

A case study of Somerset in Ames, Iowa: An analysis of the process, planning
approaches, and implementation methods of the development

by

Karen Leigh Fisk Ormsbee

A thesis submitted to the graduate faculty
in partial fulfillment of the requirements for the degree of
MASTER OF LANDSCAPE ARCHITECTURE

Major: Landscape Architecture

Major Professor: Michael D. Martin

Iowa State University

Ames, Iowa

2000

Copyright © Karen Leigh Fisk Ormsbee, 2000. All rights reserved.

Graduate College
Iowa State University

This is to certify that the Master's thesis of

Karen Leigh Fisk Ormsbee

has met the thesis requirements of Iowa State University

Signatures have been redacted for privacy

TABLE OF CONTENTS

ACKNOWLEDGEMENTS _____	v
ABSTRACT _____	vi
PREFACE _____	vii
CHAPTER 1. INTRODUCTION _____	1
Background of Topic _____	1
Issues of topic _____	7
Research Methods and Process _____	8
Somerset _____	9
Middleton Hills _____	15
Purpose of Study _____	17
Significance _____	18
Hypothesis _____	19
Assumptions _____	19
Limitations of the Study _____	20
Definition of Terms _____	20
CHAPTER 2. TOPICS FOR REVIEW _____	24
Suburban Housing History _____	25
Nineteenth century _____	25
1890 to the mid-1940s _____	25
The mid-1940s to the early 1980s _____	28
The mid-1980s to the year 2000 _____	34
The future _____	35
Design Issues and Social Implications _____	37
Government policy _____	38
Streetscape _____	40
Space behind houses _____	42
Road hierarchy/Traffic _____	44
Commercial _____	47
Parking _____	48
Public space/Civic amenities _____	50
Open space network _____	51
Land use adjacencies _____	53
Regional context _____	54

Community disconnection	55
Homogeneity	57
Environmental awareness	59
Expense of lifestyle choice	61
The impact of marketing	62
Development Principles	65
Ahwahnee Principles	66
New Urbanist Principles	69
Design Process	73
Evaluation of New Urbanism	75
Conclusions	79
CHAPTER 3. CASE STUDY	82
Evaluation Matrix	86
Description of the Matrix	86
Selection of design issues	88
Selection of points of view	88
Evaluation of needs and wants	99
Road hierarchy/Traffic	99
Streetscape/Front yards	99
Space behind houses	100
Parking	100
Open space network	101
Land use adjacencies	101
Regional context	102
Evaluation of Somerset and Middleton Hills Designs	102
Initial Somerset design	105
Final Somerset design	112
Middleton Hills design	118
Evaluation of the Design and Development Processes	123
CHAPTER 4. CONCLUSIONS AND RECOMMENDATIONS	126
Conclusions	126
Recommendations	132
REFERENCES	136

ACKNOWLEDGEMENTS

I would first like to thank all the people who took the time to answer my barrage of questions throughout this study. The following people provided critical information for my research: City of Ames Planning and Housing Director Brian O'Connell; Ames city planner Eden Schmitt; Mrs. Rosemary Taylor; architect Jeff Fenimore, with Architects Rudi/Lee/Dreyer in Ames; Jeff Speck, senior designer with DPZ in Miami, Jane Grabowski-Miller, Director of Design at Middleton Hills, and Middleton City Planner Eileen Kelley, AICP. Valuable input and data were provided by the developers: Reiny Friedrich, Bob Friedrich Jr., and Ron Murphy from Friedrich/Iowa Realty; Erben Hunziker, Hillary Howard, and Chuck Winkleblack from Hunziker & Associates; Don Furman from the Furman Corporation; and the developers' lawyer Deb Krauth. Stuart Huntington, resident of Northridge; Ann Marie Fiore, resident of Parkview Heights; and various Ames realtors illustrated perspectives that helped to validate this research. This investigation would not have been complete without everyone's patience and cooperation.

This body of work could not have been feasible without the guidance of my dedicated thesis committee. Thank you Michael, Joni, and Bob. Michael and Joni especially supported and mentored me in my efforts to establish a strong foundation – not just in my research, but in my life as well. I am greatly indebted to each of you for allowing me to fully explore the topics that I am most interested in, and for directing me in a way that challenged me while allowing the freedom to exercise my views about land use.

I wish to acknowledge the outstanding support of my mother and sister because they have always encouraged me to do my best. Among others, Jodi, Jean, Erika, Karen, Jeanie, Jenny, Erin, Steph, Denise, Tamara, and Jen have supported me and stood by me even though many were miles away. I love you all for everything you do, for believing in me, and for helping me to become a better person.

Finally, my husband Stuart was always by my side supporting, encouraging, and helping in any way that he could. Though frustrating at times, his analytical mind has made this a better piece of work. His love and dedication pulled me through the really rough spots and I can never thank him enough for making every day of my life more meaningful.

ABSTRACT

Communities are predominantly developed with one type of dwelling in each neighborhood, creating a clustered landscape of single-use buildings that requires people to get into their automobiles and drive to their destinations. What choices are people being offered for the types of communities that they can live in? A growing movement attempts to address this question by developing housing that suits a larger audience. The principles of New Urbanism provides a *flexible framework for creating communities that are less automobile-dependent, affords residents opportunities to interact, and consumes fewer natural resources.*

This case study examines Somerset, a housing development in Ames, Iowa, which began as a Traditional Neighborhood Development (TND). An evaluation matrix was developed as a tool to assess the design and development processes, determine whether the needs of various stakeholder groups were met, and gauge how well the design fulfilled the principles of New Urbanism. A second TND in Middleton, Wisconsin provided the opportunity to analyze this approach in another Midwestern setting under different design and development circumstances.

Due to a variety of influences, Somerset has evolved into a hybridized conventional suburb. The initial intentions were inspired by a governing city document that attempted to address the growing needs of the city. The three developers of the project were willing to work together to create something innovative, but also wanted a positive return on their investment. To assure this return, they retained their long-held construction practices and perspectives of the marketplace. This study exposes the difficulties faced by a city attempting to guide the creation of richer communities while, at the same time, showing sensitivity to the concerns of its constituents. This retreat from a pure New Urbanist approach should not be seen as a failure in all regards; rather, it should be viewed as a starting point for merging current development patterns with forms of alternative development. After appropriate post-occupancy studies are conducted, future planners and developers will be able to refer to these cases as examples of how stakeholders can influence design decisions, and use them to evaluate the implications of those decisions.

PREFACE

That land is a community is the basic concept of ecology, but that land is to be loved and respected is an extension of ethics.

Aldo Leopold
A Sand County Almanac, 1949

The Somerset housing development in Ames, Iowa offered the opportunity to examine an alternative housing option while, at the same time, exploring the influences of conventional suburban development. Through my studies, general observations of suburban sprawl, and resource conservation beliefs, I became interested in investigating land use, suburban growth, social design, and residential needs satisfaction. My interest in these issues has been further refined through coursework in landscape architecture, architecture, community and regional planning, housing, sociology, consumer studies, and marketing.

My perspectives on land use have been expanded through research assistantships while at Iowa State University. I was involved in state legislative growth management research, community visioning and participation design charrettes, and land use change studies. On a personal level, I also actively participated in Ankeny (Iowa) City Council meetings where they considered the expansion of the city to meet consumer demands for housing. These opportunities provided insights into the role of land use planning on a larger scale. I was able to conclude that Iowans are concerned about the loss of farmland, and the rate of unchecked growth that is prevalent in many urbanized areas of Iowa, but they seem unsure of the tools and expertise needed to accomplish positive growth strategies.

There is resignation in Ankeny, Ames, and similar communities, to accept current sprawl development as necessary and inevitable. The question is usually where to build, not what, when, or if at all. I believe that people are not being critical of developer and “market-driven” solutions that impose conventional development standards upon all segments of the population. I also feel that Americans are a self-absorbed society composed of individuals who are primarily concerned with personal wealth and image rather than livable communities that emphasize communal interaction, networking, and sharing. In the often piecemeal, reactive approach to growth, current development does not fully consider affordability, sustainability, social development, regional planning, or alternative transportation.

This project provides insight into the challenges that citizens, municipalities, and developers face when creating communities that offer alternatives to conventional development. Somerset should help to raise awareness by expanding the discussion about housing choices that foster sociable land planning and efficient development. It is my hope that, as people come to understand the principles embodied in alternatives such as New Urbanism, they will challenge policy makers, developers, and neighbors to question the current approach of reacting to growth. Only through a greater understanding of livable communities will we be able to attack the larger societal problems of natural resource degradation, pollution, violence, neglect, and intolerance.

CHAPTER 1. INTRODUCTION

We are molded into a people by the things we live with day after day.

Jens Jensen
Siftings, 1939

Background of Topic

The Somerset housing development in Ames, Iowa is being developed as an “unconventional” development. The final design reflects a hybrid between what local developers usually build and the city’s vision for a “village concept.” City officials wanted to avoid the negative aspects of sprawl-like development and instead encourage design that fosters social interaction and engenders a sense of place. The architecture and planning firm of Andres Duany and Elizabeth Plater-Zyberk (DPZ) set out to implement the city’s vision when it created the original plan for Somerset. DPZ is known for creating the guiding principles of the traditional neighborhood development, or TND planning movement. Some of the principles reflected in this plan include: mixture of housing types and densities, pedestrian-scale buildings, buildings closer to narrow streets, through streets rather than dead end streets, and a commercial core. However, the city council, local residents, and in particular, local developers used their influence in the process to remove or diminish some of the TND design features and created a mixed design of conventional development and TND ideals.

The development of Middleton Hills in Middleton, Wisconsin, provides another example of a New Urbanist project. Middleton is located eight miles northwest of Madison, is the same size as Somerset and was started around the same time (see Table 1.1). The visionary landowner wanted to provide Middleton with a housing project that would extend beyond its borders and offer a quality of living unparalleled in the Madison area. The developer also wanted to create a model that other developers and planners could emulate. The process that was followed in Middleton differs from that in Ames, and this research will analyze the intricacies of both situations.

As a thesis topic, Somerset in Ames, Iowa, presented a means for exploring alternative housing options within planned unit developments.¹ Aside from the advent and

Table 1.1. Summary of general characteristics for Somerset and Middleton Hills.

		Final Somerset Design ²	Middleton Hills Design ³
Location		Ames, Iowa	Middleton, Wisconsin
City population (projected 1996)		48,691	15,422
Closest major metropolitan center (1990 census population)		Des Moines 35 miles south 193,187	Madison 8 miles southeast 191,262
Year project began		1995	1993
Development size		149 acres	150 acres
Density	gross	4 dwelling units per acre	3 dwelling units per acre
	net	9 dwelling units per acre	7-7.5 dwelling units per acre
Projected number and type of dwelling units	single-family detached	256	325
	single-family attached	206	30
	multiple-family	464	140
	live/work ⁴	8	28
	Total	934	523
Projected population of the development		2,140	1,189
Acreage devoted to open space		Approximately 10 acres	Approximately 44 acres

growth of condominiums and retirement communities, options for new house buyers in the United States have remained relatively unchanged over the past fifty years. Suburban development, as opposed to inner city development, has become the prevalent direction of housing for middle- and upper-income households, and houses that are segregated by size, lot size, façade style, and price have dominated the suburban landscape. Each housing development is restricted to a solitary type of use – either single family or multi-family. With some exceptions, the end of World War II marshaled in a booming market economy that launched a fast and furious national campaign of house building. Immediate need created communities without a distinct character, often isolated pods of single-family houses. Later in the century, apartments, townhouses, and large retail outlets were interspersed at various intervals, but remained segregated in use and style.

A growing economy fostered the automobile-dependent consumer lifestyles of the 1950s, 1960s, and 1970s, thus contributing to single-use land planning. Euclidean zoning

laws set the stage for the infiltration of houses, industry, and retail in homogeneous sectors on the outskirts of cities and towns. Lured by the assurance of easy access by automobiles, people did not hesitate to buy new houses in the suburbs – the new American dream. Advertising enticed people to buy cars and houses, and glorified a new lifestyle espousing freedom and independence, but practically speaking, focused dependence on the automobile. In *Asphalt Nation*, Kay (1961, 172) notes, “It wasn’t just the imagery that grabbed Americans, however; it was the trip, both long and short – the mobility.” Compared to traditional neighborhoods where daily needs could be met on foot, the auto-dependent suburbs isolated housewives while their husbands worked outside the house and outside the suburb. Children were relegated to activities in their immediate neighborhoods unless parents were willing to chauffeur them from activity to activity, to the mall, or to a friend’s house.

The same approach to development persists today. Houses are separated from shopping, services, workplaces, and recreation. The task of buying a gallon of milk for dinner or signing insurance papers necessitates a three, five, or ten-mile drive. Children’s sports and extra-curricular activities are almost always outside the neighborhood. Kay (1997, 24) highlights the impact on parents as well, “Time-starved parents chauffeur immobilized children to sports and chores, and genuine sociability goes.” Dependence on the automobile leads to tremendous impact on other facets of people’s lives – contemporary drive-through services such as fast food restaurants, pharmacies, and liquor stores all cater to a faster-paced environment. Kay (1997, 25) confirms that the breadwinner(s) have lost “not just leisure but life.”

A road is built; houses are built along the length of it; the road expands; more houses are built, and on and on. “It is assumed that if a site can be reached by the privately owned automobile, consumers will appear” (Nelessen, 1994, 6). Unchecked development becomes rampant during periods of economic growth like that of the 1980s and mid-to-late 1990s. “America is a consumer culture, and when we change what we buy – and how we buy it – we’ll change who we are” (Popcorn 1991, 4). During prosperous times houses become symbols of affluence as people upscale to larger dwellings (see Figure 1.1). Large lots engulf large tracts of land, as do large-scale developments of moderately priced houses.

Developers work quickly to build houses and businesses to meet quickening demand. The flood of development proposals, plat review filings, and building permit applications force municipalities to react to growth rather than to plan for it.

While new construction moves outward, inner cities are plagued with vacancies in housing, retail, service, and entertainment space. The majority of cities are vacated at 5:00 P.M. and re-inhabited at 8:00 A.M. resulting in cycles of congestion and gridlock due, in part, to a lack of appropriate public



Figure 1.1. Prestige houses in Ames, Iowa

transportation networks. Efforts to revitalize downtown come in the form of expensive warehouse renovations, making luxury condominiums from the space within. Low-income citizens are forced to live on the fringes of city centers, clustered together and out-of-sight. They do not have reliable transportation to reach jobs in the suburbs so they take low paying jobs in the cities or pay bus fares that are expensive because ridership is low in a system that is often not very user-friendly. The car culture, argues Kay (1997, 36), increases the barriers of class and race, “transportation that is difficult at best, nonexistent at worst, darkens their lives in myriad ways and adds to the financial and social inequity they suffer.”

There has been a slow but steadily increasing level of dissatisfaction among the general population regarding aesthetics, scale, and neighborhood satisfaction. Duany, Plater-Zyberk, and Speck (2000, x) claim, “For the past fifty years, we Americans have been building a national landscape that is largely devoid of places worth caring about.” A growing number of people are expressing displeasure for the negative aspects of the new vernacular that accompanies unmanaged growth – big box retail outlets, cookie-cutter housing, and road expansions that consume tax dollars (see Figure 1.2). Communities have allowed housing and retail districts to creep further and further outward, displacing people further away from urban centers, and degrading community life. Kay (1997, 25) supports this argument, “Given our far-flung, single-family, single-use suburban environment that purges pedestrians, given our urban environment drained of life by flight, given landscapes

lacking sidewalks and multilane roads that terrorize parents and children alike, impaired mobility is more than inevitable. It is a social tragedy.”

Advocates for New Urbanism claim that people can receive greater satisfaction from their neighborhoods if these neighborhoods are designed with opportunities for interaction. In the middle of the last century, even before New Urbanism, Mumford (1953, 237) supports



Figure 1.2. Conventional houses in an Ames subdivision.

these ideals, “If you wish casual opportunities for meeting your neighbors, and for profiting by chance contacts with acquaintances and colleagues, a stroll at two miles an hour in a concentrated area, free from needless vehicles, will alone meet your need.” In this new century, Duany, Plater-Zyberk, and Speck (2000, xiii) write, “we believe more strongly than ever in the power of good design to overcome the ills created by bad design, or, more accurately, by design’s conspicuous absence.” Supporters of traditional design also assert that integrating uses such as single-family houses, apartments, and townhouses with some commercial properties will accommodate people’s needs and reduce class and income segregation. Creating good transportation connections between communities may strengthen the relationship of the entire region, thus, leading to a degree of independence from the automobile. Bringing people out of their automobiles and back onto sidewalks may provide opportunities for relationships to form and may enhance the appeal of neighborhoods. Moving dwellings closer to the street and attaching deep, front porches affords the opportunity for chance encounters with neighbors. In studies about alley spaces, Martin (1996, 140) reveals that when alleys are provided, the social realm of streets is relieved of unpolished activities such as automotive repair. Although many of these concepts were prevalent in communities built between 1890 and 1930, these elements are not realized in many communities today.

Changes in the way communities are designed and built can and will take place if enough people endorse and encourage alternatives. However, current attitudes toward economic development need to be challenged. Citizens, municipal leaders, and developers need to evaluate current economic incentive practices within the context of how these incentives will provide long-term benefits to the community. The pervasive marketing of excessive or superfluous goods has contributed to a general attitude that people need things that are not necessary to lead quality lives. Schor (1998, 17, 21) denounces the nation's focus on market exchanges, not quality of life, or social health and suggests that "needs" have been disproportionately upscaled among people with more money. She continues, "The competitive upscale consumption that began in the 1980s, with the attendant expansion of the American dream... wasn't a cultural accident. It was created by the escalating lifestyles of the most affluent and the need that many others felt to meet that standard, irrespective of their financial ability to maintain such a lifestyle" (Schor 1998, 18). People demand variety in many aspects of their lives but accept current development patterns as inevitable. Forces in the marketplace have actually decreased the number of choices available to house buyers. Generally, people do not want their individual house to look like their neighbors, but beyond that they do not challenge the lack of available alternatives in development layout. Perhaps this can be attributed to a general perception that an individual does not have control over these decisions. In addition, the need to market the dwelling in response to high residential mobility may have contributed to this condition. The house becomes a utility and commodity rather than a place of personal representation. The same marketing forces that have subtly institutionalized suburban development over the past five decades can be reworked to create demand for alternatives. Advertising and marketing are very influential tools in creating response and demand. Schor (1991, 199) notes that advertising has been used as a "psychological weapon against consumers." She contends that advertising provides an association between a product and a person's identity and that people no longer purchase items to satisfy basic needs. "Today's luxuries become tomorrow's necessities" (Schor 1991, 122). For many years developers have been, in their words, "building what people want," and if they continue to respond to

market demand, and that demand includes a variety of choices, then alternative housing forms could become the favored development style.

Issues of topic

Calthorpe believes that planning strategies that are used today, but developed over fifty years ago, may no longer be relevant (Kelbaugh 1989, 3, 8). The composition of households has changed and the suburbs are still being built as if families were large, jobs were downtown, land and energy were unlimited resources, and as if an additional freeway lane would curb traffic congestion. Changes in population and demographics mean a shift in housing needs, which should force changes in the housing market. A large house on a large lot may no longer be what most people need or want to house their non-traditional family. However, it seems as though housing opportunities for additional demographic groups are being overlooked or not even considered. The market may be ready for a change. The growing dissatisfaction with conventional development and the apparent mismatch between housing needs and the housing stock indicates that people are ready for alternative housing choices.

One alternative housing approach is to build communities that are “livable.” Langdon (1994) defines “livable communities” as places where residents want to spend time, and want to become engaged in activities there. Livable communities incorporate principles that have been established by planning, architecture, and landscape architecture firms that specialize in traditional neighborhood development. Terms such as Neotraditional planning, livable communities, transit-oriented design, and New Urbanism have been used interchangeably to define similar principles.⁵ The goal of any of these “movements” is to plan wisely for suburban growth and create pedestrian-friendly neighborhoods that encourage interaction among residents. For example, when houses have usable front porches and are situated closer to the sidewalk they may encourage interaction with neighbors walking by. Kay (1997, 72) finds that the porch is the inviting, public-private space that integrates the “singular with the communal.” When various housing types (single family detached, apartments, townhouses, etc.) are available in one neighborhood, some of the stereotyping linked with homogeneous living situations may be mitigated. When houses and lots are

smaller and more human-scaled, people feel more comfortable in the landscape. When streets are narrow and designed in conjunction with multi-modal corridors, traffic moves slowly through communities. When bike paths and parks link throughout neighborhoods then the possibility exists for alternative transportation that contributes to healthy living and healthy interaction with neighbors. Parents can worry less knowing their children play in neighborhoods where people know each other. When good restaurants, doctors, dry cleaners, cafés, dentists, or small grocers are located a mere five-minute walk⁶ away, then people would be encouraged to patronize locally owned businesses that provide many economic and social benefits.

New Urbanists believe that citizens and local leaders need to initiate comprehensive planning in communities. The City of Ames has taken steps to incorporate long-range planning by enacting guidelines for change. The Land Use Policy Plan and revised zoning ordinances guided development for the village of Somerset. The city wanted to pursue a village-type concept and City Planning and Housing Director Brian O'Connell expressed, "There was a sense that if we don't keep an eye on [developers consuming more land than necessary], Ames might be considered another midsized sprawling city" (O'Donnell 1998, B10). The city has taken a proactive role by encouraging and facilitating New Urbanist style development. Somerset was the first community in Ames to essentially be directed by the city. The developers and the city made many compromises but there is now a benchmark to work and learn from.⁷

Research Methods and Process

This research strives to contribute to the understanding of the process followed in establishing New Urbanist style housing developments in Ames, Iowa and Middleton, Wisconsin. In so doing, the guiding principles of New Urbanism are revealed and lead to a discussion of housing choice and preferences. The project focused on one case study (Somerset in Ames) and relied on a second, less comprehensive, case study (Middleton Hills in Middleton) for comparison. Individual and community reactions to the proposed development and to the comprehensive land use plan for the City of Ames were used to understand the origins guiding design decisions. An evaluation matrix was developed as a

tool to assess the impact of competing interests on the initial and final Somerset designs. The Somerset plans were evaluated and specific design features isolated to help determine design differences between the two plans. An additional table was developed to compare the initial Somerset plan with the final Somerset plan, and to compare the designs for Somerset with that of Middleton Hills.

Primary data sources include on-site observations at various times of the day and at various times of the year. This allowed direct evaluation of the physical structure and social features of the site. This case study was further developed using qualitative data from face-to-face or telephone interviews with people involved in the project. This afforded direct access to unpublished information.

Secondary data sources include literature reviews, and information obtained through additional discussions with professionals in the fields of planning, architecture, and landscape architecture. These sources provided background information about alternative development techniques, planning, housing, suburban sprawl, cities, transportation, preferences, consumer and marketing influences, community development, social needs, and placemaking. Additional secondary data was obtained via a computer interface and the World Wide Web.

Somerset

The parcel of land originally owned by the Taylor family at the intersection of Stange Road and 24th Street in Ames, Iowa, has undergone a series of transformations over the years. The original prairie succumbed to frontier settlers over 100 years ago. Long gone are the bison and prairie chickens that once inhabited these fertile grounds. Gone too are the bluestem, switchgrass, wildindigo, and prairie clover. Out of necessity for an expanding population, it was replaced by a monoculture of either corn or soybeans.

By 1994, suburban development had reached the boundaries of the Taylor property and it came time for the farm family to decide the fate of their heritage. They made the difficult decision to sell a portion of the land they had worked and loved for generations to three local developers, Friedrich/Iowa Realty, Hunziker and Associates, and the Furman Corporation.⁸ Today, the Taylor family lives on about one acre of this parcel and still own

and farm the land just north of Somerset to Bloomington Road. The current zoning includes R1-6, R-2, R-3, and a planned commercial zone. The R1-6 zoning allows for low-density residential with a minimum 6,000 square foot lot size, and allows up to 7.2 dwelling units per acre. An R-2 designation allows for low-density residential with single-family and duplexes at a minimum lot size of 6,000 or 7,000 square feet, respectively, with up to 12.4 dwelling units per acre. R-3 zoning designates medium-density residential with single-family, two-family, and multiple-family units with 22.3 dwelling units per acre. The planned commercial zone is part of the overlay district for the village concept and does not dictate minimum lot sizing but does require compatibility with surrounding uses (Schmitt 2000).

Housing developments utilizing curvilinear streets, cul-de-sacs, large open spaces behind properties, and garages that dominate house facades describe some of the elements of conventional suburban design (see Figures 1.3 and 1.4). Many of the housing developments in Ames are conventional in nature as well. In the mid 1980s

Friedrich/Iowa Realty attempted something different with Spring Valley, a mixed density housing community utilizing zero lot lines,⁹ and incorporating single-family houses with townhouses, and apartments. The design placed the apartments at both sides of the entrance, which required residents to drive between them to get to the single-family houses behind. According to Mr. Friedrich, broker-owner of Friedrich/Iowa Realty, people did not like it, and therefore the idea did not sell (Friedrich 1999). So, the developer reworked the plan



Figure 1.3. Large open space in a conventional subdivision in Ames.



Figure 1.4. Garage doors dominate the facades of houses in Ames.

utilizing the template that had proven would sell – a monoculture of single-family houses. This template has remained relatively unchanged since. Why should it have changed? The market has dictated that this is the way to build. After all, people are buying these single-family detached units, on large lots, with attached three-car garages. The real estate market is also fairly conservative about the style of development because investors want to be assured of turning a profit. Regardless, developers say what is being built today sells; one conclusion is that it *must* be what people want. However, it has been some fifteen years since the Spring Valley development. The economy is much healthier and there has been a growing interest in non-conventional developments. A second conclusion could be that conventional-style developments sell because they are the only option people have, and this is one of the main arguments behind New Urbanism. Frampton (1995, 85) contends that the building industry “does its best to make sure that what people want is what it already provides”

Somerset became a possibility as a result of a deal the city made with the developers on an adjacent property, Northridge. The group of developers (Friedrich, Hunziker, and Furman) developed Northridge in the same manner as they have platted many other developments in the city for the past thirty years, as low-density residential single-family units (approximately two dwelling units per acre). This particular development was selling well because it met the need for large houses on large lots. It also incorporated an extensive trail system connected with the Ames community bikeway. Northridge was originally zoned as a planned unit development with a commercial zone and medium density housing. In addition to single-family detached houses, the development included 448 multiple-family units and 1.6 acres of commercial space. Due to the success of the project, the developers asked the city for permission to continue the development using exclusively low-density housing. Permission was granted under the condition that the developers build the parcel to the east (now Somerset) with the equivalent number of multiple-family units.

The landscape transformation of the Taylor farm began with the seeds of a progressive city government that visualized positive development practices in this ever-expanding college town.¹⁰ At the time, the recently adopted (1996) Land Use Policy Plan (LUPP) outlined many of the ideas being discussed in planning circles all over the country.

These principles encourage interaction among neighbors, and promote a stronger sense of belonging for residents. The LUPP uses terminology such as providing connections, public spaces to encourage social interaction, mixing of uses to create a “village” concept, pedestrian activities, integrated community, sense of place, and quality of life. For example, the LUPP (RM Plan Group 1996, 11) stresses the “provision of public spaces that are designed to encourage social interaction” and encourages “the mixing of uses in new development to create a ‘village’ concept involving closer proximity of uses and more pedestrian activities.” These simple words help to set up a new, diverse alternative to the cookie-cutter housing choices offered over the past forty years – neighborhoods fairly devoid of opportunities to interact and become involved in the community.

