Retrieved August 10, 2009, from http://www.alexmarshall.org/index.php?pageId=75
- Rodriguez, D. A., Khactak, A. J., & Evenson, K. R. (2006). Can New Urbanism encourage physical activity? *Journal of the American Planning Association*, 72 (1), 43-54.
- Russo, E. (2002, June 20). *Arlie to pursue Crescent complex*. Retrieved September 1, 2009, from Crescent Village: http://www.crescent-village.com/press NEWS 06 20 02.php5
- Rutheiser, C. (1997). Beyond the radiant garden city beautiful: Notes on New Urbanism. *City & Society*, 9 (1), 117-133.
- Schmitz et. al. (2003). *The new shape of suburbia: Trends in residential development.* Washington DC: Urban Land Institute.
- Schutt, R. K. (2006). *Investigating the social world: The process and practice of research* (5th ed.). Thousand Oaks, CA: Sage.
- Southworth, M. (1997). Walkable suburbs? *Journal of the American Planning Association*, 63 (1), 28-44.
- Southworth, M., & Pathasarathy, B. (1997). The suburban public realm II: Eurourbanism, New Urbanism and the implications for urban design in the American metropolis. *Journal of Urban Design*, 2 (1), 9-33.
- Talen, E. (1999). Sense of community and neighborhood form: An assessment of the social doctrine of New Urbanism. *Urban Studies*, 36 (8), 1361-1379.
- Thompson-Fawcett, M. (1996). The urbanist revision of development. *Urban Design International*, 1 (4), 301-322.

- U. S. Census Bureau. (2000a). American FactFinder fact sheet: Eugene, OR. Retrieved November 24, 2009, from http://factfinder.census.gov/servlet/

  ACSSAFFFacts?\_event=Search&geo\_id=&\_geoContext=&\_street=&\_county=
  Eugene&\_cityTown=Eugene&\_state=04000US41&\_zip=&\_lang=en&\_sse=on
  &pctxt=fph&pgsl=010
- U. S. Census Bureau. (2000b). *American FactFinder fact sheet: Oregon*. Retrieved November 24, 2009, from http://factfinder.census.gov/servlet/

  ACSSAFFFacts?\_event=Search&geo\_id=16000US4123850&\_geoContext=0100
  0US|04000US41|16000US4123850&\_street=&\_county=&\_cityTown=&\_state=0
  4000US41&\_zip=&\_lang=en&\_sse=on&ActiveGeoDiv=geoSelect&\_useEV=&p
  ctxt=fph&pgsl=160&\_submenuId=factsheet\_1&ds\_name=ACS\_2008\_3YR\_SAF
  F& ci\_nbr=null&qr\_name=null&reg=null%3Anull& keyword=& industry=
- U. S. Census Bureau. (2000c). *Census 2000 Summary File 1 (SF 1) 100 Percent Data*. Retrieved November 24, from http://factfinder.census.gov/servlet/DTSubjectShowTablesServlet?\_lang=en&\_ts=277393113418
- U. S. Census Bureau. (2000d). *Census 2000 Summary File 3 (SF 3) Sample Data*. Retrieved November 24, from http://factfinder.census.gov/servlet/DTSubjectShowTablesServlet?\_lang=en&\_ts=277393250046
- Winstanley, A., Thorns, D. C., & Perkins, H. C. (2003). Nostalgia, community and new housing developments: A critique of New Urbanism incorporating a New Zealand perspective. *Urban Policy and Research*, 21 (2), 175-189.
- Yin, R. K. (2003). Case study research: Design and methods (3rd ed.). Thousand Oaks, CA: Sage.