Various plans for the Somerset parcel were created by the developers, which included high-density units and some commercial development (see Figures 1.5 and 1.6). These initial proposals met with criticism because the commercial and high-density residential areas were drawn as they typically are – along strips close to the intersection of Stange Road and 24th Street. Local residents protested the idea that their new neighbors could include gas stations, fast food restaurants, and apartment buildings, and also felt that there were too many dead-end streets and not enough open space (Hoffman 1996c, A3). The city decided to work more closely with the developers on this project because they wanted to put their LUPP into action. To become better educated about components of the Land Use plan, they sponsored a one-day workshop at Iowa State University in the spring of 1996. Each of the four presenters detailed current thinking about development

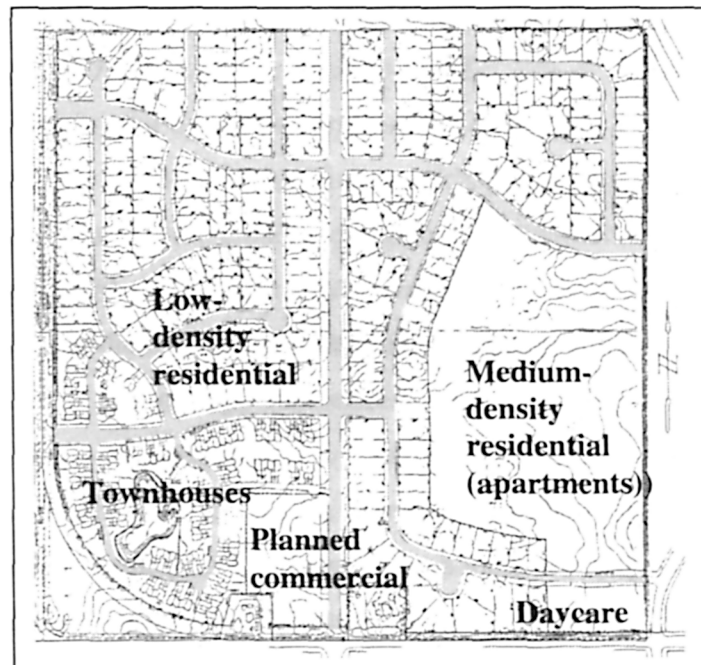


Figure 1.5. Original plan for “The Meadows” (now Somerset) proposed by the developers in September 1995 (Friedrich 1999).

practices. Discussions included examples of successful alternative housing developments, and the challenges of undertaking this unfamiliar prototype. Guest speakers included Jeff Speck from Duany and Plater-Zyberk Architects and Planners. As a result of the workshop, Mr. Speck/DPZ were hired as consultants on the project. Mr. Speck worked with the developers and Mr. O'Connell for several months developing a workable alternative for Ames.

A master plan and design package was submitted by DPZ to the city in August 1996. The package included a master plan drawing, project description, perspective drawings, detailed park plans, street specifications, urban design

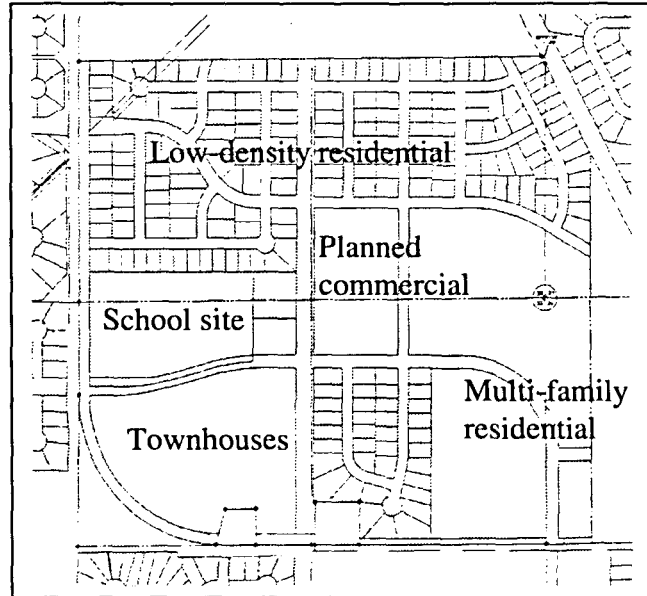


Figure 1.6. Revised plan for Somerset submitted by the developers in March 1996.

regulations for the various building types, architectural and retail regulations, prototypes of floor plans with elevation drawings, and a *TND Checklist* developed by DPZ.

The project was and continues to be plagued by opposition from the developers and city engineers. Mr. O'Connell stated that, "the developers, deciding Speck's blueprint was too radical for Ames, changed the design so that it more closely resembles a conventional subdivision" (Hoffman 1996b, A3). Street widths and corner radii were the subjects of concern early in planning. The city convinced the fire department and city engineers that the corner radii and street widths would allow fire and garbage trucks adequate access. The developers had already invested a lot of money and feared the proposal would not sell. The New Urbanist concept was unlike the existing housing market. Understandably, the developers feared that potential buyers would be skeptical. According to a local newspaper, Bob Friedrich, Jr. believed the end result may be "wonderful," but from the developer's point of view, it may be difficult to turn a profit (O'Donnell 1998, B10).

The developers proceeded to make changes to the design submitted by DPZ. Reiny Friedrich is quoted as saying, "We've got to fine tune this We're going to come up with

something we can live with, the city can live with, something that's good for the community and something that can be marketed in Ames" (Hoffman 1996a, A1). The developers protested that the numerous alleys would cause problems with snow removal, the narrow roads would lead to frustration and accidents, and the lack of parking would be a deterrent to renting the high-density units and attracting retail establishments (Hunziker 1999). For these reasons the commercial district was enlarged and more parking was added. Further disagreement surfaced in regard to the width of the lots, the distance houses would be built from the sidewalk, and placement of garages in relation to houses. It was argued that these items would create marketing problems because, in Reiny Friedrich's words, "of what it does to the layout of the house" (Hoffman 1996a, A2). Because the developers depend on stock plans for house designs, they were concerned that there were an insufficient number of existing patterns with attached garages placed far back from the front of the house. Housing types were clustered within the development, which is in opposition to New Urbanist principles. In defense of this decision Mr. Reiny Friedrich stated in an article, "It's best, we found, to have like-kind properties next door to each other and across the street from each other" (Hoffman 1996c, A3). To further delineate the different housing types, seven homeowner associations have been set up—one for each housing classification, one for the commercial, and one for the overall development.

Somerset is now a 150-acre modified traditional neighborhood at the northwestern edge of Ames (see Figure 1.7). There are 934 units planned for an expected population of 2,140 residents (City of Ames 1997b, 3). The gross density is approximately four dwelling units per acre and the net density is approximately nine dwellings units per acre (O'Connell 2000). Somerset is surrounded by primarily single-family residential developments. It is located within one mile of a high school, Iowa State University is less than one mile to the south, a large park is one-half mile to the west, a public golf course is one-half mile to the southwest, a large shopping mall is one and one-half miles to the east, and the historic downtown is two miles to the southeast. This development is unlike the homogeneous communities of single-family dwellings to the west, south, or east. Residents are offered a variety of house types and building facades—choices not offered in other parts of Ames or in many other towns or cities. Apartments, townhouses, rowhouses, and single-family

dwellings all share common spaces and will enjoy the neighborhood amenities of small shops and services in the town center. The street pattern is a modified grid offering a variety for walking, driving or biking. The road hierarchy offers wider streets (36 feet)¹¹ that collect traffic from narrow (20 foot wide) residential streets.

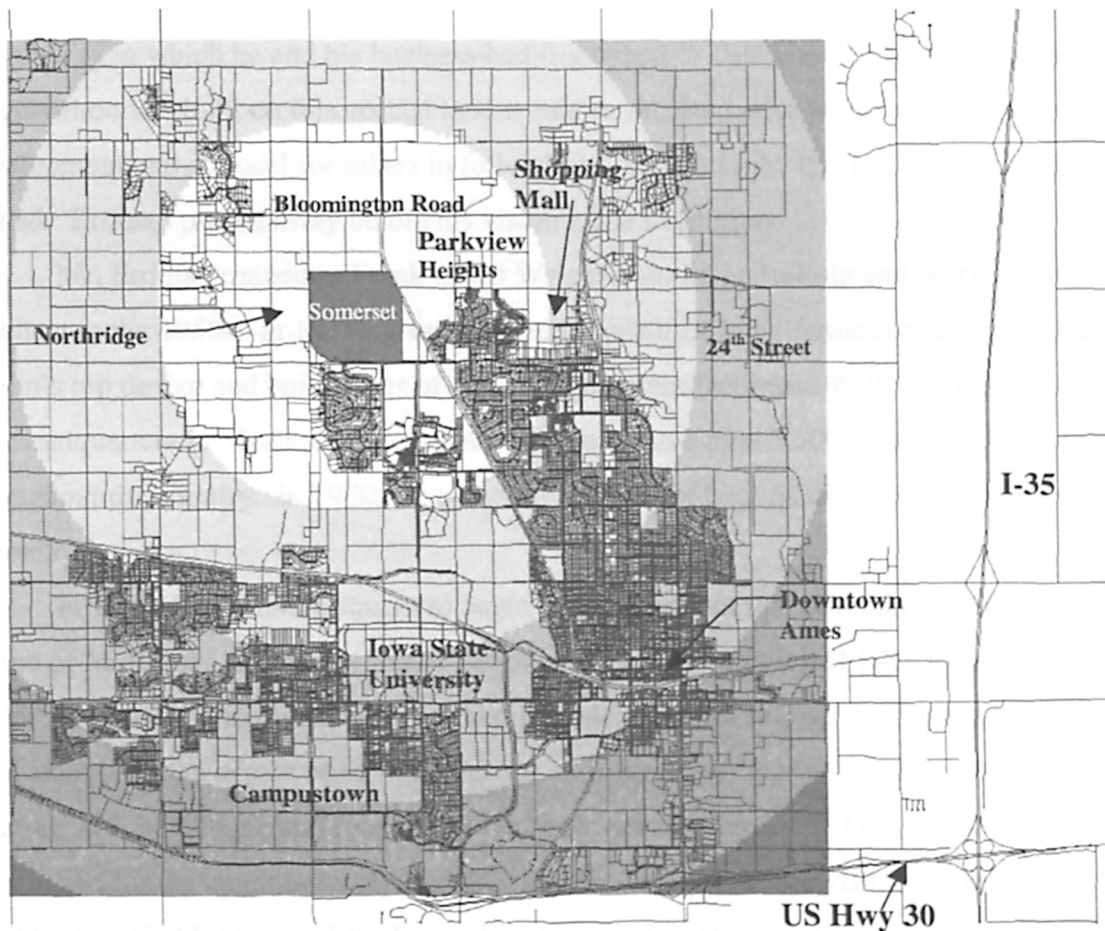


Figure 1.7. Map of Ames, Iowa showing one-mile radius distances from the center of Somerset to adjacent land uses.

Middleton Hills

The project in Middleton, Wisconsin offered an opportunity to study another Midwest New Urbanist development and analyze the design and development process. It also allowed an evaluation of the design relative to New Urbanist principles. The project was initiated by the developer, but planned by DPZ, and is being built with few modifications to the original

plan. Like Somerset, other residential communities surround it, but unlike Somerset, the developer is not the builder. The lots are being sold to and built by individual builders.

The community of Middleton Hills is located eight miles from Wisconsin's state capitol in Madison. Marshall Erdman was a designer and builder who owned a 150-acre parcel of land in Middleton for many years. He wanted to make a contribution to the community in which he and his business had flourished.¹² "He was determined that the neighborhood he built on this special land would be an alternative to current suburban development and a model for others to follow" (Middleton Hills, Inc. n.d.). It is unfortunate that Mr. Erdman passed away before his vision came to fruition.

Mr. Erdman trained in Frank Lloyd Wright's studio at Taliesin and worked with the architect in the 1950s. In 1951, he established Marshall Erdman Associates as one of the nation's top design and build firms of medical outpatient facilities. With six division offices and headquarters in Madison, his company has built more than 3,500 medical facilities throughout the country. In 1980, the company introduced high quality Techline furniture and cabinetry.

In 1993, Mr. Erdman sought to begin development of this new community in a hilly region of Middleton.¹³ Andres Duany and Elizabeth Plater-Zyberk of DPZ were approached by Mr. Erdman to bring their expertise to this project. In developing the basic design, the DPZ team spent a week in Madison speaking with municipal leaders, studying the site, meeting with neighbors, and looking at city codes and ordinances.¹⁴ Design codes were established for the community that would, "assure the physical and visual success of the neighborhood" (Middleton Hills, Inc. n.d.). A general implementation plan was presented in August 1994, and a specific implementation plan was ready in April 1995. Construction began soon after. As of February 2000 construction had been completed on 40 dwellings, the senior independent living, several live/work units, and the 20-acre wetland park (Grabowski-Miller 2000). Ultimately residents will occupy 523 units of single-family, townhouses, apartments, or other multiple-family dwellings.

Three tiers of regulations were developed to support an underlying structure of visual, spatial, and material uniformity throughout the development. According to the General Implementation Plan, the architectural, urban, and landscape regulations at Middleton Hills

“contribute to visual stability, aid in creating and maintaining interesting places within the neighborhood, and aid in sustaining property values” (Erdman Associates 1994, 2). There will be one homeowner association, which will cover all segments of the community.

As with Somerset, there were issues that needed to be resolved with this new community design. The planning commission was always behind the project but the public works engineers raised concerns about the width of streets and access for larger vehicles. There were also safety and servicing concerns raised by the fire department and sanitation departments in regard to turning radii and street widths. A balance was achieved without sacrificing the guiding principles. City Planner Eileen Kelley said the city conducted parking studies and tested emergency vehicle access. They were able to convince concerned parties that the road layout would work, even though the dimensions varied from the standard they were accustomed to using (Kelley 2000a). The topography of the site also presented challenges to the development codes. Erdman Associates had to allow some buildings to be three stories on the downhill side and one or two stories on the ridge to accommodate slope differences (Grabowski-Miller 2000).

Purpose of Study

Recognizing the benefits of New Urbanist design, this case study contrasts two different design and development processes and their potential for providing a quality housing alternative for citizens. There are five objectives to this study:

1. Evaluate the initial Somerset plan developed by DPZ, along select design elements in order to assess how well the plan meets the needs and conflicting desires of the various stakeholders.
2. Evaluate the final Somerset plan, modified and implemented by the developers, along the same design elements to assess how well it meets the needs and conflicting desires of the various stakeholders.
3. Determine whether changes from the initial to the final plan were beneficial to the city and its residents overall. In making this assessment the following questions will be addressed:
 - Which groups and elements benefited from the changes?
 - Whose needs were met and whose were compromised?

- In what way did the changes cause design elements to stray from New Urbanist principles?
 - Were these changes harmful to the objectives of New Urbanist design?
4. Evaluate how well the Middleton Hills design adheres to New Urbanist principles.
 5. Explore how different design and development processes contributed to different degrees of New Urbanist style in Somerset and Middleton Hills.

Significance

For various reasons, primarily economic, markets sometimes fail to provide more than one product choice for consumers. If the product or service is of significant importance for human need or quality of life, government agencies can, and perhaps should, play a role in providing consumer choice. This case study presents an example of a market (housing) where consumer choice is limited. The City of Ames identified this deficiency and imposed its authority, through the planning process, to encourage private businesses to provide an alternative to conventional development. This is notable in a number of ways. First, the city was able to recognize that important qualities were lacking in new developments being built in Ames. Second, the city took an active approach by updating its regulations and ordinances, which changed requirements for developers. Third, while the city promoted New Urbanism as a quality alternative, it supported changes to accommodate concerns of other stakeholders, principally the developers and neighbors. This study recognizes that if quality alternatives to conventional design are not being offered in the market, then government may have a role to play in promoting alternatives.

The final Somerset design reflects a hybrid approach mixing elements of conventional and New Urbanist design. Somerset will provide a test case for evaluating the acceptance of New Urbanist elements in a region where this development style is not prevalent. Once built, people can become accustomed to the unique layout, experience what it looks and feels like, but still identify with suburban elements that they are accustomed to seeing elsewhere. Somerset will allow developers to assess whether the physical and social environment created by New Urbanist design attracts buyers in this market, and whether it is a viable supply option. This study recognizes that a hybrid approach may be a good first step for the Midwest.

Finally, this paper sets the groundwork for future comparison of Somerset and Middleton Hills. These two similar-sized New Urbanist developments were built around the same time, but one was a government-initiated project and the other initiated by a developer.

Hypothesis

It is the intent of this research to differentiate the competing interests which are involved in (or affected by) the process of new neighborhood development, and to use case studies of particular developments to suggest that conflicting assumptions and values among these interests can have a significant impact on the outcome of the development process.

Assumptions

The foundations for this study are based on the following assumptions:

- There are explicit differences between the two Somerset plans – the original proposed plan submitted by DPZ and the final plan being implemented.
- These differences are significant enough to warrant an in-depth study.
- The people most intimately involved with the project and/or the process will be able to articulate their positions.
- The City of Ames Planning and Housing Department would like to encourage more housing choices in the city.
- Extrinsic house value is readily discernable while intrinsic values such as safety and sense of community are not easy to measure.
- Consumers, in general, are beginning to desire more choice in housing development layout.
- Developers and investors are primarily focused on sales and profits and less interested in innovative growth practices, or are slow to change their practices.
- People are generally concerned about the decline of neighborhood and community social structure.
- People are concerned about rampant, haphazard growth.

Limitations of the Study

This study does not intend to address:

- The New Urbanist approach relative to other alternatives to urban sprawl, including ecological planning and large-scale master planning with reliable public transportation linkages.
- The politics of land availability and reasons for land sales.
- Potential housing needs of extremely low-income owners or renters.
- Infill development as an alternative solution to land consumption.

Definition of Terms

Alternative housing. Housing that is different from conventional development, often designed to accommodate special populations or lifestyles. Examples include co-housing, single-room-occupancy, and various types of housing for the elderly.

Arterial street. A primary traffic route through urbanized areas which provide for a rapid movement of concentrated volumes of traffic over relatively long distances (City of Ames 1995, 23-4).

Build-to-line. To help define the street, the build-to-line requires that buildings be constructed beginning at that line, not set back from a certain point. Porches or stoops can extend in front of that line.

Charrette. Literally means “cart load” where designers bring their materials directly to the site, to gather information and to speak with stakeholders and citizens (Duany and Plater-Zyberk 1993, 33).

Collector street. A street intended to move traffic from local streets to arterial streets. These streets provide for movement at moderate speeds and provide a direct route between activity centers with a lesser degree of access control than arterial streets (City of Ames 1995, 23-4).

Conventional development. Low-density, auto-oriented suburbs that have characterized the American landscape since the end of World War II (Fulton, 1996, 2).

Cul-de-sac. A local street closed at one end with a turn around.

Gross density. The number of dwelling units divided by all the land in a development in acres, exclusive of dedicated road right-of-ways, etc.

Neotraditional planning. Principles of neighborhood design that are pedestrian-oriented and offer a mix of land uses including public spaces; a precursor to the New Urbanism (Fulton, 1996, 2).

Net density. The number of dwelling units divided by the land held in the parcels of a development in acres.

New households. Potential buyers, people in the market for a new house.

New Urbanism. A movement in architecture, planning and urban design that emphasizes a particular set of design principles, including pedestrian-and transit-oriented neighborhood design and a mix of land uses, as a means of creating more cohesive communities (Fulton, 1996, 7).

Outbuilding. Residential dwelling – backyard cottage/garage apartment equipped with a small kitchen and bath (Duany and Plater-Zyberk 1992, 34). Also referred to as an efficiency apartment, accessory unit, or granny flat. A structure not connected to the main house by an enclosed, heated space.

Pedestrian friendly. Sidewalks, street trees, building entries, and parallel parking must shelter and enhance the walking environment (Calthorpe 1993, 64).

Planned unit development (PUD). Housing projects built during the 1960s to 1980s with clustered townhouses and apartments surrounded by open space and other non-residential uses (Fulton 1996, 2).

Quality of life. Our degree of satisfaction with our surroundings (Lewis 1996, 6).

Shared parking. Parking spaces that can be used to serve two or more individual land uses without conflict or encroachment (Urban Land Institute 1999, 3).

Sense of place. Elements that foster social interactions between people and the living world; the environment as a “repository of meaning and not merely a collection of things” (Horrigan 1999, 250).

Suburban sprawl. A term generally used to refer to low-density, land consumptive patterns in conventional auto-oriented suburbs (Fulton, 1996, 3). Various uses are generally inaccessible to each other except by car.

Sustainability/Sustainable. In its broadest definition, sustainability means preserving the means of our present way of life as well as the options for changes, improvements, and adjustments in human affairs (Lewis 1996, 241). In terms of development – it should be designed to meet the needs of the present without compromising the ability of future generations to meet their own needs (Pawlukiewicz 1998, 69).

Technoburb. Independent, self-sufficient entities detached from the city. They are perimeter cities consisting of houses, industry, and commercial enterprises (Fishman 1987, 17).

Traditional Neighborhood. Pedestrian-oriented neighborhoods built in the early twentieth century (Fulton, 1996, 3).

Traditional Neighborhood Development (TND). Typically includes a commercial center within walking distance of dwellings. Also includes a mix of housing types and densities, buildings and streets are pedestrian-scaled, and there is a hierarchy of street patterns and use. A term often used by the Andres Duany and Elizabeth Plater-Zyberk architecture and planning firm DPZ to refer to the design principles they employ in implementing the New Urbanism (Fulton, 1996, 3).

Transit-oriented Development (TOD). A term often used by Calthorpe Associates to refer to the design principles that firm employs in designing neighborhoods around regional transit systems to reduce auto traffic (Fulton, 1996, 3).

Urban sprawl. See suburban sprawl.

Notes

- ¹ Terms are defined at the end of this chapter under “Definition of Terms.”
- ² Information obtained from Friedrich (1999) and O’Connell (2000).
- ³ Information obtained from Grabowski-Miller (2000), Kelley (2000), and Marshall Erdman Associates (1994).
- ⁴ A live/work unit is a row house with ground-floor store or office (Duany, Plater-Zyberk, and Speck 2000, 51).
- ⁵ This report will typically use the term “New Urbanism” when referring to these principles however; the author recognizes that there are fundamental differences between the various movements.
- ⁶ The five-minute walk became a standard determinant of neighborhood size when enunciated in the 1929 New York Regional Plan (DPZ 1996).
- ⁷ Chapter Three includes a detailed history of the major contributors and their role(s) in the development of Somerset.
- ⁸ The three developers currently do business as Friedrich/Iowa Realty, Hunziker and Associates, and the Furman Corporation. The property was acquired under the names R. Friedrich and Sons, Inc., Hunziker and Associates, and Furman Realty.
- ⁹ The term zero lot line means to build a dwelling with one wall on the side property boundary.
- ¹⁰ The 1996 projected population of Ames, including some students, was 48,691.
- ¹¹ Stange Road is the widest street at 88 feet, including center median.
- ¹² Often referred to as a visionary, Mr. Erdman cared about the community by becoming involved in state boards and commissions in addition to serving as a consultant for the Peace Corps and USAID.
- ¹³ The 1996 projected population of Middleton was 15,422.
- ¹⁴ This process is also known as a charrette. A charrette is a workshop where designers bring their materials and experts to the site to learn about the character of the place, the people, and the landscape.

CHAPTER 2. TOPICS FOR REVIEW

We must create meaningful places rather than take up meaningful space.

Keith Simon of Design Workshop speaking at the
1999 National ASLA Conference in Boston

Valuable evidence supporting this case study was gathered from published literature, which presented additional sources through their bibliographies. Sources included books, journals and periodicals between 1890 and 2000, with emphasis on the past twenty years for current topics. Internet searches led to published works, and information from various organizations such as the Urban Land Institute, National Association of Home Builders (NAHB), and the Congress for the New Urbanism provided valuable insight. Various keyword searches at the Iowa State University Library and via the Internet included new urbanism, land use, traditional neighborhood design, housing and marketing preferences, Neotraditional planning, suburban sprawl, alternative housing, town planning, planning history, census, Ames, Iowa profile, and Middleton, Wisconsin profile, as well as specific designer searches and various author searches.

The literature revealed a great deal about planning history, reviews of projects, and principles of New Urbanist design, but very little about the process followed to achieve a harmonious transition from conventional housing practices to more innovative alternatives. This review will include planning history with regard to suburban housing, and outline the general impetus of New Urbanism as a planning trend. A discussion of existing and potential owner preferences in relation to conventional and New Urbanist housing, and the influence of marketing on consumer behavior will be presented. Finally, principles of New Urbanism, the process followed in New Urbanist design, and an evaluation of New Urbanism will be discussed.

Suburban Housing History

Nineteenth century

Jackson (1985, 13) notes that residential segregation occurred early in the 1800s in larger cities such as Boston, New York, and Philadelphia.

Thus, the suburb as a residential place as a site of scattered dwellings and businesses outside city walls is as old as civilization and an important part of the ancient medieval and early modern urban traditions. However, suburbanization as a process involving the systematic growth of fringe areas at a pace more rapid than that of core cities as a lifestyle involving a daily commute to jobs in the center occurred first in the United States and Great Britain where it can be dated from about 1815.

He continues, “There were clear indications that the suburbs were in every way inferior to the core of the city Suburbs, then, were socially and economically inferior to cities when wind, muscle, and water were the prime movers of civilization” (Jackson 1985, 19). The very translation of the word “suburb” indicates that the suburbs are “beneath [sub] the city in significance” (Girling and Helphand 1994, 7).

Early in the nineteenth century, industrial cities provided jobs for many people, however the health risks were great and the labor was hard. Escape from the congestion and pollution of industrial cities was made possible by the provision of rail lines and streetcars. Streetcars provided transportation for the majority of Americans within urban areas from the late nineteenth into the early twentieth century. Although “streetcar suburbs” existed, they were somewhat limited in scale because people had to live within walking distance of the rail lines (Nelessen 1994, 27). New modes of transportation facilitated an exodus from urban centers.

Between 1815 and 1875, America’s largest cities underwent dramatic spatial change. The introduction of the steam ferry, the omnibus, the commuter railroad, the horsecar, the elevated railroad, and the cable car gave additional impetus to an exodus that would turn cities “inside out” and inaugurate a new pattern of suburban affluence and center despair. (Jackson 1985, 20)

1890 to the mid-1940s

Early in the twentieth century, English architect and planner Raymond Unwin placed importance on town planning as a social tool. The underlying principles of Unwin’s approach focused on careful planning, historical context, and beauty. He stated that a growing town should be laid out using a plan prepared with forethought that provided for the

needs of the growing community. Unwin declared it was a “pattern of life” he was seeking more than any form of civic design. He recognized that shared common interests linked the residents of a community and that these linking relationships must be considered in planning. He focused on what he called “civic art,” trying to design for the interplay of the community where citizens are constantly in touch with each other. Unwin emphasized the importance of history, believing the planner must be aware of the community’s cultural heritage. He didn’t mean for planners to copy the features of beautiful towns of the past, but to find the elements that made them beautiful and carry these traditional methods further. Finally, Unwin stressed the indispensability of beauty in town planning, proclaiming that he and his colleagues needed to instill the spirit of the artist in their work. But, he cautioned that art is a necessary element to be infused into their work and not merely tacked-on as trimming. Unwin encouraged more open ground, parks, playgrounds, and controlling streets by planning their width and direction (Creese 1994, 1967; Unwin 1994).

Ebenezer Howard revolutionized town planning by proposing Garden Cities where people might again live close to nature. Howard’s design ideas responded to the terrible living conditions in England’s city centers. His designs created self-sufficient small towns encircled with agriculture. Howard’s city was designed as a circular city crossed by boulevards with a park located in the center. The city was circled by a commercial arcade, then houses, and finally factories and warehouses were situated on the outside. Commercial and cultural places were located in the center and factories were hidden. Howard saw that good planning required anticipating all that would be needed after the city was built (Jacobs 1961, 17-19). To prevent the expansion of the city beyond its optimum size, Howard proposed that the town should be planned as a whole and not left to grow in a chaotic manner. A group of Garden City proponents, including Lewis Mumford, Clarence Stein, Henry Wright, and Alexander M. Bing, founded the Regional Planning Association of America in 1923 (Stein 1957, 14). For the next ten years these architects and planners were actively trying to balance the Garden City notion with suburban development practices. The suburbs were associated with high taxes, infrastructure costs, monotonous semi-detached houses, and unnecessarily wide streets (Southworth and Ben-Joseph 1997, 62). While Howard focused on a unity of design and purpose, Mumford and Stein held that regional

planning should focus on thinning out cities, and disperse enterprises and populations into smaller cities. Mumford and Stein felt that streets are bad for humans, houses should be turned away from wasteful streets, and commerce should be segregated from residences and greens (Jacobs 1961, 19; McKenzie 1994, 4).

Started in 1928, the Radburn development in Fairlawn, New Jersey was one of the first attempts to build a Garden City in the United States. Stein and Wright worked with the Fairlawn City Housing Corporation to obtain two square miles of undeveloped farmland sixteen miles from New York City. The developers felt there was a pressing need for a town in which people could live peacefully with the automobile. There were five main elements to the Radburn plan. First, houses were situated on cul-de-sacs within a “superblock,” 30 to 50 acres in size, rather than the narrow, rectangular blocks shaped by the traditional grid layout. Second, specialized roads were planned and built for one use instead of all uses. Roads were designated as service lanes, secondary collector roads, main through roads, and express highways. Third, there was a complete separation of pedestrians and automobiles. Planners routed walks and paths at different places and utilized under- and overpasses to bypass roads. Fourth, floor plans were turned around to face living and sleeping quarters toward gardens and parks, and service rooms toward access roads. Fifth, parks were interconnected throughout the development forming the backbone of the neighborhood. The main educational center or cultural center was located in a central place of importance. Strictly speaking, Radburn could not be classified as a Garden City since it did not incorporate industry or a surrounding greenbelt. Nevertheless, “Radburn demonstrated for America a new form of city and community that fit the needs of ... urban living in America ...” (Stein 1957, 41).

In his book *Visions for a New American Dream*, Anton Nelessen (1994) provides a succinct history of settlement patterns and the reasons for some of the trends in development. Nelessen explains that federal programs, and state and local land use policies have shaped the housing market since the early twentieth century. The separation of land uses began as early as 1926 with the *Euclid vs. Ambler Realty Co.* court decision (Nelessen 1994, 29). This Supreme Court decision to uphold comprehensive zoning emphasized the need to protect single-family houses from encroachment by commercial, industrial, and apartment dwellings.

In *Euclid* the Court sustained zoning at least partly because it maintained property values. “This ruling became the basis of all comprehensive zoning and planning in the United States, making single-use zoning the norm and mixed-uses [sic] zones illegal in many places” (Nelessen 1994, 29). This single-use zoning approach is now referred to as “Euclidean” or “Euclidian” zoning (Wright 1994, 174).

The Department of Commerce established the Standard City Planning Enabling Act in 1928. This act provided solid grounding for planning professionals to work with lawyers, engineers, and architects to create state legislation, thereby fostering city planning and comprehensive zoning (Wright 1994, 75). Following the Great Depression, the Federal Housing Administration (FHA) developed programs such as the National Housing Act of 1934 to help stimulate economic growth by favoring new construction over urban redevelopment. In 1937, the Federal Highway Administration was instituted to develop new road types to accommodate the freedom of automobile ownership. Also in 1937, the American Association of State Highway and Transportation Officials published the “Bible” for road design standards.¹ This blueprint encouraged the development of infrastructure for the purpose of growth and economic development. Federal subsidies through gasoline taxes provided much of the funding that encouraged highway building programs. Gasoline taxes remain in place today. Highways became the American symbol for progress. Strip commercial development and housing subdivisions dotted the landscape along these new corridors. “Such development proceeded unchecked and without any rational plan” (Nelessen 1994, 30). The streetcars that provided much of the transportation prior to the Second World War were abandoned, as were their networks (Nelessen 1994, 31).

The 1939-1940 New York World’s Fair seduced the eager public with modern conveniences, which became the goal for consumers. The introduction of the television set and air conditioning helped to define the American home. These technological marvels allowed for a significant change in the American lifestyle where families preferred to spend more time indoors (Nelessen 1994, 31).²

The mid-1940s to the early 1980s

Subdivisions built between 1945 and the mid-1970s tended to possess five common characteristics: they were constructed adjacent to existing developments; they were relatively

low-density; they were architecturally similar; they were abundant and thus implied that houses were no longer only for the wealthy; and they were economically and racially homogeneous (Jackson 1985, 238-241).

Returning veterans from World War II and the baby boom's larger families required many new dwellings. "Through television and marketing, the expectations of Americans grew" (Nelessen 1994, 32). Suburban development was huge in scale, starting the era of mass-produced housing. Large-scale developments decreased overhead costs, which allowed builders to keep house prices low. Mass-production resulted in standardized dwellings lacking in architectural detail. Standardized developments lead to standardized urban planning focused exclusively on detached, single family houses on individual lots, easily accessed by the private automobile (Rybczynski 1995, 194). This new pattern represented "the ideal model for the young, American family of modest means in the postwar period" (Girling and Helphand 1994, 96).

Inner city neighborhoods began to deteriorate with either real or perceived increases in crime rates. People identified inner cities with crime, excessive drug use, low educational attainment, and high unemployment. By 1950, America's preferred solution to urban problems was to attract young families to suburban areas. The intention was to remove massive quantities of substandard housing from cities. Villages expanded and the middle- and upper-income populations began to leave cities as the FHA strengthened programs that fostered suburban ownership. Potential buyers were enticed to relocate (Nelessen 1994, 32).

Attempts were made to reverse the decline of inner cities. The National Housing Act of 1949 was an early Urban Renewal program, which cleared blighted areas. The Housing Act of 1954 expanded Urban Renewal and established redevelopment procedures for the physical structures in cities and towns, but did not address the social problems. These acts did not provide much relief for the areas they were attempting to help. "They neither ended the degradation of the inner city nor promoted the creation of healthy environments" (Nelessen 1994, 32). These unsuccessful ventures further contributed to urban growth outside of cities.

Potential owners who decided to seek housing on the urban fringe could obtain mortgage insurance and low interest rates by purchasing houses that met FHA standards.

These standards included large lots, generous setbacks, and centrally located parks, and assured quality in both houses and neighborhoods. Recognizing that owners valued these assurances, builders willingly followed FHA guidelines. These guidelines were predicated on providing “a safe, secure family haven, a symbol of success, and a ‘good place to raise your kids’” (Girling and Helphand 1994, 82-83).

When advising developers, the FHA attempted to differentiate between platted subdivisions and neighborhoods. “Subdivisions planned as neighborhoods are more profitable to developers, better security for investors, and more desirable to homeowners” (Girling and Helphand 1994, 86). The FHA was trying to promote the development of distinguishable neighborhoods. In their philosophy, neighborhoods should include shopping, churches, schools, parks, and access to public transportation. However, the FHA stated that neighborhoods planned for higher priced dwellings did not require local retail establishments. The Federal Housing Authority presumed that the more affluent would shop by car at distant commercial centers (Girling and Helphand 1994, 88).

During the 1960s and 1970s the Federal 701 Comprehensive Planning Act further encouraged urban flight because it typically required single-use zoning and highway development (Nelessen 1994, 33). However, by 1960, land suitable for suburban housing was becoming scarce and more expensive. Developers could no longer build big lot suburban houses to sell at prices affordable to the middle class. Developers concluded that housing density needed to increase. Developers knew that it would be difficult to sell this idea since the appeal to buyers was sufficient lot size, refuge from urban life, heterogeneity, privacy, being close to nature, and autonomy (McKenzie 1994, 80-82).

A new program was developed to help developers to accommodate changing needs of new buyers. The New Communities Act of 1968 provided federal loans to support new infrastructure for communities throughout the United States. The goals of this Act were to provide affordable housing, place jobs in proximity to houses, and provide community services. Unfortunately only a few communities were funded (Nelessen 1994, 33). The Urban Growth and New Community Development Act of 1970 was created to provide grants and loans to new town developers (Wright 1994, 72). National planners collaborated with the building industry to research and publicize alternatives to subdivided suburbs. The

American Society of Planning Officials, the Federal Housing and Home Finance Agency, and the FHA worked with the NAHB, and the Urban Land Institute. Together they encouraged comprehensive planning for land use, transportation, open space, and recreation. These collaborative efforts, and the failed New Communities Act, lead to the development of guidelines for cluster development, including common interest developments (CIDs), and planned unit developments (PUDs) (Girling and Helphand 1994, 109).

Cluster developments allowed developers to group housing in exchange for providing open space. This effort reduced roads, lot sizes, and total infrastructure, and therefore costs. Individual lots were smaller but each cluster was separated by common land. The same overall density within the development was maintained (Girling and Helphand 1994, 111).

A CID is a development where residents share common interest in some of the property. In these cases, homeowner associations act as private governing bodies, which address the issues related to the common property (McKenzie 1994, 81). CIDs took over many municipal functions such as provision of parks and security. In the mid-1960s the FHA encouraged CIDs as a way for municipalities to avoid paying for these services through taxes (McKenzie 1994, 22). Developers and the FHA began sustained efforts to convince people of the advantages of higher densities. They saw homeowner associations as an ideal tool for counteracting the impersonal nature of big cities, and they were seen as a way to revive a grass roots sense of community, by controlling nearby facilities. This way, residents could participate actively in the life of their neighborhoods. Residents were told they were returning to traditional town meeting democracy based on ownership of their community (McKenzie 1994, 24, 82).

A PUD is a widely accepted land use strategy that allows multiple uses on a single tract of land. Local governments granted special zoning privileges to private developers if they built PUDs. Regulations covering building setbacks, street widths, densities, distances between houses, and mixing residential and commercial uses were relaxed. However, only the large developers could afford the lengthy development applications and extensive drawing preparation, thus leaving little incentive for small developers to participate. Though widely accepted, PUDs did not address existing urban ills or alter the prevailing pattern in the suburbs. "In 1962, for instance, the government spent \$820 million to subsidize housing for

the poor; in that same year, it spent approximately \$2.9 billion simply on homeowners' tax deductions, most of which went to the suburbs" (Wright 1995, 260).

The environmental movement in the 1960s rallied for legislative and zoning officials to consider using "natural and environmental features as the basis for land-use controls" (Nelessen 1994, 34). Incorporating ecological concerns with planning and design, Ian McHarg's revolutionary 1969 book *Design with Nature* used overlay mapping to categorize land as either environmentally suitable or unsuitable for development. The Historic Preservation Act of 1966 helped to establish historic and traditional building and streetscape precedents. Tax credits offered an incentive for preservation (Nelessen 1994, 37).

The subject of "community" was beginning to surface with the advent of large developments with similar-looking houses, built side by side, surrounded by fences, and isolated from public transportation, shopping, and entertainment. In the 1960s, Reston, Virginia and Columbia, Maryland were two complete "new towns" designed to be economically self-sufficient communities. Developers utilized professionals in a collaborative effort to plan for community life. Designs focused on shopping, service, and networks of open space to provide "new ways of living" (Girling and Helphand 1994, 122). Planned communities such as these had more comprehensive land planning, superior recreational facilities, safer and easier pedestrian routes, reduced auto traffic, and more diverse populations. However, these town plans were too big for most of the development industry. New town development "took too long to reach maturity for a culture compelled by instant gratification" (Girling and Helphand 1994, 134).

In the mid-1970s, when a national recession led to greater competition in the industry, developers began to emphasize marketing. Developers worked to sell lifestyle and emotion and sell potential buyers before they saw the property. Developers used a cohesive theme to sell a package, which established the community's image. Developers typically emphasized natural themes, whether the natural landscape existed or not. Community development became more of a corporate enterprise in the 1970s. Much less emphasis was placed on social innovation and civic life (Girling and Helphand 1994, 139).

Master-planned communities (MPCs) developed in the mid-1970s were significantly larger than PUDs but less comprehensive than new towns. They targeted very specific

market niches defined by income level, personal or family status, or common interests (for example, golf). Large corporations, intent on making a profit, privately developed these communities by targeting upper income populations and limiting commercial enterprises within the community to those that the residents would support. Local governments welcomed these developments as contributors to the local economy and provided modest financial support. Common open space was a standard design element because residents expected it, and in many cases, local governments required that a percentage of the parcel remain open. Many developers met this requirement by building golf courses, thus providing a very specific amenity at the expense of the recreational community park (Girling and Helphand 1994, 142). MPCs had positive open space practices, but automobiles still dominated. Biking and walking trails were limited to recreation, golf courses dominated open space, and densities were low.

Although well planned by contemporary standards, MPCs only scratch the surface of environmental or social problems. They address short-term needs and desires, while ignoring long-term and incremental impacts Once [residents] get into their cars to commute to work or to go shopping, the community open space plan has little significance to their lives. (Girling and Helphand 1994, 167)

House buyers had recognized the private dwelling as an investment for years. However, in the 1970s, developers expanded their role to offer owners a secure investment. Developers became more competitive while vying for fewer buyers, and builders emphasized marketing. Consumers became more sensitive to what their money could buy. Developers initiated covenants³ to protect investments in order to maintain image, status, and security (Girling and Helphand 1994, 144). Each owner of a lot may enforce them against another lot owner (Wright 1994, 34). Covenants, codes, and restrictions (CC&Rs) are used to control the future action of owners (Girling and Helphand 1994, 144). CC&Rs “give a developer the power to create a distinct lifestyle in a development, which the developer can use as a powerful marketing tool” (McKenzie 1994, 128).

Appearing in the mid-1970s, Ecoburbs presented alternative living situations focused on sustaining natural systems while fostering a community lifestyle that encouraged environmental sensitivity. Planning and design attempted to reduce the impact of development on natural resources by encouraging walking, bicycling, and public

transportation; on-site recycling and reuse of water; elimination of harmful chemicals such as pesticides; and energy conservation (Girling and Helphand 1994, 153). Only a few successful examples of this philosophy and lifestyle exist today.⁴

In the 1980s, gated communities were built, and continue to be built, to increase safety and thus to protect the owners' investment. While it has the effect of keeping some people out, it also has the effect of walling residents in (Marcus, Francis, Meunier 1988, 26).

The mid-1980s to the year 2000

McKenzie (1994) contends that America's culture is focused on "privatism," where the purpose of the citizen is to seek wealth, and the job of the city is to be a community of private moneymakers. He writes that since the 1920s, large corporate builders have made single-family housing a mass-produced consumer item built for short-term profit. Although corporations have planned and built on a grand scale, their communities have been based on private ownership and designed to protect property values. They have not conducted their business with the idea of long-term social transformation. Instead, real estate developers have built communities that serve as a monument to privatism, with government as a silent partner (McKenzie 1994, 8).

Suburbs today are independent and self-sufficient entities detached from the city. They are perimeter cities consisting of houses, industry, and commercial enterprises. Fishman (1987, 17) and Girling and Helphand (1994, 146) observe that today's suburbs, or more appropriately "technoburbs," are the product of zoning practices and the availability of freeways, which have led to segregated and disorganized layout. Technoburbs appeared in the early 1980s because communication networks enabled businesses to prosper in dispersed locations. The growth of these outer technoburbs has, on the one hand, led to liberation from the city, but on the other hand, has increased dependence on automobiles. Automobiles and highway access determined the basic framework of these conglomerations of housing, shopping malls, schools, and high-tech industrial parks. Rybczynski (1995, 202) reasons that automobiles provided not only individual freedom, but freedom to move goods and services. This induced small industry to locate off highways outside of town. The automobile affected the location and design of offices, strip developments, drive-ins, shopping centers, and malls.

Zoning practices continue to mandate single-function land uses. Zoning sets minimum lot requirements, deep building setbacks, and maximum building heights. Parks are placed on cheap leftover land, shopping centers are placed at intersections, and civic centers are located away from historical downtown areas. Everything has a separate zone or “pod”. Housing, shopping, and industry are separated, and economic class separates housing. As a result, residents are forced to make frequent automobile trips over great distances in different directions (Calthorpe 1993, 22; Girling and Helphand 1994, 178; Kunstler 1996, 110).

This country’s enjoyment of cheap gas and a populace wealthy enough to afford a basic automobile has had a tremendous impact on the design of towns and cities. The auto is pervasive in United States culture because it is convenient and allows people to lead productive lives, but more importantly because people can afford to do so. Consumers and developers expect community designs to be built for the auto because it provides relatively cheap independence. Consumers take advantage of this resource to realize other efficiencies in their lives such as driving to large big box retailers to conduct all their shopping at one or two locations, thus saving time and money. They save time because it requires fewer stops, and they save money because big volume retailers also benefit from cheap gas when transporting goods. Other economies of scale are realized by virtue of sales volume and purchasing power. Conventional design incorporates ribbons of highways and arterial roads to accommodate this way of life (Kunstler 1996, 106). Transportation planners use a hierarchy of roads, from residential to collector, and arterials to highways and freeways. This system is designed for high speeds and disregards pedestrian uses (Girling and Helphand 1994, 178).

The future

Girling and Helphand (1994, 217) recommend, “The task of the community planner is not to design a static product, but to set the framework for a process of change that improves the quality of a place with age.” Rybczynski (1995, 231) supports the idea of a forward-looking process that confirms people’s desire for local identity and old-fashioned architecture. He cautions that it should not be confused with a desire to return to the static communities of the past. People will not give up physical and social freedom and mobility.

Future design should include the best of both worlds by facilitating and shaping people's desires to disperse by creating new centers of concentration within sprawling districts. People need places to gather and places to get away from each other, but one does not necessarily preclude the other (Rybczynski 1995, 231-232). For these reasons, Warrick and Alexander (1998, 23) reason that developers will need to look at community and design issues from both a social research and marketing standpoint.

Girling and Helphand (1994, 213) maintain that creating a synergy between resource conservation, historic precedents, and current patterns of growth are the challenges facing future designs. Providing more linkages between houses, parks, natural areas, and local services; inverting designs which currently treat pedestrians as impediments to the flow of traffic; wasting less land with pavement; and encouraging denser land use patterns are some recommendations for change. To create a "more humane and ecologically healthy living environment," Corbett (1981, 7) contends that people must use the best current technologies and planning tools to build new communities and rehabilitate old ones. Jackson (1985, 304) reasons that the future cannot ignore the past; "Decisions made in the past impose powerful restraints on the future. The location of buildings, streets, and highway systems imposes a measure of permanence on the form of community." Girling and Helphand (1994, 213) agree that strategies need to be devised to retrofit the immense investment already made in the suburbs.

Jackson (1985, 304) predicts that by 2025 new patterns for energy efficient human activity will have to replace current energy inefficient and automobile-dependent suburban systems. Calthorpe (1993, 44-45) advocates that the design of communities needs to understand the qualities of nature in each place and balance nature with towns in order to make them sustainable and spiritually nourishing. Warrick and Alexander (1998, 24) reason that by incorporating principles of ecological sustainability, communities will last for generations and leave "good legacies for future generations."

Duany and Plater-Zyberk (1992, 48) assert,

Building real towns will require changing master plans, codes, and road-building standards, and, above all, attitudes Americans need to be reacquainted with their small-town heritage and to be persuaded of the importance of protecting the human habitat every bit as rigorously as the natural habitat. Architects and planners and developers can be leaders and educators, but ordinary citizens will have to insist that

the happiness of people finally takes precedence over the happiness of cars, that the health of communities takes precedence over the unimpeded flow of traffic.

Finally, Nelessen (1994, 366) predicts that citizens will help to create a new pattern of development and redevelopment. He urges that this pattern must be more positive and responsive to the user and to the environment, but continue to meet the needs of consumer markets and affordable prices. “Let us gain a sense of respect for ourselves, our community, and our government by allowing a new American Dream of well-designed small communities, linked to all other communities, where everyone can feel safe, know and respect their neighbors, and effectively use our wealth of technology to expand the quality of our lives” (Nelessen 1994, 369).

Design Issues and Social Implications

Langdon (1994, 1) observes, “There is a strong connection between the ills we exhibit as a people and the suburban ‘communities’ that we inhabit.” Langdon continues, “We are being injured in two ways – one from the defects of the suburbs themselves, the other from the more general contaminants in our society ...” (Langdon 1994, 2). These contaminants include unfulfilling jobs, materialism, insecurity of work and income, and the influence of marketing and advertising. Many criticisms of conventional suburban design focus on the use of land and resources, and the physical appearance of the houses and neighborhoods. However, there has also been a significant amount written about the social implications of living in communities which lack identity, provide few opportunities for those unable to drive, and are isolated from city centers. Strong arguments are made by many authors that poor community design, or an apparent lack of positive community design, sustains many social problems. Langdon (1994, 2) and Nelessen (1994, 7) contend that a well-designed community can combat these contaminants by fostering contact with nature, and counteract the troubles associated with the scarcity of time. The wastefulness of natural resources and time associated with auto-dominated culture detracts from the quality of life.

The housing that is available today is generally regarded as placeless, meaning that one subdivision or development can be found virtually anywhere in the country (Harris and Larkham 1999, 2). It has little historic precedent that it draws from to anchor it in the

regional landscape. Support comes from Duany, Plater-Zyberk, and Speck (2000, 12) who contend, “Each year, we construct the equivalent of many cities, but the pieces don’t add up to anything memorable or of lasting value. The result doesn’t look like a place, it doesn’t act like a place, and, perhaps most significant, it doesn’t feel like a place.” This sentiment is reiterated by Calthorpe (1993, 9) who states, “We are adaptable and our communities are formed around interest groups and work rather than any sense of place or history.” Evidence shows that traditional neighborhoods provided elements that people like – “mixed use, mixed income, apartments and offices over the stores, moderate density, scaled to pedestrians, vehicles permitted but not allowed to dominate, buildings detailed with care, and built to last” (Kunstler 1996, 37). Anton Nelessen’s Visual Preference Survey™ technique, introduced in 1979, indicated a consistent negative reaction to sprawl development and a positive reaction to traditional neighborhood patterns (Nelessen 1994, 37).

This section deals primarily with conventional design. The reader is cautioned that, while some suggested solutions are discussed, they are certainly not exhaustive. In addition, more solutions are discussed under the Evaluation of New Urbanism and Conclusions sections at the end of this chapter. The issues outlined in this section confront design and social implications of design, especially the conspicuous lack of comprehensive design. This discussion leads into a dialogue about some principles for understanding and implementing guidelines for change. The ultimate goal of these principles is to set a flexible framework for community and regional development.

Government policy

Calthorpe (1993, 22) asserts that nearly every city, county, and town has a set of zoning ordinances and planning codes that bind the community to a future of sprawl-like development. Zoning laws still follow the patterns of “Euclidian zoning” established in the early twentieth century. Duany and Plater-Zyberk (1992, 23) note that this “residue of the Industrial Revolution” mandates the rigid segregation of housing, commerce, and industry and they maintain that zoning and other government regulations need to be changed in order to foster a spirit of community. Martin and Warner (1997, 119) contend that the regulatory framework is “specific about many things but generally amounts to prohibitions *against* what

is most feared rather than prescriptions *toward* what is most desired.” Some planners criticize local zoning codes that emphasize reduced densities and orienting the community around the automobile. This auto-focused approach leads to segregated land uses, wide streets, extensive off-street parking, generous setback requirements, and berms or other visual barriers. Fulton (1996, 18) notes that traffic engineers prefer wide streets, no on-street parking, cul-de-sacs, and rigid street hierarchy, and he contends that local officials are resistant to change the codes. Further, Martin and Warner (1997, 119) remark that regulations seldom expire, nor are they reviewed in light of changing conditions.

In a survey conducted by the NAHB (1999, 15), 73 percent of the respondents either agreed or strongly agreed that, when managed properly, growth is good for communities. Additionally, 72 percent felt that local government holds the primary responsibility for managing growth. Calthorpe (1993, 34-36) feels the problem with current town comprehensive plans is that they often fail to take into account regional concerns and sometimes emphasize parochial concerns. Langdon (1994, 202-204) notes that suburbs vie with one another and with cities for residential developments, office parks, shopping malls, and light industrial facilities to increase the town’s tax base. He argues that, in their quest for financial benefits, municipalities too infrequently ask what kind of development will make their community as satisfying as possible. In their pursuit of greater tax revenues, communities become blind to their true potential.

Langdon (1994, 208-209) suggests town governments need to expand their vision and look beyond financial considerations and the generation of tax revenues and focus more on quality of life issues. Even in 1939, Jensen (1990, 89) suggested that the real purpose of town planning was to guide the city so it will retain a livable atmosphere. A possible way to avoid the competition for tax base among towns is to share revenue regionally. Another option is to allow state governments to exercise power over planning that necessitates a broader perspective. Langdon (1994, 208-209) cautions that state-directed initiatives sometimes result in government specialists pushing certain agendas, such as water quality, air pollution, economic development, or transportation, at the expense of a more balanced approach. All planning needs to take into account distinctive features of the community.

Some already criticize the government for dictating housing design. Gordon and Richardson (1997, 97) favor market tests but oppose attempts to impose compact developments through zoning and regulations. Ironically, the only way a market test is going to happen is if planning is initiated by local government. Gordon and Richardson attest that builders will not initiate these types of projects on their own. Therefore, it must come from local government whose role it is to look after the larger public interest.

Streetscape

The streetscape helps to shape and support elements of design that contribute to the atmosphere of that community. Structural elements of the street and its dimensions, sidewalks, housing density, and street-to-building ratios are overlaid with human-scale elements such as lawns, landscaping, and front porches.

Kunstler (1996, 136) maintains that buildings foster certain behavior in humans. Human beings desire enclosed spaces and feel sheltered and protected by the presence of awnings, arbors, arcades, and shade. Buildings should not be categorized by use, but by height, mass, and attitude toward the street. Buildings should be pulled together by some structure of unity to form a “street wall”, sized in proportion to the width of the street. Parking lots or vacant spaces should not interrupt the street wall. Duany, Plater-Zyberk, and Speck (2000, 161) even rank streetscape elements from best to worst: shopfront, porch, stoop, yard, blank wall, parking lot, and parking structure. They also recommend a streetscape ratio of 6:1 (Duany, Plater-Zyberk, and Speck 2000, 78). Specifically, the distance from building front to building front should not exceed six times the height of those buildings. This ratio is recommended in order for pedestrians to feel a sense of enclosure, a sense of space, and ultimately, a sense of place.

According to Jacobs (1961, 55-56), sidewalks bring together people who do not know each other in an intimate, private social fashion. A certain amount of contact is useful or enjoyable. The sum of these public contacts gives a person a feeling for the public identity of people, a web of public respect and trust, and a resource in time of neighborhood need. Rybczynski (1995, 230-231) adds that pedestrian pleasures of traditional cities and towns have made a comeback. Americans have preserved a taste for old-fashioned pedestrian urbanism. They crave for a sense of local identity, sharing experiences at a smaller scale,

and this desire for a sense of community has spawned interest in traditional neighborhood patterns.

Perhaps the most prominent human-scale element is the front lawn. Fishman (1987, 147) contends that many people take great pride in the appearance of their lawn and go to great expense and effort to maintain it. Ironically, little activity takes place on the front lawn of the house. According to Duany and Plater-Zyberk (1992, 41), landscaping is not only an aesthetic necessity, but a social one as well. Trees and other plantings provide shade and help to soften the scale of surrounding features. In addition, the front lawn is part of the neighborhood package. Fishman (1987, 147) writes, in many ways the lawn belongs to the community because it transforms the atmosphere of an urban street to that of a park. “At the same time the lawn is also private space, which no casual sidewalk passerby can make his own.” It insulates the house and thus maintains a balance between public and private.

Advocates in favor of New Urbanism principles suggest sacrificing some of this unused space for the common good of the community. Calthorpe (1993, 84) writes that, by making front yards smaller and dedicating a larger portion of the lot to the back yard, the extra land can be transferred to shared open space and natural areas for public use.

Girling and Helphand (1994, 32-33) state that driveways are the paved portions of front yards. They maintain that the driveway provides a multi-functioning space where households work, play, and socialize. The driveway is where activities such as basketball, tricycle riding, garage sales, and vehicle washing take place. It is where automobiles are stored, sometimes even when people have garages to use.

An attached garage is of primary importance to suburban dwelling owners. Garages are designed to hold two or three vehicles without difficulty. Langdon (1994, 155) observes, garage doors frequently dominate the façade of the building exterior (see Figure 2.1). They also occasionally protrude into the front yard, sometimes diminishing the main structure behind and making it difficult to locate the entrance. Duany and Plater-Zyberk (1992, 38) feel that the garage should not be the priority feature in a pedestrian-oriented neighborhood. These advocates of traditional neighborhood design do not admonish the garage altogether. They orient garages on a back or side alley, making the front of the home interesting to humans.

Today's front porches are acknowledged as more symbolic than practical. Kunstler (1996, 144) criticizes the front porches that builders sometimes "tack on" suburban houses for the purpose of curb appeal. These front porches are less than six feet deep and inadequate for furniture and human use. The nostalgia associated with front porches evokes sharing and neighborliness. The principle behind using the front porch as a central design element stems from the desire to enable relationships – the same as placing the house closer to the street. Brown, Burton and Sweaney (1998, 579) conclude, "A variety of fond memories are attached to the front porch, even in the modern era with the multiple competitors for free time." They discuss that front porches provide a flexible, supportive setting for pleasant interactions, solitude, visual contact, and group use.



Figure 2.1. House in Ames with garage dominating the front.

Space behind houses

In conventional neighborhoods, back yards extend the family room and kitchen outdoors creating private miniature parks used for passive and active recreation. Large yards essentially replace the desire or need for neighborhood parks, however they also replace the sociability associated with shared common spaces such as neighborhood parks (Girling and Helphand 1994, 27).

The space behind dwellings is generally regarded as private and is often separated from public spaces using fences or vegetative screening. Without these well-defined boundaries the distinction between the public and private realm become obscured (see Figure 2.2). Girling and Helphand (1994, 115) and Duany, Plater-Zyberk, and Speck (2000, 32) reason that when back yards are adjacent to greenbelts or recreation paths, the aggregate space is sometimes too large, it feels like a private back yard, and people feel that using the space violates privacy, so it is not fully utilized. "The result in many [developments] was

common areas left as ill-defined ‘viewing’ space, intended to give the impression of spaciousness, yet so exposed that people were uncomfortable using them.” Further evidence is presented by Duany, Plater-Zyberk, and Speck (2000, 75) who state that the degree of architectural enclosure contributes to the comfort of a place. They continue by stating that a lack of geometric definition impedes the residents’ ability to develop a sense of ownership. As a result, these spaces are improperly used, if at all, and poorly maintained. Martin (1999, 115) further reveals that the openness of back yards leads to a lack of privacy and personal space that is not exempt from public scrutiny.



Figure 2.2. Ames neighborhood with poor definition between public and private space.

An important element to rear-yard design is the inclusion of alleys (see Figure 2.3). Some authors contend that alleys are necessary social spaces, while others find them a nuisance and only practical for service uses, where snow collects in the winter. Duany, Plater-Zyberk, and Speck (2000, 81) contend that alleys are included for access and purely utilitarian functions, “where all the messy stuff goes.” “Messy stuff” includes garages, trash receptacles, utility access boxes and meters, and storage units. They also reveal that many zoning codes render alley inclusion illegal. Though designed for service uses, the functionality of alleys located behind houses is becoming more accepted as potential recreational and social areas. Alley advocates reason that they provide safe (often paved) play surfaces for children (especially the young) to bicycle, skate, and play ball,



Figure 2.3. Alley in Ames, Iowa Historic District

and interact where automobiles are less of a threat. As one of the few people to specifically study and write about alleys as social spaces, Martin (1996, 152) concludes that these landscapes are rich, diverse, and meaningful. He notes that it is not the spatial relationships that make the space meaningful, but it is the everyday goings-on and the common connections that allow “diverse households [to] interact, freely expressing their personalities in an intermingled, close-knit community landscape.”

Road hierarchy/Traffic

Current and historic growth patterns confirm that suburban development induces automobile dependence. Expanding on this point, Hylton (1995, 32) states, “Our dependence on the car spurs the extension of highways and the spread of parking lots and the sprawling of suburbia.” Americans love to be mobile. This mobility, often in the form of private automobiles, has led to a landscape of environmentally degraded land uses, excessive road networks, traffic congestion, vast expanses of unoccupied parking lots, concerns for personal safety, degradation of downtown areas, antisocial behavior, isolation for those unable to drive, and great expense (Calthorpe 1993; Duany and Plater-Zyberk 1992; Hylton 1995; Jackson 1985; Kay 1997; Kunstler 1996; Langdon 1994).

Duany and Plater-Zyberk (1992, 45) comment, “Building more highways to reduce traffic congestion is an exercise in futility.” They go on to assert that the only permanent solution to traffic problems is to bring neighborhood elements together – housing, shopping, and the workplace. Gordon and Richardson (1997, 98) agree with this concept, but assert that the suburbs have already been successful in bringing these elements together. They argue that suburbanization has been a fortuitous mechanism for reducing congestion because road and highway demand has shifted to less congested routes, away from core areas. Trip lengths have increased, but because highway speeds have increased, time traveled has remained about the same. Weiss (2000, 68) notes that a 1998 survey showed 50 percent of all motorists like driving time and use the time to think and enjoy some solitude. He states that rush hour traffic and road rage are still at tolerable levels. People will not change their driving patterns until the costs, direct and indirect, become more expensive.

The American automobile-dominated culture has created an intricate network of roads and large parking lots to accommodate America's lifestyle focused on convenience. Transportation planners utilize a hierarchy of roads designed to speed traffic flow (see figure 2.4). Residential streets lead to collector streets, which lead to arterial roads, and then to highways and freeways. Traffic engineers seem fixed on moving traffic as smoothly as possible and do not dwell on aesthetics, social consequences, or the quality experiences of motorists. Langdon suggests that motorists and pedestrians find less



Figure 2.4. An arterial street in Ames.

satisfaction in the auto-friendly street designs compared to older neighborhoods. People would rather have travel options than be limited to following a single path. Arterial roads exude ugliness because houses are typically oriented with their backs to the street and high fences are erected to form visual barricades (Girling and Helphand 1994; Langdon 1994, 31, 36, 59).

A 1999 NAHB survey indicated that 75 percent of the respondents agree that growth creates traffic problems, and 79 percent cite heavy traffic as the most negative aspect of growth in their area (NAHB 1999, 15). Traffic congestion can be linked to the convenience and independence of automobiles, the use of collector streets and cul-de-sacs, the poor connectivity of streets, and multiple vehicle ownership. Kay (1997, 20) reports that half of all American households own more than one car, one-third own two, and one-fifth own a third vehicle. A possible solution, Langdon (1994, 60) asserts, is for traffic planners to create a better balance for the needs of autos with pedestrians and bicycles. They need to be designed to encourage walking and biking, facilitate mass transit, and foster community social life and neighborhood-oriented businesses. Moule and Polyzoides (1994, xxii) and Calthorpe (1993, 49) feel that a preferred design creates an interconnected system of local streets, internal to the neighborhood, to reduce congestion on main roads. Arterials form edges around the community, and provide for through traffic and regional access only. Local

streets are designed to minimize the potential for through-traffic while providing access to local destinations. Further defined, Fulton (1996, 16) asserts that proponents promote the use of a gridded street pattern and shun the use of arterial roads. They argue traffic will flow better because the grid provides more options for drivers and may decrease the total vehicle miles traveled. Comparing people who live in a conventional suburb to those that live in areas utilizing a tight street grid, Arrington (2000, 61) notes that the urban group walks more, uses more transit, and make half as many automobile trips.

Southworth and Ben-Joseph (1997, 132) reason that streets must be viewed as “complex community settings that serve a variety of functions – not simply as channels for moving traffic and emergency vehicles.” They outline design criteria for streets (Southworth and Ben-Joseph 1997, 142-146):

- They should support a variety of uses including recreation for children and adults.
- Comfort and safety of residents should dictate design rather than the needs of automobiles.
- A well-connected, interesting pedestrian network should provide new experiences, even after repeated use.
- Allow local access but discourage through traffic.
- Streets should be differentiated by functions such as local residential or collectors.
- The natural or historic traditions should be reflected in the pattern.
- Minimize the amount of land devoted to streets.

Despite criticisms that cul-de-sacs contribute to traffic congestion, a 1994 American LIVES survey that showed 78 percent of respondents view cul-de-sacs, circles, and courts as important features in neighborhoods (Warrick and Alexander 1998, 14). Cul-de-sacs provide play areas for children, draw parents out for social interaction, and eliminate through traffic. However, cul-de-sacs limit overall community interaction because outsiders do not venture into these dead-end streets (Langdon 1994, 43). A supporting argument is presented by Jacobs (1961, 56) who states that an integrated network of sidewalks brings together people who do not know each other in an intimate, private social fashion. The sum of these public contacts gives a person empathy “for the public identity of people, a web of public respect and trust, and a resource in time of personal or neighborhood need.”

A possible solution to traffic problems is to increase the use of public transportation by creating regional transportation corridors that are convenient and cost effective. Mumford wrote in 1953, “There is no one ideal mode or speed: human purpose should govern the choice of the means of transportation. That is why we need a better transportation *system*, not just more highways.” However, until public transportation becomes more cost-competitive with the automobile, it will be difficult to change driving patterns and habits. Kay (1997, 347) states that when comparing transportation costs, people need to consider the costs of sprawl, pollution, congestion, commuting, and – the “money-losing car.”

Although 33 percent of the respondents of a NAHB (1999, 15) survey wanted to see more public transportation available, they also wanted to use tax dollars to build (27 percent) or widen (47 percent) roads. Even when public transportation is an option, people choose not to use it. The NAHB survey indicates that 47 percent of the respondents have access to a bus or trolley but only 3 percent use it to commute to work. While 16 percent indicated having access to train or light-rail service, only 2 percent use it; 17 percent could car pool but only 4 percent do; and 6 percent have access to the subway and only 2 percent make use of it.

Commercial

Migration from urban centers to the suburbs started with houses, followed by retailers and services, and finally employment. The movement of businesses and jobs to the suburbs has been increasing dramatically since the 1960s. Malls, warehouse supercenters, strip commercial development, and office parks surrounded by large parking lots punctuate the suburban landscape (see Figure 2.5). These single-use pods have replaced the dynamic mixed-use atmosphere created by downtown shops (Langdon 1994, 173-174).

Langdon (1994, 178) suggests that building uses in the commercial area should be more like a traditional downtown with integrated shops, offices, and apartments. He also advocates for an interconnected street network utilizing parking that does not disrupt the continuity of shops. Ewing (1997, 111) suggests that people favor compact commercial centers over strip development. People feel that compact centers are safer, easier for one-stop shopping, and pleasant for pedestrians.

New Urbanists focus on small-scale commercial centers within neighborhoods. Langdon (1994, 194) argues that there are advantages to constructing several small buildings close to one another rather than constructing one big building off by itself. Construction



Figure 2.5. Conventional shopping experience in suburban Ames.

costs may be higher, but owners would have greater flexibility to lease unneeded space. Fulton (1996, 12-14) counters that a commercial center occupied only with small-scale specialty stores will not provide enough jobs for local residents and may not provide the economies of scale necessary to support the businesses. He argues the economic and lifestyle demands of urban and suburban life seem to require facilities on a massive scale that preclude the small scale of a New Urbanist scheme. Even neighborhood stores have to depend on the high-traffic volumes provided by today's arterial roads. In the long run, unless the community is tied in some way to a large-scale commercial center, office, or research park, prospects seem dim for a development that is commercially self-sufficient (Audirac and Shermeyen 1994, 170).

Parking

Parking amounts to acreage reserved exclusively to accommodate vehicles at rest. In both residential and commercial areas vehicles are stored in garages, driveways, parking lots, or on the street. In addition to the nuisance of congestion, parking is a visual and resource problem associated with the suburbs. Once people reach their destinations, their automobiles must be parked. Duany and Plater-Zyberk (1992, 27) note that many urban regulations

require that stores are set back a “great distance” from roads, requiring parking up front. Kay (1997, 63) wonders at the immense amount of asphalt required to accommodate the movement, parking, and storage of the automobile. Parking lots built for office buildings and shopping centers consume an immense amount of land, but certain lots are only occupied during limited hours of a day (see Figure 2.6). A 1998 survey of shopping centers conducted by the Urban Land Institute (1999, 23) found that 56 percent of the centers experienced



Figure 2.6. Primarily vacant parking lot servicing big-box retail in Ames.

capacity demand (defined as at least 85 percent occupied) three or fewer days out of the year. Only 26 percent were filled to capacity ten or more days of the year. This means that parking lots are empty more often than they are full. Duany, Plater-Zyberk, and Speck (2000, 13) characterize the suburban parking situation well, stating, “The parking lots are typically half-empty, since they have been sized for the Saturday before Christmas.”

In suburban commercial areas, parking is one amenity that easily serves customers because it is abundant and easily visible from the street. Parking is a valuable commodity that people seem to covet in close proximity to work, entertainment, and shopping. They want to be assured that a spot will be available at their destination, at the front door if possible.⁵ People view parking as a right. However, as Lewis Mumford once stated, “The right to have access to every building in the city by private motorcar in an age when everyone possesses such a vehicle is actually the right to destroy the city” (Kay 1997, 67). The scale of buildings and the siting of parking distinguish good pedestrian-friendly design from auto-dominated design. The pursuit for a better balance between vehicles and people

includes siting parking on the street, underground, or in the middle of blocks, hidden behind buildings. A number of authors stress the importance of where parking is placed, rather than how much is provided, because it is the quality of the streetscape that should come first (Calthorpe 1993, 110; Duany, Plater-Zyberk, and Speck 2000, 206, 208; and Moule and Polyzoides 1994, xxii).

Cumulatively, conventional parking systems, whether at home or at work, create environmental problems. The design of parking usually creates visual blight and wastes resources and open space. Parking lots leach toxins, increase runoff, and wash hazardous chemicals into water streams (Kay 1997, 83). It is a challenge, then, to develop creative, environmentally friendly solutions for accommodating vehicle storage. Alternatives to conventional parking include reducing the size of paved surfaces, paving with permeable surfacing to reduce runoff, using bioswales to treat runoff before water reaches watersheds, sharing parking among various uses, turning residential parking onto alleys to reduce visual clutter at the front of dwellings, and facilitating on-street parking where possible (Calthorpe 1993, 108-112; Duany, Plater-Zyberk, and Speck 2000, 81; Kay 1997; 342-343).

Public space/Civic amenities

Girling and Helphand (1994, 172) contend that technoburbs provide few of the physical elements that engender a sense of community, such as civic buildings, parks, and monuments. With regard to design and construction, Duany (2000, 161) offers that civic buildings are constrained by “utilitarian thinking” and are “incapable of providing identity or pride for their communities.” Kunstler (1996, 37) supports this sentiment and feels that, “Deep down, many Americans are dissatisfied with suburbia – though they have trouble understanding what’s missing.” The missing elements, Kunstler argues, are civic amenities. In suburbia, the public realm is minimized and, as a result, interrelations among citizens are minimized as well.

Duany (2000, 161) and Duany, Plater-Zyberk, and Speck (2000, 190-191) feel that civic buildings are a primary component for the success of mixed-use communities because they contribute to a sense of community identity. Civic buildings should be planned for early in the design process, unconstrained by the same architectural coding as non-civic buildings,

sited in prominent locations, and placed within the site in an exceptional manner. They can be grouped together in order to concentrate pedestrians or be dispersed to create varied landmarks. They need to be scaled appropriately, finely detailed, and in the case of elementary schools, located within a fifteen-minute walk of most residences. Fifty two percent of the respondents in an American LIVES survey indicated that civic buildings such as community or recreational areas are important features to include in neighborhoods (Warrick and Alexander 1998, 14). To stimulate pedestrian activity and provide economic incentives Calthorpe (1993, 63) suggests minimum proportions of uses in neighborhood developments. He recommends that 10 to 15 percent should be reserved for public use, the core/employment area should be 10 to 40 percent of the overall area, and housing should represent 50 to 80 percent.

Open space network

Early in the twentieth century, Jensen (1990, 89) advised that cities should not be built for profit or speculation; rather, they should be built around the “living green.” Today, Comitta (2000, 116) contends, “Parks and open areas are the places that support neighborhood life and its celebrations.” The American LIVES study showed that people prefer to live in communities that incorporate open space, wilderness areas, and gardens. In the study, 78 percent desired natural, open space, 56 percent preferred gardens with native plants and walking paths, and 53 percent wanted wilderness areas incorporated into their community (Warrick and Alexander, 1998, 15).

Many conventional developments frequently include common greenspaces between neighborhood cul-de-sacs. However, Girling and Helphand (1994, 115), contend that a frequent dilemma occurs when yards are fenced to give residents privacy but leave the connecting common areas with no apparent purpose. They note that some developers understand the connections between well-planned open space and neighborhood quality, while others do not. Parks are often made from leftover spaces, primarily because open land sacrifices profits. Calthorpe (1993, 90) recommends that open spaces not be residual, nor should they separate buildings from streets, or buffer the community from its surroundings. In the 1960s, William Whyte observed that open space in urban areas, whether private yards

or city parks, had to be linked to each other in order to serve populations. He argued that “a spacious landscape quality would best be achieved not by setting aside large tracts for parks, but by utilizing both natural and human made corridors to connect a series of smaller spaces” (Girling and Helphand 1994, 112). Jacobs (1961, 90) supports these observations and adds that simply leaving acreage undeveloped does not automatically make a good feature or enhance neighborhoods (see Figure 2.7).

Jacobs (1961, 96, 101) contends that only diverse surroundings have the practical power to induce natural and continuing flow of life and use. In cities, successful parks are adjacent to mixed-use buildings – residential, retail, commercial, and public. These parks are busy because of the functional diversity among adjacent uses and, hence, diversity among users and their schedules. Well-designed spaces invite people to gather and to enjoy the



Figure 2.7. Neighborhood park in Ames Historic District.

space together. These shared parks contribute to enhancing relationships. Jacobs (1961, 107) states that parks will only do well if they possess “demand goods,” elements that people are willing to travel to (active recreation, fishing, or a band shell).

Jacobs (1961, 103-106) continues by describing the qualities of design that make for a good park:

- *Intricacy.* The park should be able to stimulate people to visit for many different purposes (relax, recreate, gawk, love, read, rejuvenate). It should not be absorbed at a glance or feel like every other place. This can be accomplished with changes in the rise of ground, groupings of trees, or openings leading to different focal points.

- *Centering*. The park should include a main crossroads, a pausing point, or a climax.
- *Sun*. Adjacent buildings should not block the sun.
- *Enclosure*. Adjacent buildings should enclose the park to give the space a definite shape and an appearance of importance.

Advocates for New Urbanism add to Jacobs' and Whyte's comments by indicating that parks and open spaces should be distributed throughout neighborhoods. Comitta (2000, 119) states that, as part of a network of green and open spaces, parks should define and connect neighborhoods. He further indicates that open spaces can be organized according to their functions and spatial attributes. Comitta indicates that between eight and fifteen percent of the landscape should be reserved for designed open space, while Calthorpe suggests between five and ten percent of the total acreage (Calthorpe 1993, 91).

Land use adjacencies

Duany, Plater-Zyberk, and Speck (2000, 25-26) make the assertion that although conventional suburban design places items adjacent to one another, it does not necessarily allow accessibility between them. Walls between uses, lack of sidewalks, excessively wide roads, and berms necessitate that vehicles must be used to get from one land use to another. In addition to the wasted gasoline and time, it creates a dangerous, unpleasant experience for people who wish to walk.

People like to live near schools, they like to have walking trails between developments, and they like to have easy access to highways. Sixty nine percent of the NAHB (1999, 16), and 70 percent of the American LIVES (Warrick and Alexander 1998, 14) respondents indicate a high level of desire for access to good quality schools. Bressi (1994, xxxii) acknowledges the importance of the way neighborhoods and communities are knit together. Supporters of New Urbanism assert that a grid system supports pedestrian-oriented uses by allowing a variety of connections between uses while taming automobiles at intersection stop signs. Acknowledging that people cannot live their entire lives in one community, Bressi notes that regional connections support accessibility between other neighborhoods and towns.

Moving beyond mere physical structure is the social structure created when connections are established. Integrating houses, offices, retail, public transportation, and higher density housing breaks down barriers to access and reduces class segregation. Recognizing the traditional American town, Calthorpe (1993, 21) observes that “the connections between uses were internal and walkable, close and direct. And the population was diverse in age, income, and family size.” Even early in the twentieth century, Mumford (1953, 235) noted, “For most Americans, progress means accepting what is new because it is new, and discarding what is old because it is old.”

Regional context

Lewis (1996, 9) believes that although information on items such as water, geology, vegetation, weather, soils, and economics is available, regional and local land-use decisions are frequently made without sufficient knowledge of these resources. This knowledge can improve design solutions and aid in making logical land-use decisions and developing comprehensive growth strategies.

Calthorpe (1993, 70) asserts that transit accessibility and environmental constraints should establish the form for the region. He notes, however, that highway capacity and location have typically directed regional growth. As a result, suburbs and towns built-up in remote areas, businesses and jobs followed, creating decentralized job centers. Calthorpe (2000, 15) also states that the economic building blocks of the global economy, environmental challenges, farmland preservation, and infrastructure investments are regional in scope, yet citizens and municipalities have difficulty coming to terms with it. “The last half-century has seen the rise of a social and commercial geography that fuses town, city, and suburb into a new but unresolved order – the metropolitan region.”

Rather than piecemeal solutions, regional planning recognizes new economic and social integration among regions (Calthorpe 2000, 15). Bressi (1994, xlii) asserts that the large-scale benefits of New Urbanism will not be realized until regional planning initiatives are undertaken. As opposed to separate agencies, Calthorpe (1993, 51) argues for establishing regional governments because they have the legal power to implement, manage, and direct growth in a sustainable manner. He also promotes comprehensive plans, local

ordinances, and standards that establish fundamental goals and policies, and allow mixed use, walkable neighborhoods. Growth, Calthorpe (1993, 25-26) states, should be directed using urban limit lines or urban growth boundaries to encourage infill, redevelopment, density, and mass transit. He also feels that the design of communities should integrate the qualities of nature and the environment, and the manmade environment should fit into natural systems, and utilize this internal structure for regional trails and bikeways.

Regional or local character is an aspect often criticized in conventional and New Urbanist style communities alike. Comments frequently reflect the aesthetic appeal of the building style and architectural details that were chosen for the development. Moule and Polyzoides (1994, xxiv) state, "Architecture is deeply bound within the culture of each region" and that building styles should not be the source of historical reference, rather building types should dictate design. This means that selecting ranch, two story, row houses, or townhouses are a more appropriate regional response than selecting Victorian, Prairie, or Greek Revival styles of architecture.

Community disconnection

A number of observers believe that people living in today's suburbs have become disconnected from others and the larger community. Jackson (1985, 272) observes a weakened sense of community in most metropolitan areas. He notes a tendency toward private social life, a reduced feeling of concern for neighbors, and a basic disregard for inner city residents. The cause of this disconnection may be a matter of personal choice, however, many contend that design elements are a contributing factor. Langdon (1994, 148) maintains that people place considerable emphasis on the "creature comforts" of the private dwelling which make home activities appealing, and thus preferred over a social life. The expansion of the creature comforts are evident in larger houses and room sizes, luxurious amenities, outdoor activities focused in the back yard, and houses configured for the automobile. Duany, Plater-Zyberk and Speck (2000, 63) observe, "Given that most time in public is spent driving around in isolation chambers, it is no surprise that social critics are witnessing a decline in the civic arts of conversation, politics, and just simply 'getting along.'"

Over the last fifty years, Americans have built neighborhoods that foster a “collection of unconnected individuals,” rather than a community (Langdon 1994, 19). In a study prepared for the San Jose Department of City Planning, Daniel Solomon and Associates stated that recent housing communities take “the form of isolated enclaves, separated from adjacent properties by perimeter parking drives and walled-off from public streets and adjacent properties The public world is reduced to walls and garages, and the isolated nature of the housing enclaves tends to deprive them of context, history, and community” (Girling and Helphand 1994, 120).

Hylton (1995, 26) asserts that children and the elderly lose their independence when they must be chauffeured everywhere. They are alienated because they are physically disconnected from the civic life of their towns. Duany and Plater-Zyberk (1992, 46) contend that these two groups, more than any other, are the greatest victims of the suburbs because they live in places designed for cars rather than for people. The elderly cannot care for themselves because opportunities for getting to appointments, to the grocery, or to the pharmacy do not exist without driving. Parents bear the burden of chauffeuring children to a friend’s house, sporting activities, shopping, and theaters. Without willing parents, children do not have easy access to social events and to civic services such as libraries and museums. Children are unable to practice becoming adults by the inability to run errands on their own, to walk to school, or to go shopping. Duany, Plater-Zyberk and Speck (2000, 117) state, “Children are frozen in a form of infancy, utterly dependent on others, bereft of the ability to introduce variety into their own lives, robbed of the opportunity to make choices and exercise judgment.” Parents move their families to the suburbs because they feel the suburbs are safer and provide better opportunities for education. While this is true, Langdon suggests the downside is that the isolated suburban environment may be “impeding [their] children’s education, maturity, and independence” (Calthorpe 1993, 18; Kunstler 1996, 55; Langdon 1994, 21, 25).

People disagree over whether the lack of neighborhood vitality in today’s suburbs is problematic. Some argue that neighborhood contact is less important today than it used to be because people get their social contact from television, the telephone, the Internet, or by traveling outside the neighborhood. They defend large private areas such as church, work

associations, malls, and fitness centers as places where people can find community. These places provide space for walking, community events, and displays (Langdon 1994, 21).

Others argue that some of these technological replacements for direct human contact have aggravated serious social ills (Langdon 1994, 1). Nelessen (1994, 6) argues, people want to be involved in their communities, and people want to create common friendships. In essence, people seek a sense of community and a sense of place. Existing planning does not allow these basic relationships to form. Hylton (1995, 74) comments that the lack of defined public areas where people can meet and socialize is lacking in the suburbs. Calthorpe (1993, 23) asserts that public spaces are neglected and displaced by an exaggerated private domain, such as shopping malls and gated communities. Langdon (1994, 21) cites a study conducted by the University of Connecticut which concluded that interaction in malls is truncated with the focus on consumption and “just being there,” and fitness centers are limited to certain activities and to economic status. Langdon (1994, 15) cites sociologist Ray Oldenburg who argues that people need a “third place” outside of work and home where they can have contact with others. For example, people need a neighborhood pub or café where they can enjoy ties with other people. Unfortunately, these gathering places have been zoned out of residential areas.

Langdon also states that individuals isolated from each other are powerless. People who know each other and get together feel more empowered to affect change and influence conditions (Langdon 1994, 18). Kunstler (1996, 33) argues, owning a house and isolating oneself from the problems of others “must now be seen for what it really is: an antisocial view of human existence. We are going to have to develop a different notion of the good life and create a physical form that accommodates it.”

Homogeneity

Many communities built since World War II have exhibited three forms of homogeneity – aesthetic, economic, and racial. Many observations of conventional suburbs relate to the aesthetics created by continuous rows of look-alike housing scaled for automobile passage and use (Harris and Larkham 1999, 2). Suburbs are placeless and homogeneous. They consist of dull, regimented, middle-income housing sealed against the

vitality of city life (Jacobs 1961, 4). The uniqueness of each place is blurred by “chain-store architecture, scaleless office parks, and monotonous subdivisions” (Calthorpe 1993, 18) (see Figure 2.8). Homogeneity in the form of economic and racial segregation continues to be a topic hotly debated in communities today. Marketing segmentation creates neighborhoods consisting of disparate groups.

People live with others from the same age group or economic status. As a result, suburbia is built in large



Figure 2.8. Homogeneous row of housing in Ames.

homogenized chunks that discriminate against anyone who is not part of a “target market.” Segregation limits exposure to different groups of people and aggravates fears people have about each other. Jackson (1985, 275) contends that the urban core has become identified with poor people, crime, minorities, deterioration, older dwellings, and abandoned buildings. Middle- and upper-income suburbs convey the opposite. Some argue that homogeneous communities deprive people of social resources, promote isolation and conflict between residents and the rest of society, and stunt the ability of children (and adults) to relate to people unlike themselves. People are labeled based on where they live, which creates an “us versus them” mentality. Solomon (1992, 7) argues that people need to come into direct contact with people of different classes because societies thrive on interdependence. Heterogeneous communities enrich community life, promote tolerance and reduce social conflict, and provide children with a broad education about humankind (Langdon 1994, 73-76; McKenzie 1994, 57; Solomon 1992, 7).

By providing a variety of housing types, a variety of social, ethnic, and racial groups will contribute to the overall community character. Communities need a mixture of lower and upper income levels, including people willing to take service-level jobs in the community. New Urbanists argue that integrating households of various income levels will help create more dynamic communities. M. A. Weiss (2000, 93) explains, “To achieve a prosperous and just society with a high quality of life for all our citizens and families,

economic, social, and physical diversity are essential elements for the long-term success of every neighborhood and community.”

Various authors provide rationale to explain the state of segregated communities. M.J. Weiss (2000, 67) reasons that people like the suburbs for their homogeneity and that suburbanites want to be surrounded by people like themselves. A number of studies show that people do not want ethnic and racial diversity (Audirac and Shermyen 1994, 169). People construct their preferred identity in relation to social groups, whether it is based on gender, race, ethnicity, economic status, or occupation. People gravitate to situations where others are close in both abilities and opinions and they are less attracted to situations where people are divergent. They equate high-density with low-income and have the perception that their property taxes support renters. As a result, people oppose higher density development consisting of townhomes and apartments (Audirac and Shermyen 1994, 169; McKenzie 1994, 57; Schor 1998, 27). Thus, in order for New Urbanists to produce more equitable and socially integrated neighborhoods, they must focus the most attention on protecting property values and threats to quality of life, whether real or imagined (Audirac and Shermyen 1994, 169).

From a historical perspective, Jackson (1985, 242) notes that, for years, zoning has been used to keep unwanted elements including racial minorities out of more affluent areas. Gordon and Richardson (1997, 102) maintain that the existence of segregated communities is primarily the result of clustering by income level rather than race. They suggest the means to address segregation is through income redistribution, not land use policy changes. McKenzie (1994, 190) concurs, stating financial inequities are eliminated most effectively by federal and state subsidies rather than forced community heterogeneity.

Environmental awareness

“In terms of air pollution and environmental degradation and even global warming, no aspect has been more harmful to [the] environment in recent decades than sprawling development” (Hylton 1995, 32). Calthorpe (1993, 25-26) addresses the many ways current development, and the subsequent emphasis on economic growth, impacts the natural environment. Storm drains and parking lots divert water and concentrate pollution;

automobile-dependence generates air pollution, congestion, and excess pavement; flood control projects destroy complex ecosystems; artificial landscapes displace indigenous species with water-demanding, imported plant life; and architecture fails to incorporate climate-responsive design and consumes more energy than needed. “When meadows are stripped, woodlands cut, and wetlands drained in the course of ‘development,’ natural ecological cycles are disrupted. The ability of native plant and animal species to survive is severely threatened” (Hylton 1995, 32). The incessant amount of time and energy that American’s devote to their non-native, and therefore water consuming, lawns has created negative environmental impacts. Owners apply chemicals to encourage or inhibit growth and the water that is applied then runs off and pollutes water streams. Lawnmowers are significant sources of air pollution and grass clippings account for the second largest source of solid waste in the country. The front lawn is an environmental quagmire (Girling and Helphand 1994, 217-218).

McHarg and Steiner (1998, 128-129) recognize that the total costs inflicted on the environment by housing developments are not counted. These expenses are not counted because natural processes are rarely attributed values. People fail to recognize or understand the larger environmental damage inflicted by unitary human interventions. The failure to recognize all costs and benefits may be explained by realizing that the benefits of developments are “particular,” accruing mainly to the private sector (the landowner and developer), while the costs are more general, burdening the public domain.

New Urbanists affirm the need to preserve prime agricultural land as part of an integrated, healthy system. Farms contribute to the economic, natural, and social fabric near and within urban America (Arendt 2000, 29). However, Gordon and Richardson (1997, 96) claim that agricultural surpluses and low crop prices indicate there is no imminent danger with the loss of farmland to housing. In addition, there is an abundance of forest and pastureland that could be converted to cropland if necessary. Ewing (1997, 113) does not agree that housing is a suitable substitute for a forest. He argues that “natural capital” and “man-made capital” are not substitutes, rather they are compliments. While Ewing recognizes the importance of economic sustainability, he promotes ecological and social

sustainability (sustainable development) through productive ecosystems and the maintenance of social values, traditions, and institutions.

Expense of lifestyle choice

Suburban life is not cheap. The houses may be less expensive than those close to the city, but there are significant added costs. Advocating for the downsizing of dwellings, Walsh (1999) reports that consumers often forget the additional expenses associated with large houses – higher insurance, property taxes, utility bills, and maintenance costs. He extols the virtues of a smaller house – energy efficient, cheaper to furnish, easier to clean, and less expensive to operate, insure, and maintain. The bottom line for consumers is that they can afford to put more money into architectural details, beautiful quality materials, and high-quality furnishings.

The greatest costs to suburban life are associated with the automobile. Households pay for automobile infrastructure in addition to the cost of owning and operating an automobile, and pay the extra costs of designing communities around the maximum use of private vehicles. Langdon (1994, 11) estimates that transportation expenditures consume 25 percent of a household's income after federal taxes. Few motorists are aware of the total costs associated with automobile transit, because American motorists receive billions of dollars in subsidies every year. Gasoline taxes and user fees cover only 60 percent of the cost of building and maintaining roads, leaving an annual \$21 billion shortfall to be paid from general taxation. Highway services cost \$68 billion a year, and the value of free parking equals \$85 billion annually (Hylton 1995, 42).

There have been numerous comparative studies conducted to try to determine the economic and resource efficiency of compact development versus conventional development. These studies have compared the costs of roads, sewers, utilities, schools, and other infrastructure. Both proponents and critics of New Urbanism agree that the comparative studies of low- and high-density areas arrive at different results (Ewing 1997, 111; and Gordon and Richardson 1997, 99). However, Ewing cautions that current land markets are fraught with market failures. For example, family housing is subsidized in the federal tax code and outlying areas receive utility subsidies. People also disagree on how increased

densities will affect mobility. Ewing (1997, 113) states that as densities increase, vehicle trips get shorter, walking increases, and the number of trips decreases. Doubling urban density results in a 25 to 30 percent reduction in vehicle miles traveled. However, Gordon and Richardson (1997, 99) reason that the number of trips taken may increase as density increases. Shortened travel distances resulting from higher densities will reduce transportation costs, which in turn may encourage people to increase the number of trips taken. They also find average commuting times are similar for suburban and central city residents and the number of shopping trips are the same for suburban and city residents.

The impact of marketing

For all the criticisms that New Urbanists direct at today's suburbia, house builders counter that current development is driven by the market, and competition will force developers to build whatever consumers desire (Eppli and Tu 1999, 13). Builders contend that what people want are large individual lots, single-family detached houses, and privacy (Goldberger 2000; Gordon and Richardson 1997, 96). Audirac and Shermeyen (1994, 167) cite national surveys which indicate only a minority of households would be willing to exercise the tradeoff between less private space for more communal space. These surveys found that two thirds of the respondents would prefer a conventional community while the other one third would prefer a New Urbanist type community. They offer that a New Urbanist community needs to be balanced with respect to the residents' desire for privacy. They note that residents of Seaside have allowed shrubbery to grow and shelter front porches and windows, and new residents are requesting porches in the rear of the house rather than the front. Ewing (1997, 111) agrees that people prefer low-density suburbs to urban living, but they dislike the rest of the suburban package.

New Urbanists may grouse at the design and form of current housing choices, but these offerings reflect owners' priorities which are focused on status and investment growth. Surveys indicate an expansion of desire and expectation where many more consumer items are now seen as necessities, including a trophy house (Schor 1998, 15). A recent study of inner desires revealed that 47 percent of the respondents wanted a better, bigger, or more beautifully situated house. Included in these expressed desires was the inclination to show

off their prize house to others and gain their esteem (Schor 1998, 33, 70). Schor (1998, 95) questions people's true motives when selecting a new dwelling in the suburbs.

Who among the middle or upper-middle class have told themselves (and others) that their first criterion is safety and quickly gravitated to high-end neighborhoods? But, who actually looks at the crime statistics for different areas? Very few, because although people genuinely want safety, many also want class, charm, proximity to an exciting retail district, and an address to which they feel comfortable inviting colleagues. Saying that you chose a certain neighborhood because it has a 'certain class of people' feels less socially acceptable than saying it is safe or has good schools.

People are seeking superiority, or at a minimum, trying to fit in. American consumers are often not conscious of being motivated by social status and they defend their buying habits stating they "need" things, or otherwise will be left out (Schor 1998, 19). Houses that are bigger, and thus perceived to possess greater charm, are not necessarily better in terms of fostering quality living. But, buyers are driven to these product offerings because of a narrow focus on the financial investment associated with house buying. Langdon (1994, 78) asserts, "Many homebuyers purchase houses or communities that they know are flawed. They buy them because of the location, the quality of the local schools, or the price, even though they might prefer houses and communities very different from what the builders and developers are offering." People buy these flawed houses because they expect to make money. "Many people take what the market produces, in the knowledge that others will most likely come along later to do the same, enabling the initial owners to step-up to a more expensive house." McKenzie (1994, 97) adds that, for the buyer, the essential role of planning in a new development is to maximize the potential appreciation of his or her investment. The preservation of property values is the highest social good to which other aspects of community life are subordinated. For example, buyers willingly accept restrictive covenants because they keep out low-income buyers and their undesirable living habits.

Fully understanding the primary goals of size, status, and return on investment, marketers now play a much larger role in the development process than do planners and landscape architects (Langdon 1994, 62). They direct what is built and, as a consequence, control what people buy. What they promote are developments that have sold well in the recent past. Builders are convinced by the sales figures and buyers are convinced by the potential for resale in the future (Duany, Plater-Zyberk, and Speck 2000, 102). Langdon

(1994, 78) states, “This process encourages homebuyers to operate just like marketing specialists – conning themselves into accepting defective living environments because they will make a profit. When millions of Americans behave this way, it’s easy for developers to sell ‘villages,’ ‘estates,’ and subdivisions of dubious quality.” It is a circular process that begins and ends with the marketer and ensures the same convention continues to be built.

Andres Duany recounts that, “Developers tell me that all people want to buy is lot size and views. And I tell them that’s because that’s all you give them” (Fulton 1996, 26). Maintaining high sales volumes requires searching for techniques that will motivate people to buy dwellings in particular subdivisions, including the increased reliance on covenants, to ensure “positive conditions” (McKenzie 1994, 97). Studies show that Americans regularly fantasize the same American dreams, including descriptions of ideal houses. These descriptions often sound like commercials, and many can be traced to particular media productions (Schor 1998, 70). Duany, Plater-Zyberk, and Speck (2000, 102) contend if marketers were to look at sales successes of the past hundred years and not just the past five, they would find that neighborhoods build before World War II outperform all other units (see Figure 2.9).

Duany, Plater-Zyberk, and Speck (2000, 102) assert that developers and their clients are often misled when poorly targeted, badly worded, or biased opinion polls are conducted. DPZ questions the validity of asking someone to express a preference for something different from what they recently purchased.

To do so would be to admit they made a poor choice in perhaps the largest investment of their life. Two representative surveys demonstrate the disparities encountered in survey questioning. Results of these surveys indicate that people prefer the homogeneous environs that have been created since the 1950s. However, there are inherent biases influencing the outcome. An American LIVES survey



Figure 2.9. Pre-World War Two neighborhood in Madison, Wisconsin.

conducted in 1995 indicated that 31 percent of the respondents “like the suburbs the way they are now and reject the new urbanism” (Warrick and Alexander 1998, 17). Further reading indicates that what respondents reject are higher densities, but are attracted to Neotraditional style. A 1999 NAHB survey (1999, 16) indicated that 83 percent of the respondents would rather live in a single-family detached house in the suburbs. Given the two choices in the question, this outcome is not surprising. Respondents were asked to choose between a townhouse in an urban setting close to public transportation, work and shopping, or an equally priced larger detached house in the suburbs with long distances to work, public transportation and shopping. An unbiased survey would also have asked people to choose between the two housing types regardless of the settings, or to choose between the two settings regardless of the housing type.

Langdon (1994, 79) suggests that because marketers and buyers behave in these ways, government direction is needed. Typical buyers will not have the knowledge to realize there are subtle but important benefits that can be achieved with good community planning. But, government initiatives cannot do it alone. Builders and developers need to know and care more about the quality of community design before the situation will improve.

Development Principles

The principles outlined below are the result of collaborative efforts in the fields of planning, land development, architecture, and landscape architecture. In addition, municipalities and citizens have assisted in defining methods for community development changes. According to Duany, Plater-Zyberk, and Speck (2000, 255) the intention is to “advocate what works best: what pattern of development is the most environmentally sensitive, socially responsible, and economically sustainable.”

Two sets of principles are presented: The Ahwahnee Principles and the New Urbanism Principles. These were selected because of their comprehensive nature, interdisciplinary evolution, and differing scales. The Ahwahnee Principles provide basic, straightforward idioms for changes at the community scale, while the New Urbanist Principles address three very distinct scales – the region; the neighborhood, district, and corridor; and the block, street, and building. The two sets of principles were also selected to

demonstrate the evolution of the principles over time. The Ahwahnee Principles were developed in 1991, while the New Urbanism Principles were established in 1999.⁶

Ahwahnee Principles

New Urbanism is a far-reaching philosophy for design and living. Traditional neighborhood development is embodied as part of the solution to larger design and environmental problems. In 1991, a group of architects were brought together by California Local Government Commission staff-member Peter Katz (author of *The New Urbanism*). These innovators in design: Andres Duany, Elizabeth Plater-Zyberk, Stefanos Polyzoides, Elizabeth Moule, Peter Calthorpe, and Michael Corbett were asked to assess their ideas for new planning. They were asked to accomplish five things: come to agreement on what the new planning ideas have in common, develop a set of community principles, determine how each community should relate to the region, develop a set of regional principles, and define methods of implementation for cities and towns. This meeting resulted in what is referred to as the “Ahwahnee Principles.”⁷

The authors of the principles recognized,

The effects of single-use, sprawling development patterns are becoming increasing[ly] clear. And, with that has evolved a realization that there is a better way. Towns of the type built earlier in this century – those compact, walkable communities where you could walk to the store and kids could walk to school, where there was a variety of housing types from housing over stores to single-family units with front porches facing tree-lined, narrow streets – these towns provided a life style that now seems far preferable to today’s neighborhoods. (Local Government Commission, 2)

The preamble of the Ahwahne Principles states,

Existing patterns of urban and suburban development seriously impair our quality of life. The symptoms are: more congestion and air pollution resulting from our increased dependence on automobiles, the loss of precious open space, the need for costly improvements to roads and public services, the inequitable distribution of economic resources, and the loss of a sense of community. By drawing upon the best from the past and the present, we can plan communities that will more successfully serve the needs of those who live and work within them. Such planning should adhere to certain fundamental principles.” (Local Government Commission, 7)

The Ahwahnee Principles are divided into three sections: community principles, regional principles, and implementation principles. These principles “outline a set of ideas for planning more livable communities built for people, not just cars, and provide a vision for an alternative to urban sprawl” (Local Government Commission, 6).

Community principles. The relationship of people to the environment defines the human scale, which is the scale addressed by the community principles. Walkability, economic viability of public transportation, economic and racial integration, parks and open space, variety of building type and use, good street and path connections, and resource efficiency are some of the elements discussed in this section. When these elements have been accommodated, “we will create the sorts of places which bring people together and create a vitality, a sense of community” (Local Government Commission, 3).

- All planning should be in the form of complete and integrated communities containing housing, shops, work places, schools, parks, and civic facilities essential to the daily life of the residents.
- Community size should be designed so that housing, jobs, daily needs, and other activities are within easy walking distance of each other.
- As many activities as possible should be located within easy walking distance of transit stops.
- A community should contain a diversity of housing types to enable citizens from a wide range of economic levels and age groups to live within its boundaries.
- Businesses within the community should provide a range of job types for the community’s residents.
- The location and character of the community should be consistent with a larger transit network.
- The community should have a center focus that combines commercial, civic, cultural, and recreational uses.
- The community should contain an ample supply of specialized open space in the form of squares, greens, and parks whose frequent use is encouraged through placement and design.
- Public spaces should be designed to encourage the attention and presence of people at all hours of the day and night.
- Each community or cluster of communities should have a well-defined edge, such as agricultural greenbelts or wildlife corridors, permanently protected from development.

- Streets, pedestrian paths, and bike paths should contribute to a system of fully connected, interesting routes to all destinations. Their design should encourage pedestrian and bicycle use by being small and spatially defined by buildings, trees and lighting; and by discouraging high speed traffic.
- Wherever possible, the natural terrain, drainage, and vegetation of the community should be preserved with superior examples contained within parks or greenbelts.
- The community design should help conserve resources and minimize waste.
- Communities should provide for the efficient use of water through the use of natural drainage, drought tolerant landscaping, and recycling.
- The street orientation, the placement of buildings, and the use of shading should contribute to the energy-efficiency of the community.

Regional principles. The regional principles call for an integrated land-use plan structured around transit and grounded by an urban core. Regional principles are also defined by the use of local materials and building methods which dictate a distinct character. The use of wildlife corridors or greenbelts establishes regional character, helps define the edges, and imparts a distinct quality into the landscape (Local Government Commission, 4).

- The regional land-use planning structure should be integrated within a larger transportation network built around transit rather than freeways.
- Regions should be bounded by and provide a continuous system of greenbelt/wildlife corridors to be determined by natural conditions.
- Regional institutions and services (government, stadiums, museums, etc.) should be located in the urban core.
- Materials and methods of construction should be specific to the region, exhibiting a continuity of history and culture, and compatibility with the climate to encourage the development of local character and community identity.

Implementation principles. The principles outlined for implementation require that municipalities incorporate the Ahwahnee Principles into an updated general plan. It is also recommended that local officials be proactive in the planning process, rather than reactive. Public participation is a very strong component of implementation. Local residents should be provided with the necessary tools (images, Visual Preference Survey,TM computer simulation) to help visualize the proposed changes. The changes should also succinctly express the implications for the community (Local Government Commission, 4).

- The general plan should be updated to incorporate the above principles.
- Rather than allowing developer-initiated, piecemeal development, local governments should take charge of the planning process. General plans should designate where new growth, infill or redevelopment will be allowed to occur.
- Prior to any development, a specific plan should be prepared based on these planning principles.
- Plans should be developed through an open process and participants in the process should be provided visual models of all planning proposals.

New Urbanist Principles

The Congress for the New Urbanism (CNU) was founded by a coalition of architects, urban designers, planners, engineers, journalists, attorneys, public servants, and concerned citizens who have all been working independently toward the same goals for years (Duany, Plater-Zyberk, and Speck 2000, 253). A number of the professionals involved in developing the Ahwahnee Principles are also members of CNU. This group has advocated for change in cities and suburbs for the past decade and recently published *Charter of the New Urbanism* (herein referred to as “The Charter”). The Charter is a flexible doctrine aimed at creating an interdisciplinary approach to addressing design decisions and how those decisions affect citizens. This book details the principles and philosophy behind this burgeoning movement in positive development practices. The twenty-seven principles outlined in The Charter are organized into three categories: the region; the neighborhood, district, and corridor; and the block, street, and building. The Charter reads (Leccese & McCormick 2000, v-vi):

The Congress for the New Urbanism views disinvestment in central cities, the spread of placeless sprawl, increasing separation by race and income, environmental deterioration, loss of agricultural lands and wilderness, and the erosion of society’s built heritage as one interrelated community-building challenge.

We stand for the restoration of existing urban centers and towns within coherent metropolitan regions, the reconfiguration of sprawling suburbs into communities of real neighborhoods and diverse districts, the conservation of natural environments, and the preservation of our built legacy.

We recognize that physical solutions by themselves will not solve social and economic problems, but neither can economic vitality, community stability, and environmental health be sustained without a coherent and supportive physical framework.

We advocate the restructuring of public policy and development practices to support the following principles: neighborhoods should be diverse in use and population; communities should be designed for the pedestrian and transit as well as

the car; cities and towns should be shaped by physically defined and universally accessible public spaces and community institutions; urban places should be framed by architecture and landscape design that celebrate local history, climate, ecology, and building practice.

We represent a broad-based citizenry, composed of public and private sector leaders, community activists, and multidisciplinary professionals. We are committed to reestablishing the relationship between the art of building and the making of community, through citizen-based participatory planning and design.

We dedicate ourselves to reclaiming our homes, blocks, streets, parks, neighborhoods, districts, towns, cities, regions, and environment.

The region: Metropolis, city, and town. The region is the largest scale of The Charter. Coordinated efforts dealing with regional strategies must guide policies regarding economic development, open space preservation, pollution control, transportation, and housing. Emerging strategies for regional approaches to design and policy principles are outlined in The Charter (Leccese & McCormick 2000, 13).

1. The metropolitan region is a fundamental economic unit of the contemporary world. Governmental cooperation, public policy, physical planning, and economic strategies must reflect this new reality.
2. Metropolitan regions are finite places with geographic boundaries derived from topography, watersheds, coastlines, farmlands, regional parks, and river basins. The metropolis is made of multiple centers that are cities, towns, and villages, each with its own identifiable center and edges.
3. The metropolis has a necessary and fragile relationship to its agrarian hinterland and natural landscapes. The relationship is environmental, economic, and cultural. Farmland and nature are as important to the metropolis as the garden is to the house.
4. Development patterns should not blur or eradicate the edges of the metropolis. Infill development within existing areas conserves environmental resources, economic investment, and social fabric, while reclaiming marginal and abandoned areas. Metropolitan regions should develop strategies to encourage such infill development over peripheral expansion.
5. Where appropriate, new development contiguous to urban boundaries should be organized as neighborhoods and districts, and be integrated with the existing urban pattern. Noncontiguous development should be organized as towns and villages with their own urban edges, and planned for a jobs/housing balance, not as bedroom suburbs.
6. The development and redevelopment of towns and cities should respect historical patterns, precedents, and boundaries.

7. Cities and towns should bring into proximity a broad spectrum of public and private uses to support a regional economy that benefits people of all incomes. Affordable housing should be distributed throughout the region to match job opportunities and to avoid concentrations of poverty.
8. The physical organization of the region should be supported by a framework of transportation alternatives. Transit, pedestrian, and bicycle systems should maximize access and mobility throughout the region while reducing dependence on the automobile.
9. Revenues and resources can be shared more cooperatively among the municipalities and centers within regions to avoid destructive competition for tax base and to promote rational coordination of transportation, recreation, public services, housing, and community institutions.

Neighborhood, district, and corridor. The neighborhood, the district, and the corridor represent an intermediate scale. Challenges at this scale include incorporating urbanism into the existing and proposed suburban framework while acknowledging the importance of pre-World War II communities. A balance must also be achieved at the neighborhood scale and juxtaposed to fit the contemporary world. Three fundamental elements comprise the underlying structure of New Urbanism: neighborhoods, districts, and corridors. The importance of integrated mixed-use at the human scale while accommodating and respecting larger institutions and modern retailing is a challenge addressed by these principles (Leccese & McCormick 2000, 71).

10. The neighborhood, the district, and the corridor are the essential elements of development and redevelopment in the metropolis. They form identifiable areas that encourage citizens to take responsibility for their maintenance and evolution.
11. Neighborhoods should be compact, pedestrian-friendly, and mixed-use. Districts generally emphasize a special single use, and should follow the principles of neighborhood design when possible. Corridors are regional connectors of neighborhoods and districts; they range from boulevards and rail lines to rivers and parkways.
 - a. The neighborhood has a center and an edge.
 - b. The neighborhood has a balanced mix of activities: shopping, work, schooling, recreation, and all types of housing.
 - c. The ideal size of a neighborhood is a quarter-mile from center to edge.
 - d. Neighborhood streets are detailed to provide equally for the pedestrian, the bicycle, and the automobile.
 - e. The neighborhood gives priority to the creation of public space and to the appropriate location of civic buildings.

12. Many activities of daily living should occur within walking distance, allowing independence to those who do not drive, especially the elderly and the young. Interconnected networks of streets should be designed to encourage walking, reduce the number and length of automobile trips, and conserve energy.
13. Within neighborhoods, a broad range of housing types and price levels can bring people of diverse ages, races, and incomes into daily interaction, strengthening the personal and civic bonds essential to an authentic community.
14. Transit corridors, when properly planned and coordinated, can help organize metropolitan structure and revitalize urban centers. In contrast, highway corridors should not displace investment from existing centers.
15. Appropriate building densities and land uses should be within walking distance of transit stops, permitting public transit to become a viable alternative to the automobile.
16. Concentrations of civic, institutional, and commercial activity should be embedded in neighborhoods and districts, not isolated in remote, single-use complexes. Schools should be sized and located to enable children to walk or bicycle to them.
17. The economic health and harmonious evolution of neighborhoods, districts, and corridors can be improved through graphic urban design codes that serve as predictable guides for change.
18. A range of parks, from tot lots and village greens to ballfields and community gardens, should be distributed within neighborhoods. Conservation areas and open lands should be used to define and connect different neighborhoods and districts.

Block, street, and building. Pedestrian accommodation and automobile accommodation are addressed at the smallest scale of The Charter – the block, the street, and the building. Modern environments challenge designers to creatively support walking, public transportation, bicycling, and the automobile. Creating mixed-use neighborhoods containing integrated office, retail, and commercial enterprises dictates sensitive design strategies. Connectivity between housing types, buildings, street and block patterns, and retail and civic uses calls for continuity of architecture and community identity (Leccese & McCormick 2000, 121).

19. A primary task of all urban architecture and landscape design is the physical definition of streets and public spaces as places of shared use.
20. Individual architectural projects should be seamlessly linked to their surroundings. This issue transcends style.

21. The revitalization of urban places depends on safety and security. The design of streets and buildings should reinforce safe environments, but not at the expense of accessibility and openness.
22. In the contemporary metropolis, development must adequately accommodate automobiles. It should do so in ways that respect the pedestrian and the form of public space.
23. Streets and squares should be safe, comfortable, and interesting to the pedestrian. Properly configured, they encourage walking and enable neighbors to know each other and protect their communities.
24. Architecture and landscape design should grow from local climate, topography, history, and building practice.
25. Civic buildings and public gathering places require important sites to reinforce community identity and the culture of democracy. They deserve distinctive form, because their role is different from that of other buildings and places that constitute the fabric of the city.
26. All buildings should provide their inhabitants with a clear sense of location, weather, and time. Natural methods of heating and cooling can be more resource-efficient than mechanical systems.
27. Preservation and renewal of historic buildings, districts, and landscapes affirm the continuity and evolution of urban society.

Design Process

Nelessen (1994) is one of the few authors to discuss the design process as a means to implementing neighborhoods and communities. He outlines seven steps in a process that can be adapted for specific sites and conditions:

1. *Understanding the biography of the past.* The planner must understand the historical development or growth of the municipality and analyze the impact of the total build-out pattern.
2. *Analyzing and understanding the problems.* The planner should conduct focus sessions with local leaders, city officials, and neighborhood groups to list the physical planning and related economic and social problems facing the area.
3. *Creating a common vision.* The planner should collect specific images of places that are positive and those that are negative to the community. The images should include various land uses, points of interest, and attractive landscape characteristics. The images are then used in the creation of master plans, land use plans, and community facilities plans.
4. *Analyzing and applying the potential.* Images are used to visualize the potential of what citizens want the area to be in the future.

5. *Designing a small community: Creating three-dimensional plans.* The master plan should include the specific location and layout of all future roads, a conceptual ground plan for all zones, and specific plans for the higher-density houses, mixed use, and non-residential zones.
6. *Writing and illustrating codes.* Development ordinances must be written and illustrated.
7. *The submission and approval process.* An application process for developers is established which strives to speed processing time.

Duany and Plater-Zyberk (1993, 33) have developed their own process for building communities:

1. Find a developer willing to think of himself as a town founder rather than a builder of houses.
2. Conduct a charrette.
 - a. Tour the surrounding area to find clues to regional history, architectural styles, and living patterns.
 - b. Study the site.
 - c. Conduct rounds of intensive meetings with the developer, local government officials, interested citizens, local architects, environmentalists, real estate agents, and other interested parties.
 - d. Divide the planning team into smaller groups that work sequentially, adding fresh ideas as they go.
 - e. Specify street layouts, lot sizes, and building heights and materials to reflect local styles. The design of individual houses is left to local builders and architects in order to encourage diversity.
3. Create a template from which the plan can grow. The idea is not to plan a new town down to the last detail.
4. Obtain necessary official permits.

McKenzie (1994, 7) states that, traditionally, private developers have been the dominant forces in urban planning in the United States. Public policy follows the activities of the entrepreneurs and, therefore, government has tended to be the handmaiden of the economic system. The role of the citizen is to seek wealth, while the job of the city is to be a “community of private money makers.” Fulton (1996, 29) contends New Urbanism will probably function most successfully in a broader planning context. Development must be linked to a consistent set of policies and programs in all areas of metropolitan development and must be linked to public investment.

Early New Urbanist developments encountered difficult processes. Kunstler (1996, 190) reports that at Kentlands, the charrette was a nightmare of bargaining and compromise, frequently stymied by “strange little design quarrels.” During construction, DPZ left a “town architect” in place as an employee of the homeowner association to make sure building codes were followed. The commercial center was slow to develop, and the primary bank was not confident mixed-use would work and wanted to build a regional entertainment center. In Laguna West, Kunstler (1996, 192) recounts that the developer soon lost control to the banks. Financiers became worried about losing their investment and were able to revert to conventional patterns because specific design guidelines were not built into the ordinances. They relaxed building codes and let developers do what they wanted. Lot sizes increased, garages were oriented to the front, alleys were eliminated, houses were designed uniformly, and sound walls were erected along the formal avenue.

Evaluation of New Urbanism

The results from surveys of residents living in New Urbanist developments have been mixed, but generally favorable. Respondents report a strong sense of neighborliness and do not think New Urbanism is overrated. They find they are more likely to walk, and expressed optimism that their houses would appreciate faster than houses in conventional neighborhoods. They liked the porches, parks, public squares, and exterior designs. However, they were dissatisfied with the product mix, price level, lot sizes, high-density, and slow introduction of amenities (Eppli and Tu 1999, 14). A study conducted by Eppli and Tu (1999) revealed that consumers are willing to pay more for houses located in New Urbanist communities compared to the prices paid for houses with comparable amenities located in conventional developments. The study accounted for property-by-property differences in construction quality and attributes. Their study refutes challenges made by critics that the higher premiums paid in New Urbanist developments are solely due to differences in construction materials. It also indicates that buyers see the lasting value in New Urbanist developments. Eppli and Tu did not draw any conclusions as to which attributes of New Urbanist developments were the most important for residents, and submitted it was not known whether these communities have mass appeal.

New Urbanism seeks to correct many of the problems created by conventional development. However, some question whether New Urbanist developments will be able to fulfill expectations. Goldberger (2000, 134) claims DPZ wants to see a culture shift where people desire more dense housing in a communal setting. But, real estate developers and free marketers “deride” them as “social engineers unwilling to accept the real preferences of the American consumer” (Fulton 1996, 3). New Urbanists attempt to change human behavior through design, but Eppli and Tu (2000, 12) claim that “a planned community using a set of formal guidelines belies the nature of a community.”

Narrower interests may stifle the New Urbanist ideal of creating community spirit through community buildings and shared open space. For example, neighborhood open spaces may be controlled by a homeowner association and not by the town. Additionally, community facilities, such as churches, daycare centers, and meeting rooms, may be exclusive. Design initiatives alone may not be enough to build the community spirit envisioned by New Urbanists (Bressi 1994, xlii). In his 1974 case study of Columbia, Maryland, Richard Brooks concluded that strong community values may not automatically result from the development of a superior town plan. “Rather, a much broader set of social and governmental institutions, far beyond the reach of any physical planner or developer, influences the degree to which a locale achieves community – the problem is much bigger than the place itself” (Girling and Helphand 1994, 135).

Critics contend that New Urbanist projects have taken only minimal steps at addressing social and economic divisions. So far, New Urbanist developments have produced only upscale housing, densities that are too low to support mixed-use housing, and homogeneous enclaves (Eppli and Tu 1999, 13-14; M.A. Weiss 1987, 67). New Urbanist projects may be able to provide small apartments for low-income individuals, but these apartments do not provide enough space for low-income families (Audirac and Shermeyen 1994, 168). Bressi (1994, xlii) observes, “They expand housing opportunities only in a limited way; housing for low-income households and groups with special needs will require additional government initiatives.”

Eppli and Tu (1999, 13) further question the fact that many New Urbanist communities are being built almost exclusively on greenfield sites. This sentiment is

repeated by Fulton (1996, 3) who states that some fear New Urbanism will merely be a new kind of suburban sprawl. Further disappointment is echoed by Bressi (1994, xlii) who claims that New Urbanist developments have not tackled ecological concerns at local and regional levels.

Although the environmental impacts of alternative forms of transportation may be lower, Gordon and Richardson (1997, 98) argue that focusing development near mass transit and designing communities to be more transit-friendly will have little bearing on people's travel choices. Favorable economics and convenience still make automobiles more attractive than public transportation. Residents are not likely to replace many car trips with walking trips. Instead, walking may occur in addition to current driving patterns. Fulton (1996, 17) believes it is impossible to say how New Urbanism will impact transportation. "Perhaps the best thing that can be said is that it is easy to walk to a store in a New Urbanist neighborhood but nearly impossible in a conventional suburban subdivision. Thus, New Urbanist designs may be a necessary step toward changing the way people travel, but not sufficient by themselves."

Some say that New Urbanist projects emphasize visual style over planning. The danger is that developments will incorporate certain elements of New Urbanism – historic styles, and small-town feel – using rhetoric about community as a sales gimmick while more substantial planning ideas are abandoned out of frustration or indifference (Bressi 1997, xli; Kunstler 1996, 194).

Perhaps the greatest barriers impeding quick success for New Urbanism are the obstacles created by government officials who do not have the will or the courage to change and enforce zoning laws to allow traditional towns. They continue to uphold zoning laws that require large lots, believing that this will preserve the feeling of natural surroundings and prevent congestion (Kunstler 1996, 173-177).

Even if New Urbanists can continue to make positive changes to municipal regulations, they still need to sell their principles to consumers. To do that, New Urbanists need to learn to market and not rely on their project to sell itself. They supply a very different product in a crowded marketplace and need to take some cues from conventional developers. Fulton (1996, 26) states, "New Urbanists' biggest challenge is selling in a

skeptical marketplace dominated by conventional developers New Urbanist projects have encountered resistance from consumers, real estate developers, some town officials, and – perhaps most important – lenders.” Lenders are singled-out because they are critical for raising capital for development. However, lenders see New Urbanist developments as more risky and seldom recognize these projects as legitimate investments. They prefer to invest in developers with strong track records and proven experience. They do not believe there is a market for mixed-use neighborhoods, though this attitude may be changing since New Urbanist projects have performed well and even attracted higher prices than nearby pod developments (Fulton 1996, 26; Kunstler 1996, 188). Fulton continues, “From a marketing point of view, the ‘product’ being offered for sale by New Urbanists is radically different from the conventional products that have dominated residential real estate for the last half-century. Consumers, developers, and lenders all have a well-established set of expectations about what houses and neighborhoods will deliver” (Fulton 1996, 26). Existing houses and patterns of land use, as argued by Martin and Warner (1997, 117), accompany laws and regulations that dominate public expectations and private demand. Because people want what is familiar, established patterns are repeated. They conclude, “Cycles of development tastes and formulas are reinforced by inertia and efforts to break the mold are penalized by delays.”

Financial risk for developers is another potential barrier. New town construction is always risky. Some community amenities must be installed first, which requires developers to spend millions of dollars up-front and incur substantial carrying costs before a house has even been sold. The added risk with New Urbanist developments is there is no guarantee that potential buyers will be enthusiastic about moving into a town that has no history and no identity except in the mind of the planner (McKenzie 1994, 98).

An American public that fails to see a crisis challenges designers and planners who are trying to promote more livable communities. People have a personal and psychological investment in business as usual and they do not want to hear about changing things. They have adopted a suburbia built out of a distaste for cities, and a fear of the underclass that lives there (Kunstler 1996, 147). M.J. Weiss (2000, 67) states that many Americans are simply too steeped in convention for the progressive vision of planners.

So while Americans keep dreaming of a good place to live, many of our dreams – to live in the presence of nature; to live near city and country; to own and control our own property; to have constant freedom of movement; to move up; to move away; to start again; to portray our individuality; to cherish our privacy – all tend to work against establishing good communities in which to live. (Krieger 1991, 11)

Bressi recognizes that New Urbanism is just a step, focusing the public's attention on how design has real impact on people's lives. But, the presence of these early projects will create tangible examples of alternatives to current development (Bressi 1994, xlii). Working New Urbanist models are needed so bankers, builders, planners, and the general public can visit and make their own evaluation as to the appeal and potential value (Kunstler 1996, 188). Recognizing that New Urbanist developments have, to date, been regionalized, Audirac and Shermeyen (1994, 167) conclude that successful New Urbanist developments outside the Northeast and Mid-Atlantic (where small town culture is firmly established) may have to "deviate significantly from the Seaside prototype and adapt to what local demand considers the highest acceptable density and mixture of housing types and land uses."

Conclusions

The literature has provided insight about the history and issues surrounding suburban development. It has also revealed that there are alternative methods to conventional design, which afford opportunities for community and neighborhood development. These revelations have addressed the physical environment as the underlying structure for the social development of various scales – from the macro scale of regions to the micro scale of neighborhoods, blocks, and streets. These scales have been translated into various guiding principles that can be customized to fit different clients, climates (both physical and political), and conditions.

One noticeable omission from the guiding principles is individual control over a person's landscape, and an overemphasis on buildings rather than comprehensive landscape planning within a community. The principles surround the topic, and talk about the pieces but fail to proclaim a need for good, thorough landscape planning from the beginning of a project. Many of the notations about landscape deal with aesthetic or functional spaces

themselves, not about a comprehensive network. It is evident that this issue needs to be addressed in further studies and discussions surrounding all planning efforts.

It is also clear that in the future, designers will need to engage citizens in the planning of their communities and their regions. Without citizen input and visualization, new communities (no matter the scale) will not address the needs of their constituents. Support has been provided that shows various qualities that people feel are very or extremely important in their communities. An American LIVES survey indicated that 61 percent of the respondents would like opportunities to meet people within the community, 55 percent would like to live in an area that provides a small cluster of convenience-oriented stores, and 52 percent would like to live within easy walking distance of parks, stores, etc. (Warrick and Alexander 1998, 14). This is easily contrasted with the types of communities that are being provided. The discrepancy between what is being built and what is needed supports the appeal that guiding municipal control at local and regional levels is warranted. This control needs to have a specific set of enforceable guidelines, and which do not impose unjustified costs that are passed on to consumers.

Information about the process for designing quality neighborhoods was lacking in the literature. Nelessen (1994) was the only author that dealt specifically with this aspect in a comprehensive manner, and that was not specific to a site. Duany and Plater-Zyberk (1992, 33) begin to outline the process in one article, but the steps get lost in their criticisms of conventional development. Much has been written about the charrette process that DPZ followed for Kentlands (Shoshkes 1989). Since Kentlands was their first major new town project (1988), it is not evident if they still follow all of these steps or if their process has been refined. Various other authors also provide principles and remedies for implementing changes, but none goes into greater detail about the steps required from start to finish.

This literature review provides support for an informed discussion and analysis for the case study. The issues of design in communities, implications for social design, methods of design and development, influences of various stakeholders, application of New Urbanist principles, and the role of government officials in community design are discussed in specific detail as they relate to Somerset and Middleton Hills.

Notes

- ¹ Although revised, this text is still widely used today for road design standards.
- ² Air conditioners and televisions brought people inside, making front porches less necessary for cooling off or socializing and provided entertainment other than the neighborhood cinema (Nelessen 1994, 31).
- ³ Covenants are contracts that restrict the use of each lot.
- ⁴ Although there are other examples of this type of alternative housing, Village Homes in California and The Woodlands in Texas are two well-documented models.
- ⁵ Southworth and Ben-Joseph (1997, 107) note that the distance most Americans are willing to walk for typical daily trips ranges from 400 feet to about one-quarter mile.
- ⁶ The authors of the Ahwahnee Principles were also heavily involved in establishing the New Urbanism Principles.
- ⁷ The Ahwahnee Principles are named for the hotel in Yosemite where the principles were presented at a conference in the fall of 1991.

CHAPTER 3. CASE STUDY

*There is a pattern here: at each step, we neglect to look at the whole picture.
We assume that our wealth, technology, and “problem-solving ability”
can bail us out of any new problem we create.*

Michael Corbett
A Better Place to Live, 1981

The Somerset housing development in Ames, Iowa is being developed as a traditional neighborhood development, or TND. A TND is designed using principles of planning that reflect social aspects of living in a community. This project was initiated by the City of Ames, rather than by the developers themselves. The developers were going to build a housing development on the property, but they were anticipating developing the 150-acre parcel in a manner consistent with the surrounding suburban landscape of single-use residential development. Through a variety of circumstances, which will be detailed below, the project has been directed toward a hybrid between what developers usually build and what the city has envisioned for growth. Jeff Speck, a designer from the Miami, Florida based architecture and planning firm of Andres Duany and Elizabeth Plater-Zyberk (DPZ), created the original plan for this TND (see Figure 3.1). DPZ is known for creating the guiding principles of the TND planning movement. Some of the principles reflected in this plan include: mixture of housing types and densities, pedestrian-scale buildings, buildings closer to the streets, through streets rather than dead end streets, and a commercial core.

The City of Ames has chosen to use the term “village concept” in place of TND to describe their vision for the development of communities that reduce the impact of suburban sprawl by building at higher densities. Residents will live within a five-minute walk of the town center (approximately one-quarter mile), a variety of retail and service needs will be accommodated, a street hierarchy filters and calms traffic, and public transportation is easily accessible. The planners and the city have modified Somerset from the original TND outline. Figure 3.2 shows the current plan as it is being implemented by the developers.

The development of Middleton Hills in Middleton, Wisconsin, provides a second Midwest example of a New Urbanist project (see Figure 3.3). Middleton is located eight miles northwest of Madison, is the same size as Somerset, and was started around the same

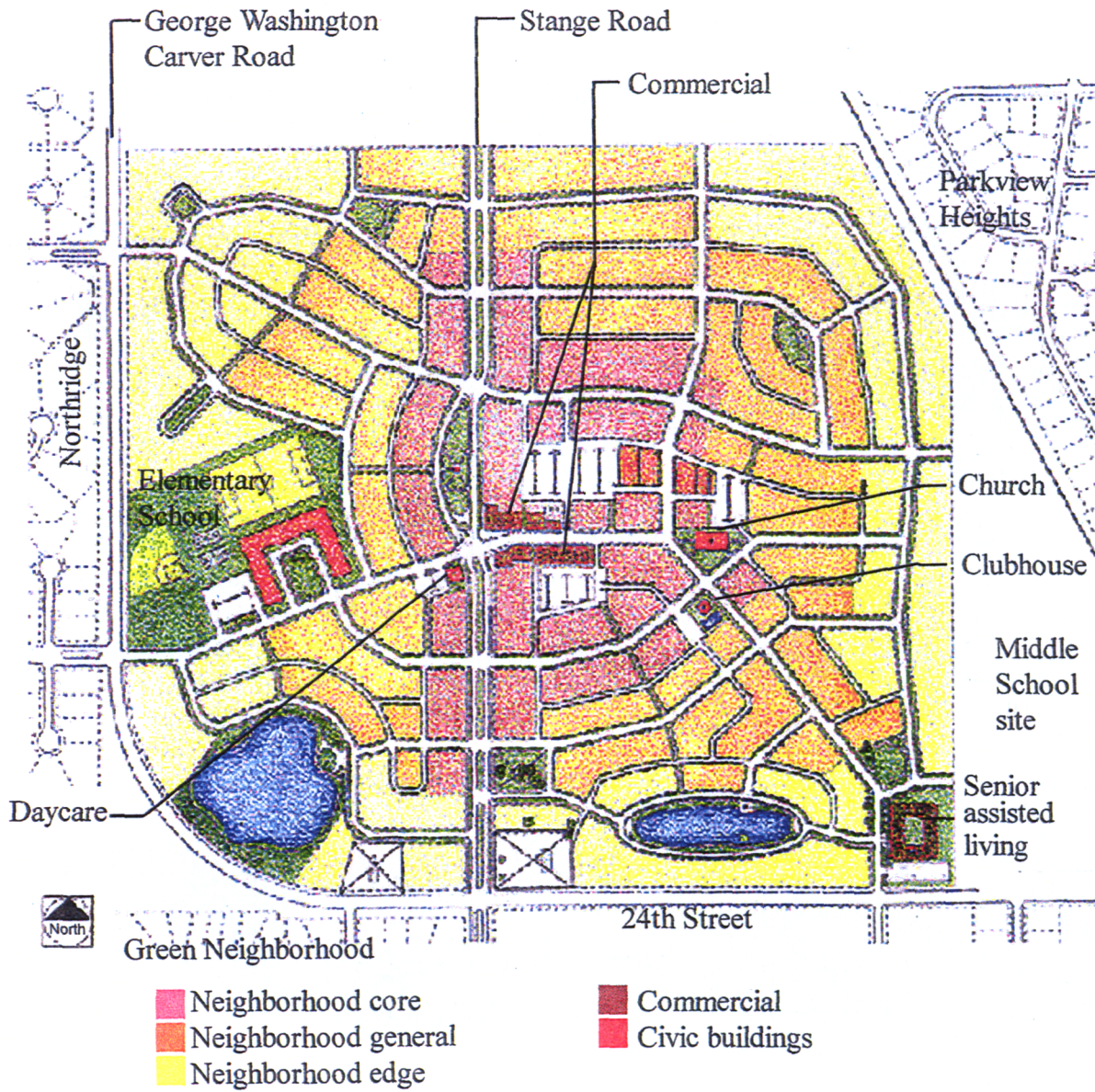


Figure 3.1. Original plan for Somerset as developed by DPZ.



Figure 3.2. Final plan for Somerset being implemented by the developers.

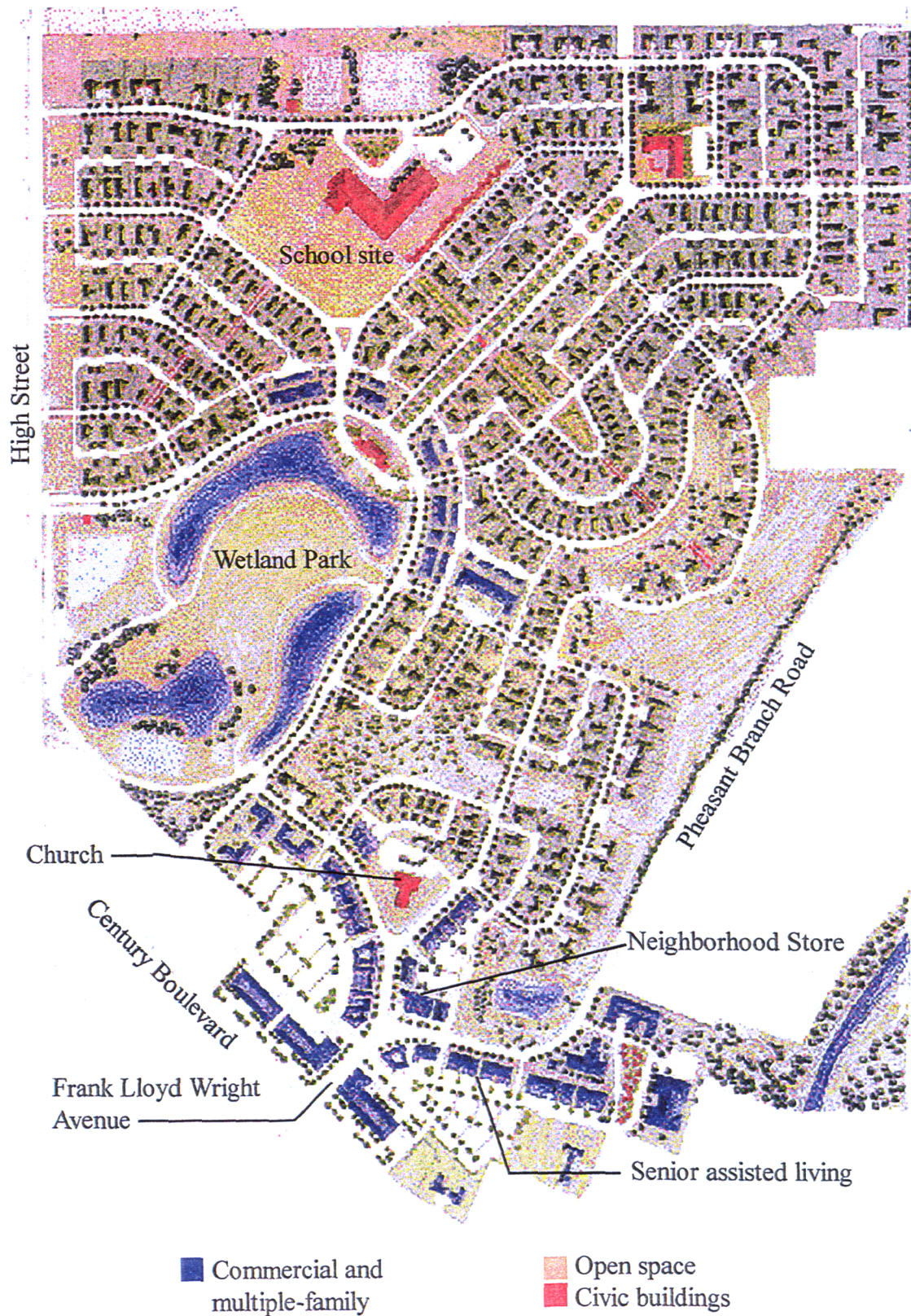


Figure 3.3. Middleton Hills plan developed by DPZ and being implemented by the developer.

time. The visionary landowner wanted to provide Middleton with a housing project that would extend beyond its borders and offer a quality of living unparalleled in the Madison area. The developer also wanted to create a model that other developers and planners could emulate. The process that was followed in Middleton differs from that in Ames, and this research will analyze the intricacies of both situations.

Evaluation Matrix

An evaluation matrix was constructed as a framework to reveal how competing interests have shaped the differences between the original Somerset plan submitted by DPZ and the final plan that is being implemented by the developers. It is intended that the matrix will provide a basis for analysis and discussion of specific elements within the two plans, the overall development concepts, and the principles of New Urbanist design. This system will also provide a framework for comparing the housing project in Ames to the project in Middleton, which was also designed by DPZ.

Description of the Matrix

The information contained in Table 3.1 is the result of research obtained from published material, from direct observations, and from interviews with the people involved in the project or the development process at Somerset. The dependent variables in Table 3.1 include surrounding neighborhood expectations, the City of Ames, the developers, DPZ, and new households. The independent variables include road hierarchy/traffic, streetscape/front yards, space behind houses, parking, open space network, land use adjacencies, and regional context. The information contained in each cell reflects the views (needs and wants) of each party (dependent variable) regarding each design issue (independent variable). The completed matrix will be used to evaluate how well the initial and the final Somerset designs balance the divergent needs of the different parties. The completed matrix will answer two questions. The first is to inquire whether the original and final plans met the needs of the various groups. The second goal is to establish how well Somerset, as it has developed, fulfills the principles of TND and New Urbanism.

Table 3.1. Somerset Evaluation Matrix

Design issue		Road hierarchy/Traffic	Streetscape/Front yards	Space behind houses	Parking	Open space network	Land use adjacencies	Regional context
Point of view (needs or wants)	Surrounding neighborhood expectations ¹	<ul style="list-style-type: none"> • Wide streets • Cul-de-sacs • Good connections and vehicle access to schools, work, shopping, and recreation • Afraid that high-density building will create more traffic 	<ul style="list-style-type: none"> • Large setbacks • Two or three-car attached garage • Large lot 	<ul style="list-style-type: none"> • Variable but generally large, unclaimed open space • Bikeway through blocks • Large open space is a positive amenity 	<ul style="list-style-type: none"> • 2 or 3 car attached garage • Garages often in front of dwelling (on setback line) • Parking along both sides of streets 	<ul style="list-style-type: none"> • Many trails and open space between houses link with regional park • Indistinguishable between public & private realm 	<ul style="list-style-type: none"> • Like access to parks and schools • Don't want apartments and retail businesses in their back yards 	<ul style="list-style-type: none"> • Compatible with surrounding character, not necessarily historic or reflecting a regional quality • "Prestige houses"
	City of Ames ²	<ul style="list-style-type: none"> • Reduced street width • Enhance availability of an integrated system of efficient automobile use including alternative transportation 	<ul style="list-style-type: none"> • Reduced building set back • Porches on the front • Pedestrian-scale • Integrated & unified design among neighborhoods 	<ul style="list-style-type: none"> • Parking to the side or rear • Recreational pathways throughout • Alleys relieve streets of parking, but difficult to maintain in winter 	<ul style="list-style-type: none"> • Visitor parking and recreational vehicle storage provisions • Attached garages set back 10' from front building line • 1 parking space for every 250 or 275 feet of gross leasable area 	<ul style="list-style-type: none"> • Open space of up to 20% of total developed acres • Encourage mixing of uses to create "village" involving closer proximity of uses & more pedestrian activities 	<ul style="list-style-type: none"> • Compatible uses between neighborhoods (shared parks, trails, streets, recreation) • Village concept 	<ul style="list-style-type: none"> • Public spaces & villages are connected through the creation of an integrated community & sense of place
	Developers ³	<ul style="list-style-type: none"> • Little hierarchy in general development practices – wide collectors & cul-de-sacs 	<ul style="list-style-type: none"> • 25-30' setbacks • Two or three-car attached garage • Large lot 	<ul style="list-style-type: none"> • Variable but generally large, unclaimed open space • Large open space is a positive amenity • Few alleys –due to development and maintenance costs 	<ul style="list-style-type: none"> • 2 or 3 car attached garages • Garages in front of dwelling (on setback line) • Parking along both sides of street 	<ul style="list-style-type: none"> • Many trails and open space between houses • Difficult to distinguish public & private realm 	<ul style="list-style-type: none"> • Build where and how they want – without restrictions • Single-use development 	<ul style="list-style-type: none"> • Compatible with surrounding character, not necessarily historic or reflecting a regional quality • Maintenance-free materials • "Prestige houses"
	DPZ ⁴	<ul style="list-style-type: none"> • Through roads instead of dead-end streets, unless required by natural conditions • Low- and high-density local roads • Main Street • Alleys • Blocks less than 600' long • Regional public transit links 	<ul style="list-style-type: none"> • Buildings are placed relatively close to the street (generally set back one-quarter the width of the lot) • Every building provides a covered stoop, and front porches are required on large houses • Few garages placed at the front 	<ul style="list-style-type: none"> • Shorter front setbacks allow deeper rear yards • Alleys integrated to create pedestrian-friendly streetscape • Houses served by alleys have 3'-6' tall fence, wall, or shrubs on rear property line • Commercial is served by rear-entrance parking lots 	<ul style="list-style-type: none"> • Most lots access parking via a rear alley • Garages at front are set back a minimum of 20' • 3 parking spaces per 1000 square feet of commercial • 1 parking space per 2 residential bedrooms • Parking can be located within one-quarter mile from buildings 	<ul style="list-style-type: none"> • Public parks distributed evenly throughout -so every house is within a two-minute walk of a park • Retain and celebrate natural features –including topography • Significant natural amenities are located in public realm, not held in private ownership 	<ul style="list-style-type: none"> • Comprehensive regional plan limits automobile use and preserves open space • Compatibility of uses • Connected to adjacent roads and developments • Public transportation access and availability 	<ul style="list-style-type: none"> • Regional character determined through charrette process • To reduce automobile trips and preserve open space, develop regional plan • Highways approaching TND should not go through (should pass to the side or move traffic slowly through) • Prominent civic buildings at critical intersections
	New households ⁵	<ul style="list-style-type: none"> • Want better system of streets that direct traffic • Afraid that high-density building will create more traffic • Widen and build more roads • Want highway access 	<ul style="list-style-type: none"> • 2 or 3 car attached garage • Large lawn areas • Plenty of parking 	<ul style="list-style-type: none"> • Large open lawns • Recreational trails 	<ul style="list-style-type: none"> • Ease of parking • People don't want to walk to anything • Parking is a "right" 	<ul style="list-style-type: none"> • Want park areas with recreation trails • Preserve green space • Want established trees 	<ul style="list-style-type: none"> • Close to good quality schools • Highway access 	<ul style="list-style-type: none"> • Want larger houses and larger lots • Quality of material is important, not level of detail • Maintenance-free exteriors • Custom houses

Selection of design issues

Selection of the “design issues” was based, in part, on initial interpretation of the DPZ and final plans. The plans were dissected to extract the differences and similarities between different design features. Figures 3.4 through 3.11 show the patterns that emerged after isolating specific design features from each plan: road hierarchy, alleys, open space, and designated parking. The remaining design issues, streetscape/front yards, space behind houses, regional context, and land use adjacencies, were selected by analyzing the plans and observing what has already been built in Somerset. These elements were also selected because they relate specifically to the principles of TND and New Urbanist planning and they provide a basis for discussion of the design and development process.

Selection of points of view

The five points of view included in the matrix represent the groups that have had the most influence on Somerset, or will be most directly affected by Somerset. Surrounding neighborhood expectations (adjacent property owners), the city, the developers, and DPZ have been the main influences on the process and planning of this development. New households have not directly influenced the Somerset plan, but will be affected because Somerset presents a new option in the market. These groups are identified separately because each point of view has a unique perspective that helps to shape housing markets.

In Ames, the perspectives of adjacent property owners reflect culturally driven expectations. The past five decades have produced a population expecting a particular lifestyle. Because there has been little change in the design of neighborhoods, people have developed certain expectations for new development. They expect that the layout and design details will be compatible with the neighborhood that they currently live in. The city represents standards that address transportation, safety, service access, and land use. These standards have changed in response to population fluctuations and to accommodate automobile needs. The city is also responsible for maintaining good business relations and needs to remain flexible in executing these standards. Developers supply the market with residential and commercial buildings. They represent the practice of designing and building structures that they believe meet consumers’ needs and desires, and therefore, provide the

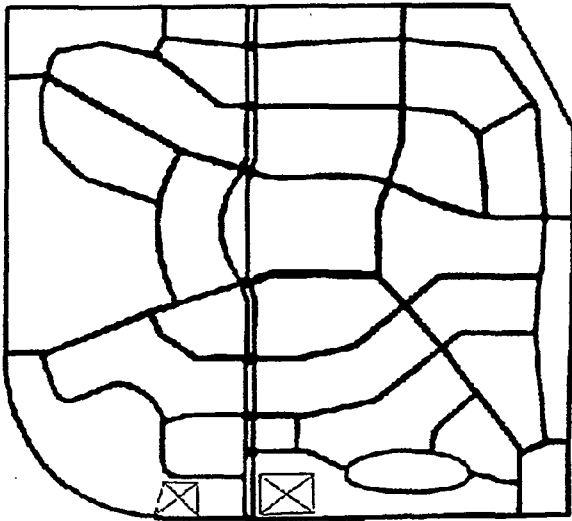


Figure 3.4. DPZ plan - street pattern as design component.

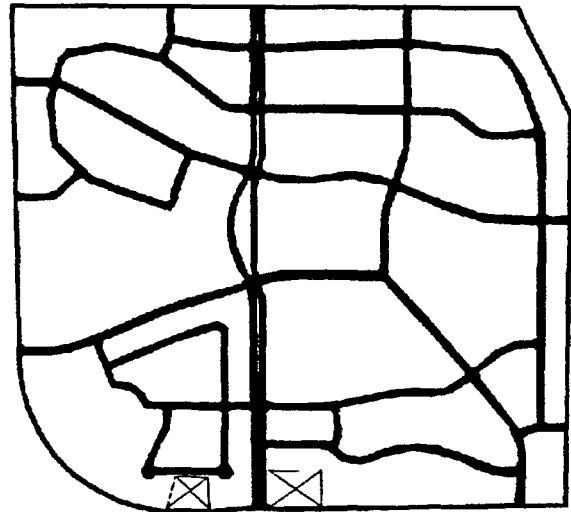


Figure 3.5. Developers' plan - slight reduction in lineal feet of streets, but wider pavements.

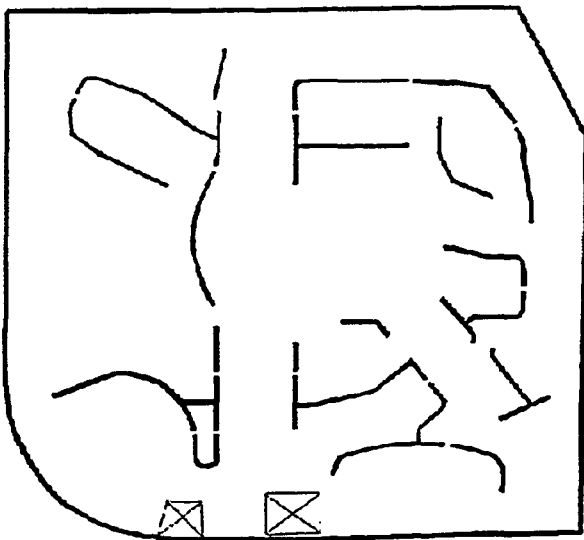


Figure 3.6. DPZ plan - 28 alleys contribute to network.

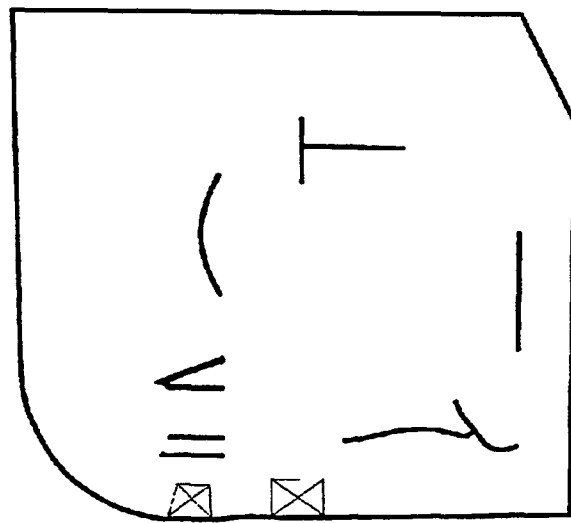


Figure 3.7. Developers' plan - Number of alleys reduced to 10.

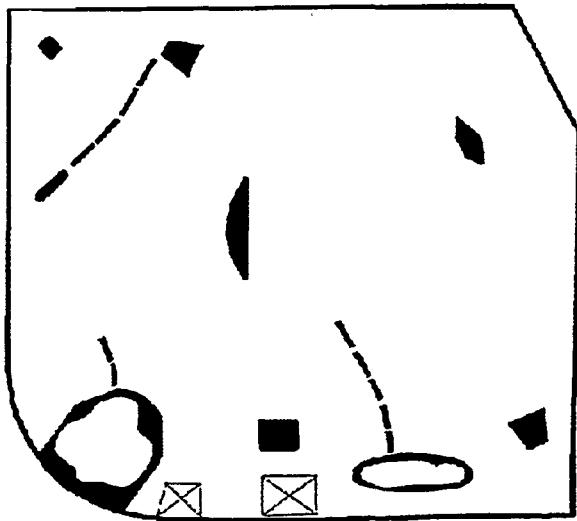


Figure 3.8. DPZ plan - parks disbursed throughout to allow each dwelling to be within a three-minute walk.

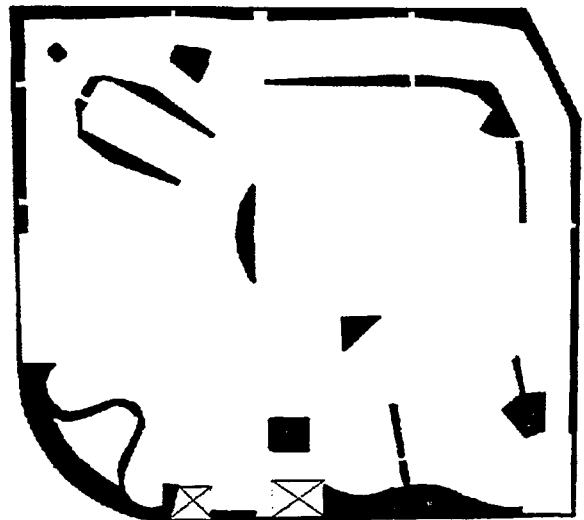


Figure 3.9. Developers' plan - modification of alleys and edge open space buffer reflects conventional patterns.

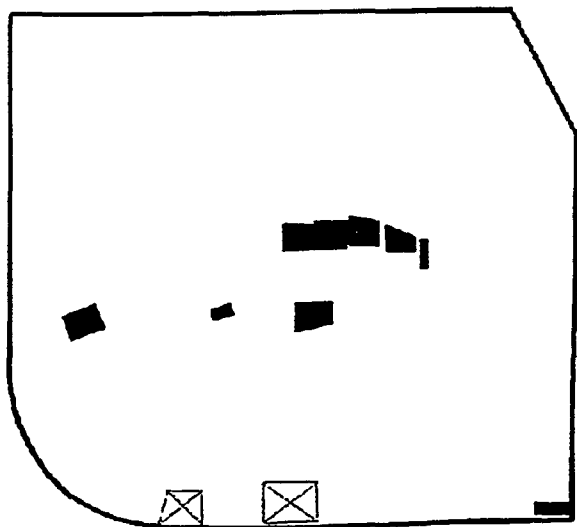


Figure 3.10. DPZ plan - much of the parking in the commercial core is to be shared between commercial and apartments.

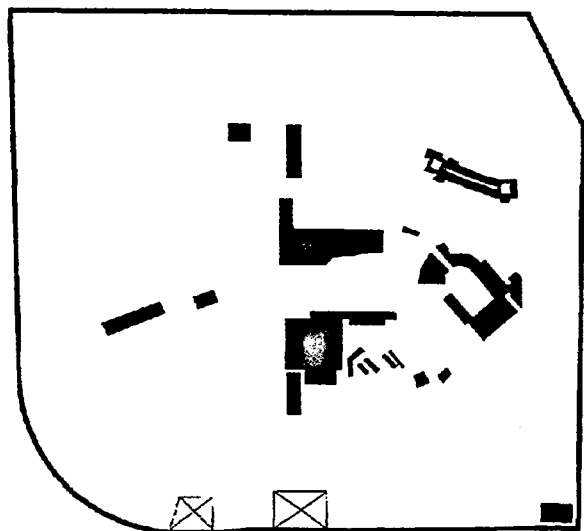


Figure 3.11 Developers' plan - parking increased in commercial core. No shared parking between uses.

greatest sales potential. DPZ represents the principles of TND and New Urbanism. These theories are based on an increasing demand for more efficient densities, physical and social integration, increased diversity in communities, and reflect an admiration for prewar architecture and planning principles. New households represent current cultural preferences for new development over existing housing stock. Over time, as developers recognize and respond to changes in demand, this group will affect change in the way that communities are designed and developed.

The city. For the purpose of this report, “The City” will refer primarily to staff from the Ames Planning and Housing Department. Although decisions are ultimately made by the City Council, the Planning and Housing Department makes recommendations to the Planning and Zoning Commission, who then makes recommendations to the City Council.

The City of Ames had been using a comprehensive plan that was last updated in 1988. In 1993, they began to update the plan again, and, in the process, collected substantial input from citizens using surveys and public forums (O’Connell 2000). The results indicated that Ames residents did not want current patterns of development to continue. These efforts became part of the Land Use Policy Plan (LUPP), which was adopted in early 1996. The City of Ames initiated the “village concept” at Somerset because the City Council saw this as an opportunity to implement the tenets of the newly adopted LUPP. The LUPP established the basis for initiating change and providing alternative housing opportunities within this expanding college town. The LUPP (RM Plan Group 1996, vi) begins by stating,

This plan for Ames is about connections – connections involving land use, environment, recreation, mobility and infrastructure. This plan is also about connections involving people with their neighborhood and community in creating a sense of place.

Somerset was the first property within the city limits, or within the state of Iowa, to attempt this progressive alternative. While the actual concept of pedestrian-scale, mixed-use, mixed-density neighborhoods is not new, the resurgence of this quality of life is new.⁶ An excellent example can be found in Ames’ Historic District. Houses are within walking distance of retail stores and offices. Compared to contemporary subdivisions, the Historic District offers a wider variety of housing types and sizes, and houses are closer together and

closer to the narrow streets. City planners and leaders realized the potential value in attempting to recreate, even a little of, this way of life at Somerset. The three developers of Somerset (Friedrich, Hunziker, and Furman) have been doing business in Ames for decades. Decades of established “status quo” housing has prevailed here. It is understandable that they would be resistant to change a formula that has been successful for them. So, the city officials vested with the authority to activate change within the city decided that it was important to investigate alternative ways to live.

The property directly to the west of Somerset was under construction when discussions about Somerset (then the Taylor farm) began in 1995. This property, Northridge, was zoned to include 448 multiple-family units. The three developers with joint ownership in this property approached the city to ask that they be allowed to complete construction on Northridge without any multiple-family units. Since these developers also jointly owned Somerset, the city permitted them to continue building only single-family houses at Northridge, with the understanding that Somerset would be built with the equivalent number of multiple-family units and some commercial buildings.

The first plans for Somerset submitted by the developers showed the medium-density residential (apartments) and the commercial property located along the intersection of 24th Street and Stange Road. Current residents and the Taylors disliked the idea that gas stations and multi-story apartment buildings would be adjacent to their property. They especially disapproved because they were originally told (by the city) that this project would match the other single-family houses surrounding them (Taylor 1999). Residents felt a sense of betrayal on the part of the developers and the city, and residents did not feel that they could trust either party. Residents also felt that these developers held too much political influence with the city, and that they expected preferential treatment because they provide revenue for the city (Fiore 2000). Residents decided to form a group to represent their views.

After protests from local residents began, the city realized they needed to become better educated about the village concept and determine what it really meant for the city. The city admitted that there was reluctance on the part of the developers, but that the developers saw the potential for trying something new by changing their development practices (O’Connell 1999). The developers, however, did not like being told how to operate their

businesses, especially since they had been conducting business successfully in the same way for years. Despite protests from the developers, the city exerted more influence and essentially drove the project. Mr. O'Connell stated that this project was a "critical, strategic opportunity" for the city and developers to "create a marriage" which could benefit both parties (O'Connell 1999).

On April 13, 1996, a workshop was held at Iowa State University to educate the city and developers about various concepts for alternative housing. The "Ames Community Planning Conference" was sponsored by the Chamber of Commerce, the Economic Development office, and the Ames Neighborhood Coalition. The goal of this conference was "[t]o provide education on progressive planning concepts and how they may solve some of the issues which the 'Ames' [sic] community faces" (Ames Community Planning Conference 1996). The four guest speakers were Jeff Speck, Senior Designer from Duany and Plater-Zyberk Architects and Planners (DPZ) in Miami, Florida; Joe Molinaro, Director of Land Development Services from the National Homebuilders Association in Washington, DC; Richard McLaughlin from the Town Planning Collaborative in Minneapolis, Minnesota; and William Morrish, Director of the Design Center for the American Urban Landscape in Minneapolis.

These experts addressed factors contributing to the prevailing model of growth. Incentives from the Federal Housing Administration and Veterans Administration programs contributed to current suburban sprawl by encouraging housing outside cities. Retailers and corporations moved outward in response to housing, and the construction of roads and highways facilitated the whole process of outward expansion. The speakers delivered the message that these elements failed to work together in establish regional character, community identity, and belonging. The City of Ames realized its town landscape had been infiltrated by chain stores and restaurants owned and managed by corporate offices in distant locations. These businesses generally did not hold a vested interest in the community and had transformed the suburban landscape. Segregated land use, auto dependence, lack of identity, sameness, and income segregation are points that Mr. O'Connell raised as issues to be addressed in this new plan (O'Connell 1999). Requesting that Somerset be built as a TND was in response to the changing housing climate.

The city continued to be persistent in making the project in Somerset a reality. Following the conference, the city requested that the developers hire Jeff Speck from DPZ as a planning consultant on the project. Throughout the process, the city was involved in altering regulations, changing zoning ordinances, and incorporating recommendations from the LUPP. The city also revised their zoning ordinances to make it easier for developers to incorporate the village concept.

Adjacent property owners. When the owners of property adjacent to the Taylor farm learned of proposed zoning changes, they exerted their influence by forming a “Neighborhood Group” (The Group). The Group sent a letter to the Planning and Zoning Commission explaining the position of residents in neighborhoods surrounding the proposed development (Cruse 1996). Residents were frustrated because information that was exchanged between the city and the developers was not shared with them. They also expressed concern that neither the city nor the developers truly understood the nature of the “village concept,” and therefore could not educate others about it. Residents took it upon themselves to learn about the principles of TND and the village concept by reading books written on the subject (Fiore 2000). After educating themselves, they felt that the initial developers’ plan did not adequately fulfill the requirements for the village model, and the plan was not considering input from local residents.

In a letter to the Planning and Zoning Commission, residents identified three major, unresolved issues (Cruse 1996). First, The Group expressed opposition to commercial development, but stated that if commercial development was incorporated, then it should be limited in size and scale to reflect the principles of the village concept. Second, traffic congestion generated from commercial development and the extension of Stange Road would place further strain on already heavily traveled streets, namely Stange and 24th. Third, the proposal for higher-density housing would also increase traffic flow, which was contrary to the village concept. Residents also feared that their property values would be compromised by the location of the proposed commercial and higher-density housing (Fiore 2000). This reaction may be rooted in the preconceived notions of transience of apartment dwellers, lower-income residents, and loitering associated with strip commercial development. The

Group demonstrated the neighborhoods' concern over these issues by presenting the Planning and Zoning Commission with a petition containing over one hundred signatures and succeeded in delaying the project until some issues could be publicly discussed.

The developers. Three Ames developers, Friedrich/Iowa Realty, Hunziker and Associates, and the Furman Corporation are well established in Ames. Over the past three decades, they have acted as a consortium by purchasing developable land together. Each developer then owns and builds one-third interest in a particular development. Somerset is an example of this type of venture.

Friedrich, Hunziker, and Furman were aware of the city's desire to incorporate more village-type housing into the city. Negotiations began with the city to insure that some commercial ventures and the high-density units were included in Somerset. However, the initial plans met with disapproval from neighboring residents.

The city instructed the developers to integrate the concepts of village planning into their design. The developers did not like the idea that they were being told how to conduct their business and felt resentful that they were being given little choice in how to develop this property (Friedrich 1999; Furman 1999; Hunziker 1999). To become educated about what they were being asked to do, the developers participated in the April conference at Iowa State University, and visited the Middleton Hills project in Madison. As recommended by the city, they hired Jeff Speck from DPZ to create a base plan for the project. Even after they received the final design from DPZ they continued to negotiate with the city planners and city engineers about altering the design to better match their own design standards. They felt that consumers wanted attached garages and large setbacks, and felt snow removal in alleys would be problematic. Mr. Friedrich stated that attached garages are safer and that "it is more desirable to have the convenience of attached garages since climates go from one extreme to another" (Friedrich 1999). The developers succeeded in changing a number of items. Many of the twenty-eight alleys in the DPZ plan were converted to trails at the backs of houses or removed altogether. The pond on the southeast side was removed and the houses were sited further away from 24th Street. More parking was added in both the commercial and residential areas. The developers felt that a DPZ-style TND was not

appropriate for the Ames market. Mr. Hunziker expressed the opinion that this type of design is better suited to communities with populations greater than 50,000 (Hunziker 1999).

The developers have successfully modified the project to better suit their conventional method of development. They have been working with local architect Jeff Fenimore from Architects Rudi/Lee/Dreyer to modify the plan. Mr. Fenimore (2000) feels that the tools to execute it have been changed, not the intent. With Mr. Fenimore's assistance, the developers selected six house styles for the development – Early Colonial, Georgian, Federal, Greek Revival, Craftsman Bungalow, and Prairie School. They felt that Ames does not exhibit a particular vernacular and therefore chose these styles for their “relationship to the street” (Fenimore 2000). Construction started approximately two years after negotiations began. Less than six months after DPZ submitted its plan to the developers, a city Council Action Form (City of Ames 1997b, 1) read, “It is the intent of the developers to develop the subject property using a modified ‘village concept.’”

With construction now underway, the developers say they generally agree with New Urbanist concepts, but feel the design parameters make the project more expensive. They talk about the infrastructure and design guidelines as the reason for high house prices. For example, the DPZ plan specified that garages be set back at least 18 feet from the build-to-line⁷ (Fenimore 2000). Because these developers rely on modified stock plans, they were limited to only a few plans that included a deep garage setback. They question why someone would choose to purchase a smaller house on a smaller lot rather than a larger house in a development like Northridge (Friedrich 1999; Winkleblack 1999). They feel that the site planning and architectural design details are too stringent and that the approval process hampers progress. For example, Mr. Winkleblack (1999) from Hunziker's office is very concerned that they will not be able to attract retail businesses because of the restrictions on size and materials for signage. However, Mr. Friedrich did comment that he could see the potential returns from incorporating greater detail (Friedrich 1999). They are all concerned that they will not make a profit, or worse, barely break even. Developers also stated that if growth in the city is limited and Somerset cannot support the type of house that a potential buyer is looking for (a large house on a large lot), then “leapfrogging”⁸ will be exacerbated (Winkleblack 1999).

DPZ. The Miami, Florida architecture and planning firm of Andres Duany and Elizabeth Plater-Zyberk (DPZ) became involved in the Somerset project in 1996 when they were asked to present information at the “Ames Community Planning Conference.” As a Senior Designer at DPZ, Jeff Speck was sent to Ames to talk about the principles guiding the movement that was instigated by the company’s founders. At the April conference, Mr. Speck espoused the benefits of creating communities that reintroduce aesthetic, social, and humanistic values into design (Ames Community Planning Conference 1996). He talked about the differences between the two current models of development: the village model and the suburban sprawl model. The village model was prevalent until the 1940s and was a natural response to human needs. The suburban sprawl model was introduced after the 1940s as a “modern” solution to planning. The isolationism created by the sprawl model offers little in terms of regional character and pedestrian orientation. The City of Ames saw value in the ideas of Mr. Speck and requested that the developers hire him to develop a plan for this new community.

The developers did hire Jeff Speck and over the next few months his firm created a design package for Somerset. This packet included a site plan, perspective drawings, and street width and building height specifications. Communication took place mostly via telephone, but Mr. Speck did visit the developers a few times as he was working on the design. One step that DPZ usually includes in design development is a pre-design charrette. However, no charrette was held in Ames, nor was input requested from community members *per se*.⁹ A charrette is performed in order to help designers adapt a TND template to local conditions. Collecting input from local residents is a key feature of the process. The DPZ team normally spends about a week in a community gathering information concerning local and regional historic precedents. This visit includes site visits, tours of surrounding areas, and various meetings with developers, city officials, interested community members, planners, and local architects. Once the design team has a better impression of the community dynamics, they begin to produce schematic drawings showcasing ideas generated from community input. At the end of the session, a public presentation is held which includes drawings and text documenting working codes. These drawings may show road layout, lot sizes, building heights, and material specifications. DPZ is also specific about

incorporating regional building types and material characteristics, however these drawings do not specify designs for individual buildings, leaving detail design for local practitioners. They do, however, often suggest styles that they feel indicate a regional architectural character. Mr. Speck feels that the Somerset design would have benefited if a charrette had been held. Missing this step in the process may have resulted in a lack of regional character, a lack of community ownership, or community resentment. As Mr. Speck stated, “I gave them a product, not the process” (Speck 1999b). Mr. Speck also feels that the only way a development will be successful is if a motivated developer initiates a project (Speck 1999a).

New households. The role of potential property owners in the development process at Somerset is not readily apparent. However, this group is largely responsible for the changes that the city of Ames “required” of the developers. On the one hand, current and future owners have been asking for growth management strategies that reflect their desire for safe, walkable streets, and strategies that reduce suburban sprawl. They want measures that help control rampant land development. On the other hand, a strong economic climate is fueling the “bigger is better” attitude among American consumers. Housing has not been exempt from this mindset. A robust economy and a booming stock market have allowed households to spend newfound wealth on larger lots featuring spacious new houses.

Over the past ten to twenty years there has been an increasing call for neighborhoods exhibiting regional character, which provide a sense of belonging. These ideas are sitting favorably among those who support the downsizing of houses, retail centers, and corporate campuses. People are beginning to realize that there can be a different, even better, way to live, work, and play. However, there is an apparent lack of publicly available assessments that reveal people’s desires and expectations regarding new houses. Developers are assured they are building what people want. While current offerings may still appeal to a majority of house buyers, the City of Ames has identified at least a segment of the population the seeks something different. New Urbanism represents a niche market, and since Ames residents are typically unfamiliar with all of its concepts, new households will generally represent views similar to existing owners.

Evaluation of needs and wants

The following discussion relates directly to the evaluation matrix. Each design issue will be reviewed along with the prevailing sentiments of the parties involved in the project. The information presented in the table represents the needs or wants of each specific stakeholder group. These cultural dispositions were gathered from written sources or interviews with the parties.

Road hierarchy/Traffic

It is generally understood that a hierarchy of streets and good connectors is desirable to move traffic smoothly and to minimize waiting times. This is the goal of most of the parties in the matrix, however not all of the parties desire the same type of road network. Current dwelling owners and developers tend to like wide streets and cul-de-sacs in residential areas. Developers prefer a dendritic street layout because it costs less to build, and cities like it because there are fewer roads to maintain. Potential owners desire a system of roads that direct traffic, including more roads and improved highway access. Both existing and potential owners fear that new growth, especially high-density apartments, will increase traffic in their neighborhoods.

The city and DPZ wish to have new streets that are narrow and contribute to pedestrian-scale development. Both parties also desire regional public transportation networks as part of the overall movement of people. DPZ is specific about the network they wish to incorporate into developments. They use a definitive hierarchy of streets, usually in a grid or modified grid pattern, to move pedestrians and automobiles by specifying the widths of roads in various areas, including alleys.

Streetscape/Front yards

The space in front of the house is treated differently depending on expectations. The surrounding neighbors, developers, and new households expect dwellings to be set far back from the street, attached two- or three-car garages, and large houses located on large lots. The city and DPZ would like new construction to reduce the setback distance, thereby bringing houses closer to the street, and creating an environment properly scaled for

pedestrians. DPZ specifically wants buildings to line up in a unified wall of architecture and utilize build-to-lines instead of setbacks. Both parties would like smaller lots, which afford more or larger public spaces, and helps curb suburban sprawl. Including deep front porches, recessing garages, and properly scaling buildings helps foster a pedestrian-friendly streetscape and community identity. DPZ would also like to reduce the number of garages attached to or at the front of houses.

Space behind houses

Adjacent property owners, developers, and new households generally expect large, open back yards, possibly fenced for privacy. Large, open space and recreational trails through properties are deemed positive amenities. The city and DPZ would like to use alleys at the back of the property, thus providing a pedestrian-scaled streetscape at the front. Moving the house closer to the street also contributes to the pedestrian-scale and allows larger rear yards. Alleys provide service corridors for garbage pick-up and garages, but also serve as social and play spaces safe from high-speed through traffic. DPZ places commercial buildings at the sidewalk, again providing pedestrian-scale and leaving the rear for parking.

Parking

Existing owners, developers, and new households desire garages, typically attached to the dwelling, to park vehicles. In conventional subdivisions, garages are often at the front of the house and are usually designed to store two or three vehicles. Overflow or visitor parking is often allowed along the wide streets in conventional neighborhoods. Potential owners are becoming increasingly sophisticated about their desire for easy parking in close proximity to their destinations. The city and DPZ agree that garages at the front of the house should be set at least ten feet behind the front façade of the house. In commercial areas, the city recommends a parking ratio of one vehicle for every 250 or 275 feet of gross leasable area.¹⁰ The city also wishes to accommodate visitor parking and recreational vehicle storage. DPZ recommends using on-street parking and sharing parking between users, for example commercial and apartments, thus reducing the scale and amount of paving.

DPZ specifies that parking should be accessed via a rear alley in both residential and commercial areas. This approach lessens the importance of the automobile and provides a pedestrian-scale streetscape. To limit the amount of parking, DPZ specifies three parking spaces per 1000 square feet of commercial area, or one space per bedroom for residential areas. They also feel that parking does not need to be at the door. It can be located up to one-quarter mile away, again, getting people out into the neighborhood.¹¹

Open space network

People appreciate open space in neighborhoods and urban areas alike. All parties desire open spaces linked within a neighborhood and between other neighborhoods. The city specifies that they would like to have up to 20 percent of the developed area incorporated into open space. DPZ not only requires open space, but is also specific about requiring parks within a three-minute walk of every dwelling. Natural features, such as ponds and tree groves, should be held in the public realm and incorporated into the landscape when possible. In New Urbanist style communities, smaller lots allow more land to be allocated to public spaces. Open space is located for use by the entire community and is not privatized in back yards.

Land use adjacencies

Property owners like having easy access to parks and schools, and dislike apartment and commercial uses in close proximity to their property. Potential owners also like living near good quality schools, and desire highway access. Developers generally build single-use developments and like to build without restrictions, particularly restrictions that could impose additional costs. The city is attempting to integrate uses among various neighborhoods and incorporate integrated neighborhoods (villages) into new development. This goal is shared by DPZ. DPZ wishes to create regional planning strategies that help alleviate excessive automobile use and also preserves open space. They also desire to create compatible uses between existing and new neighborhoods, including making public transportation available and accessible.

Regional context

Surrounding owners, developers, and new households desire many of the same things. They want new development to be compatible with houses located in surrounding neighborhoods. In addition, developers and new owners want maintenance-free materials, and new owners specify that the level of detail is secondary to the quality of materials. Each new suburban development is a near mirror image of the last subdivision completed. These large houses sitting on large lots fail to share historic (pre-World War II), architectural, or landscape characteristics indicative of the larger region. The city and DPZ both want shared public amenities that create an identity for each neighborhood and respond to regional transportation and community networks. DPZ feels that regional character is also shaped by transportation access because of vehicle accommodation and movement, and multi-modal options. They normally assess regional character by conducting a pre-design charrette where local municipal leaders, community members, and builders provide insight.

Evaluation of Somerset and Middleton Hills Designs

The previous sections have outlined details of each design issue and the influence that each stakeholder group had on the designs for Somerset. This section provides an analysis of the design issues and New Urbanist principles as they have been applied in the design for Somerset and Middleton Hills. Table 3.2 provides a comparative analysis of the design components for DPZ's original Somerset plan, the final plan being implemented by the developers, and DPZ's Middleton Hills plan. The issues were selected based on critical issues identified in the literature. The topics include government policy, streetscape/front yards, space behind houses, road hierarchy/traffic, commercial, parking, public space/civic amenities, open space network, land use adjacencies, and regional context. The information contained in each cell of the table is based on the final design decisions as influenced by the various parties. The initial Somerset scheme will be compared to the final plan being implemented by the developers. The Middleton Hills plan and process will be discussed and evaluated for its adherence to New Urbanist principles.

Table 3.2. New Urbanist principles incorporated into Somerset and Middleton Hills designs.

	Initial Somerset Design ¹²	Final Somerset Design ¹³	Middleton Hills Design ¹⁴
Government policy	Municipal government initiated design.	Municipal government initiated design.	Municipal government heavily involved in all stages of process. Have incorporated New Urbanist principles into master plan.
Streetscape/ Front yards	Garages at back of houses off alley, creating pedestrian-scale environment. Build-to-lines: 30' in Neighborhood Edge; 18' in Neighborhood General; 8' in Neighborhood Center; 6' for Apartments; 6' for Shopfront buildings. Three-foot tall picket fences built on front property line (and side for corner lots) in the Neighborhood General, while none are allowed at Neighborhood Edge.	Many alleys removed so garages are at front of houses creating focus on automobiles. Build-to-lines: 20' for Country House; 15' for Village House, Village Cottage, Row House & Garden Apartments; 6' for Village Apartments. An 18' garage setback is recommended at front, 15' off rear alleys. A minimum of 10% to be landscaped using native materials but no higher than fencing.	Garages at back of houses off alley, thus creating a pedestrian-scale environment. Garages 20' back from build-to-line. Part of the public landscape and must be integrated with neighborhood as a whole (may require trees or ground covers to create wooded village impression). Landscaping should be regional and create horizontal mass, no hot or strong colors in front. Front porches required.
Space behind houses	Alleys provide access and opportunities for interaction. Shopfront buildings setback 24' from rear property line. Privacy fence or garden wall on rear property line if no alley, and rear setback line if there is an alley.	Open spaces ill defined when alleys removed. Country house and village houses are setback 20' if there is no alley. Village houses are setback 3' if there is an alley. Landscape materials to be native to area but no taller than 3' high.	Alleys provide access and opportunities for interaction. Strongly encourage wildlife-friendly shrub hedge, one tree for sheltering wildlife, native plantings. Alleys must be planted with trees to create shade and block wind.
Road hierarchy/ Traffic	Street networks sustain automobile access while providing for pedestrian mobility. Streets range from 20' to 36' with parking on one or both sides. Stange is 60' wide with a total 96' right-of-way. Alleys are 12' wide with a total 24' right-of-way.	Street networks focus on automobile access. Streets range from 25' to 44' with parking on one or both sides. Stange is 88' wide with a total 124' right-of-way. Alleys are 12' wide with a total 24' right-of-way.	Street networks sustain automobile access while providing for pedestrian mobility. Streets range from 20' to 28' with parking on one or both sides (entrance drive is 44' wide). Alleys are 14' wide with a total 30' right-of-way.
Commercial	Commercial core anchored by civic buildings. Not dominated by parking.	Commercial area expanded and dominated by parking. No civic anchor.	Commercial core anchored by civic buildings. Not dominated by parking.

Table 3.2. (continued)

	Initial Somerset Design	Final Somerset Design	Middleton Hills Design
Parking	Parking is off alleys behind houses and commercial buildings. Three parking spaces provided for every 1000 square feet of commercial.	Parking increased in high-density areas. Most dwellings provide two or three car garages at the front. One parking space for every 250 or 275 square feet of leasable space.	Parking is off alleys behind houses and commercial buildings. One parking space provided for every 400 gross square feet of net office or commercial space.
Public space/Civic amenities	Civic amenities placed at prominent locations. Community center intended for entire community use.	Civic amenities not at prominent locations. Community center only for use by apartment dwellers.	Civic amenities placed at prominent locations. Community centers intended for entire community use.
Open space network	Public parks distributed throughout, so each dwelling is within a three-minute walk of a park. Open spaces “left over” at street intersections are maintained by neighborhood associations.	In addition to parks distributed in initial plan, alleys converted to open space behind dwellings. Neighborhood associations maintain open spaces “left over” at street intersections or from conversion of alleys.	Network created by wetlands and open space corridors. Forty four acres of passive and active recreation dedicated to the city. Natural topography, native prairie, and mature oak stands preserved.
Land use adjacencies	Adjacent land uses are acknowledged via road connections only. Buses provide alternative transportation.	Adjacent land uses are acknowledged via road connections only. Buses provide alternative transportation.	Pedestrian corridors and open spaces connect with surrounding uses. Wetland park located adjacent to surrounding neighborhoods. Buses provide alternative transportation.
Regional context	No charrette required that DPZ speculate about general regional character. Input from the community came only via protests about traffic and property values. Ames historic downtown is acknowledged as a planning model for mixed-use. Local materials are specified to anchor designs in region.	The developers exerted their conventional development style by separating housing by types within the development. Developers/builders concerned with using maintenance-free materials. Architectural styles: Early Colonial, Georgian, Federal, Greek Revival, Craftsman Bungalow, and Prairie School.	Charrette helped to illustrate regional character – defined by historic architecture, natural resources, and topography. Seek to produce buildings which share form and material characteristics of the Prairie, Arts and Crafts, and Bungalow traditions.

Initial Somerset design

The collective experiences of Andres Duany and Elizabeth Plater-Zyberk over the past twenty years have shaped the elements found in their *TND Checklist* (Duany, Plater-Zyberk, and Speck 2000, 245-252). This checklist distills their recommended principles for a new town, neighborhood, or village of twenty-five acres or more. The guiding principles for Somerset are based on this checklist.

The initial plan for Somerset follows many, but not all, of the principles advocated by DPZ and other New Urbanist designers. A hierarchy of roads and alleys accommodate automobiles while allowing streets to be comfortable and interesting to pedestrians (primarily by moving garages to back alleys, narrowing roads, and requiring front porches at least six feet deep). DPZ's plan offers a spectrum of public and private uses, is compact, pedestrian-friendly, and mixed-use. The mixture of uses allows a range of housing types and price levels to accommodate various income levels. The design does, however, concentrate the apartments toward the center and places larger dwellings toward the outside to blend with surrounding communities. Civic, institutional, and commercial enterprises are planned at critical junctures in the design. Parks are distributed throughout the project to allow each house to be within a three-minute walk of a public greenspace. Parks are located within neighborhoods and not privatized in back yards. Urban design codes have been established to help developers incorporate the principles into their conventional methods of development.

As outlined at various points in this text, the initial plan for Somerset reflects some compromises made by DPZ to accommodate various needs of the parties involved. The discourse that follows relates specifically to these compromises. The most notable exceptions to the underlying principles relate to regional context (no charrette was held), connections within the design and between adjacent land uses, the open space network, and the extension of a major arterial street (Stange Road) through the center of the development.

Regional context. Calthorpe (2000, 15) calls for economic and social integration among regions. When communities compete for new development, all communities suffer as a result. Ames is not part of a more comprehensive planning effort to create regional corridors or economic equality among surrounding communities. The city planning director

indicated that there have been some discussions with surrounding municipalities. Those talks resulted in a bikeway system plan, but no other regional issues evolved. Transportation corridors have not been resolved; a bus route is the only alternative transportation within Ames. A commuter transit system linkage to Des Moines, approximately 35 miles to the south was abandoned due to projected low ridership (O'Connell 2000).

Calthorpe (2000,15) advocates creating regional transportation corridors that provide easy access between communities. When Mr. O'Connell (2000) was questioned about transportation routes, he said seven percent of the Ames population uses the city bus system, and most riders are students. He indicated that the city does not see this number increasing with the addition of new routes, including one through Somerset, but they will provide that option to residents. Citing Calthorpe, O'Connell views Stange Road as part of a regional transportation corridor. Calthorpe does acknowledge that land uses and internal street systems must provide adequate automobile access (Calthorpe 1993, 62). However, he cautions that arterial streets are barriers to pedestrian activity and should not pass through a neighborhood's center (Calthorpe 1993, 98).

The plan for Somerset represents a dramatic departure from conventional design. It takes time and effort to present and explain the principles and supporting design elements to a general public accustomed to convention. The charrette process is normally used by DPZ to gather input and educate developers, municipalities, and the public. Again, a charrette was not conducted for Somerset. Restricting input to developers and city officials is too limiting. Developers are primarily interested in how the plan will allow them to best use their property in terms of sales and return on investment. Their interest in layout, design, and community principles is limited to creating features, at little additional cost, that entice people to buy. City employees take a broader view in that they represent the general opinions of the city's residents. But it is unrealistic to expect them to know or even to advocate the desires of a distinct group of residents living in a certain neighborhood.

Without input from the community as a whole, is it reasonable to expect that such a dramatic proposition will be accepted? This question is especially poignant since the very first designs proposed by the developers met with opposition from the community. Residents of the area were alarmed when they realized what was proposed. Community protests

focused primarily on increased traffic and the potential negative impact on property values caused by the proximity of strip commercial developments and apartments. There were no initial attempts to include the community, but the protests prompted open forums so community members could air their views. An organized event such as a charrette could have allowed cross-communication to answer questions and alleviate fears. The DPZ team did not spend time in the community to find out what items were important to all the involved parties. They were also unable to adequately assess the regional character and historic precedents of the area. As a result, Mr. Speck was forced to make decisions based on input from the developers and the city alone. The city did not push the developers to conduct a charrette and the developers felt that the April 1996 conference provided sufficient information (O'Connell 2000; Friedrich 2000). Mr. Speck (1999b) felt that eliminating the charrette was a detriment to the final design.

Connections. Internal and external connections provide key opportunities for making New Urbanist projects work. Among others, Langdon (1994), Duany, Plater-Zyberk, Speck (2000), and Calthorpe (1993) attest that design can help individuals connect with each other and with their communities. When the road hierarchy, alley, and open space diagrams are compiled together one can better understand these connections (see Figure 3.12). A diversity of streets allow a variety of access points and connections. In addition, a community center with a clubhouse and pool is planned within the village center. These amenities will be accessible for all residents of the village. This could further enhance a sense of ownership and belonging for the community at large. The clubhouse is located one block from a prominent street so it is easily recognized as a part of the larger community structure.

While the initial plan does address some connections, it could further enhance others. Duany, Plater-Zyberk, and Speck (2000) stress using the street networks as pedestrian paths, rather than utilizing separate recreational corridors. Somerset is surrounded by conventional housing developments that utilize recreational trails. Why should these trails be ignored while expecting surrounding community members to adopt streets for recreation? The Ames bikeway weaves through Northridge but was incorporated into Somerset along Northridge

Parkway and Stange only. Moore Park is a beautiful setting at the southeastern edge of Northridge but no linkage to Somerset has been addressed in the plan. A natural connection could have been initiated since large recreational amenities are at the southwestern edge of Somerset (the pond) and eastern edge of Northridge (Moore Park).

Without proper pedestrian crossings between Somerset and Northridge or neighborhoods to the south, the inter-community connections are further degraded. Pedestrian-activated traffic signals and a change in paving would cue drivers to potential crossings and urge people to slow down, thereby allowing pedestrians and bicyclists safe passage. This will be especially important for the elementary and middle school students crossing from Northridge and other neighborhoods into Somerset.

Granted, options for connections are limited because of the railroad bed and busy streets bounding the edges. However, DPZ could have taken further steps toward integrating both street and recreational trail patterns. Two streets connect Somerset and Northridge to the west, Stange and two future roads connect to the north, two future roads connect to the east, and Stange and one other road connect to the south. No other paths or trails cross the property and without proper pedestrian crossings, it is doubtful that significant community interaction beyond Somerset's borders will occur.

Open space. Jacobs (1961) suggests that open spaces celebrate natural amenities and provide active and passive recreation. Calthorpe (1993) and other New Urbanist advocates agree. Most of the open spaces in this design are too small to allow much recreation of either type, and they seem more like civic monuments designed for image rather than community

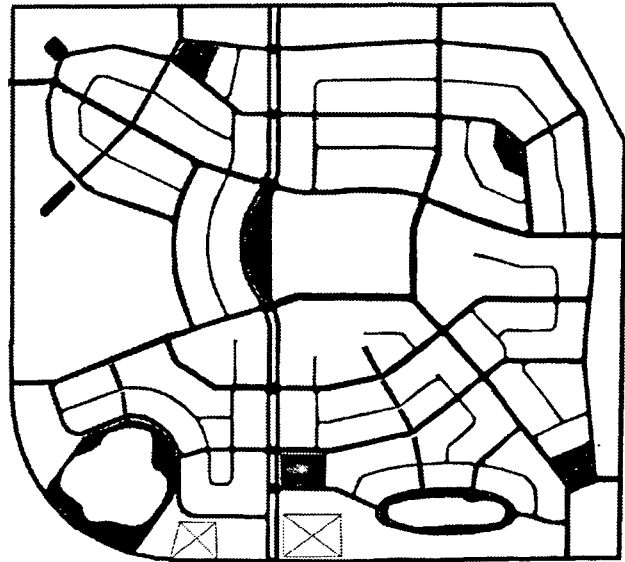


Figure 3.12. DPZ road hierarchy, alley, and open space diagrams show a fairly complete network.

life. The two retention ponds on the south side occupy large spaces that are buffered by roads and not part of a larger network of open spaces. As mentioned previously, they are also not connected to open spaces in surrounding neighborhoods via alternative trails.

Since there are few natural amenities, except for a small grove of oak trees on the south side, the plan required the expertise of a landscape architect or recreational planner to partner on design. Unfortunately, DPZ does not fully recognize the value of collaborating with landscape architects from the beginning of design projects (Duany and Plater-Zyberk 1993, 41; Duany, Plater-Zyberk, and Speck 2000, 79). They view landscape architects as designers assigned the task of picking up the pieces from inferior site design, but believe they do a poor job of it. As a result, the parks, as designed by DPZ, fail to perform as a solid, usable, and safe network. Total park land occupies approximately ten acres, or seven percent of the total acreage. This number approximates the typical percentage (between eight and fifteen percent) suggested by Comitta (2000, 119) for traditional neighborhoods. The parks also adhere to the principle that they be located within a three-minute walk of dwellings. For the most part, the neighborhood parks are positioned at critical junctions in roads, making them dangerous, exposed, and uncomfortable (see Figure 3.13). A safer design would locate parks, with defined borders, inside the blocks and not at the ends. One of the largest parks is the island in the middle of Stange Road. Safety concerns coupled with its open location will likely severely limit its use (see Figure 3.14). Landscape architects could have been employed early in the design process to help shape and create usable spaces and to mitigate for ecological issues such as storm water drainage, wildlife habitat, and runoff. Since the layout was already determined, the small role played by the landscape architect was to mask these ill-suited spaces for aesthetic appeal.



Figure 3.13. Park in Somerset defined by roads on three sides.

Arterial bisector. The extension of Stange Road, a major arterial street through the heart of Somerset, belies New Urbanist design strategies. Moule and Polyzoides (1994, xxii) and Calthorpe (1993, 98) recommend providing arterial roads around the edges of communities to limit the movement of through traffic to regional access only. Siting a major road through a project is a safety concern and may create visual and physical barriers that hinder connections within the community.

Mr. O'Connell (1999) explained that the City of Ames needs more north-south arterial streets to connect growing satellite communities to Ames. To help remedy this deficiency, the city decided in the late 1980s that Stange

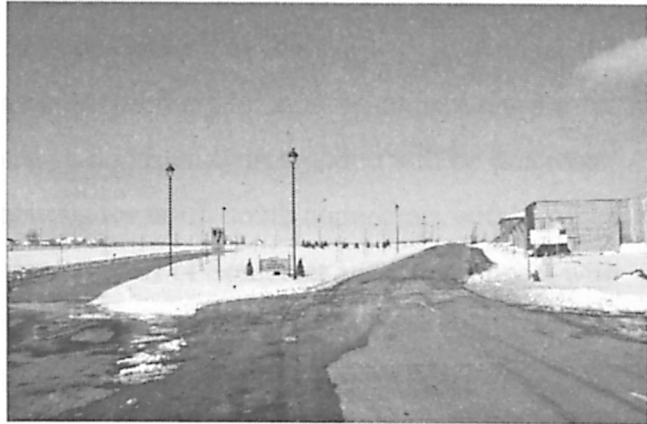


Figure 3.14. Park in the middle of Stange Road at Somerset.

Road would become one of the north-south connectors. The Land Use Policy Plan (RM Plan Group 1996, 58) states that Stange Road will be an arterial for traffic movement with minimal land access, with sub-regional and inter-community trip lengths, and where private access is restricted. As is the case with most of their projects, DPZ not only draws the plans but attempts to educate stakeholders, particularly city officials, about the New Urbanist approach. Nevertheless, Mr. Speck was unable to steer the city away from the LUPP, despite his strong objections. In order to address the needs of the city, Mr. Speck incorporated Stange Road into the design, with the understanding that Stange would be limited to one lane in each direction (Speck 1999b). Mr. Speck offered that the city may wish to widen the lanes to accommodate street parking, but emphasized that the road should not be widened to provide additional travel lanes. The Project Description in the packet submitted by DPZ states, "Stange Road now passes through the village as a two-lane boulevard which also accommodates bicyclists and pedestrians. It is designed to accommodate a steady flow of slowly moving automobiles, as befits a traditional village" (DPZ 1996). As a traffic-calming device, a slight curve in the road is incorporated near the commercial area. Personal

observations indicate this brief bend does not seem to deter high-speed uses – speeds not appropriate for a residential neighborhood.

Allowing Stange Road to continue through the entire site is detrimental to the holistic approach of New Urbanism. The physical and social barriers will be difficult to overcome, especially with a school site and the largest recreational areas located on the west side. Safe passage for pedestrians, especially children, will be difficult to achieve without devices that alert drivers to potential crossings. No matter how good the remaining connections are within the community, the largest barrier to cross-community interaction will be this road.

The city contends there are limited options for north-south connectors within Ames. One alternative would have located Stange through part of Somerset and then connect with George Washington Carver Road (GWC) to the west of Stange.¹⁵ Another scenario would have converted GWC into a north-south collector instead of bisecting Somerset. The city never really considered GWC an option because it is not designed and built to meet the city's need to move traffic quickly (O'Connell 2000). When questioned about widening GWC to serve as an arterial, Mr. O'Connell said it was not an appropriate solution and it would cause even greater congestion (O'Connell 2000). He believed the route through Somerset was preferable, stating that the "side friction" created by the buildings, trees, and center median would slow traffic. This contradicts the claim that the city needs the Stange arterial to move traffic quickly through the site. However, Mr. O'Connell explained that the city views Stange Road as a community-wide issue, not just a local one. He stated that designing Stange any other way would have been detrimental to the entire community and altering this route would create problems that they have been trying to avoid, namely congestion. Mr. O'Connell feels that one of the biggest challenges facing projects such as Somerset is accommodating and integrating vehicles in this automobile-dependent society.

The primary objection to Somerset raised by residents in surrounding neighborhoods was their concern about the increase in traffic caused by this one development. However, it does not appear their concerns were addressed within the wider context of the city's expectations for future growth to the north. It is unlikely residents were made aware of the potential traffic impact created by using Stange as a major connector to more developments and eventually Bloomington further north.

Final Somerset design

The final plan for Somerset reflects a hybrid of New Urbanist principles and the conventional method used for house building in the Ames area since the middle of the last century. A city document reports, “ultimately the developers chose to modify the original plan through a series of design compromises to more directly reflect the market potential in Ames” (City of Ames 1997a, 23). Mr. O’Connell (2000) indicated that city staff understood some of the impacts that the changes would have on the design, but not all. He said the city realized that working with resistant developers would necessitate some compromises in order to get something built at all. It is difficult to evaluate the significance of “design compromises” and the overall power of the final design since the project is not yet complete. Post-occupancy studies and follow-up interviews would be valuable in order to ascertain the success of Somerset in meeting the expectations of stakeholders and creating a community climate.

The final plan did not correct the limitations of the initial DPZ plan, so the comments in the previous section apply to this design as well. Further, the changes that were adopted compromise additional principles. Some of the design compromises are subtle while others, such as community connections, the widening of Stange Road, the elimination of alleys, and increased parking are more prominent.

General changes. The road hierarchy, though modified, still exists. Some of the streets were widened (particularly Stange), redirected, or eliminated, and many of the alleys were removed. The developers’ plan still offers a spectrum of public and private uses, but the commercial center does not contain a prominent public feature open to the entire community. A church was sited prominently at the east end of the commercial district in the DPZ plan, but in the final plan the church was moved north of the crescent park along Stange. The original site for the church was taken by the clubhouse and one could argue that it serves as an important visual feature for the community. However, the view of the clubhouse for pedestrians and vehicles along the approaching street will be obscured by plantings and a sizable parking lot fronting the building. Further, the clubhouse fails to meet the definition of a community feature since it will not be open to the community at large.

There is still a mixture of building uses, but they are now somewhat segregated by use or type. Various housing types are offered, but they are arranged into separate groups so there is little integration of households of different incomes and potentially less cultural, racial, or social class mingling (see Figures 3.15 through 3.19). Parks are distributed



Figure 3.15. Apartments.



Figure 3.16. Townhouses.



Figure 3.17. Rowhouses.



Figure 3.18. Senior independent living.



Figure 3.19. Single-family detached.

throughout the project, allowing each house to be within a three-minute walk. Access to the west pond has been reduced because the road has been moved away from the park's edge and more building lots have been placed along the perimeter. These changes diminish the sense of public ownership. The pond to the east was relocated to parallel 24th Street and converted to a dry-bottom retention basin. The original DPZ plan intended for houses to front the pond and back 24th Street. Instead, a buffer has been created between Somerset and the neighboring community. The regional character has not been addressed in planning or architecture. The developer and town architect chose the six styles of housing that are being built. From the Colonial period, Early Colonial, Georgian, and Federal were chosen; from the Neo-Classical period, Greek Revival was selected; and from the Arts and Crafts period, the Craftsman Bungalow and Prairie School were chosen as alternatives to conventional house designs. Mr. Fenimore (2000) indicated that there is no definitive style to Ames architecture. They chose these styles for their relationship to the street, not necessarily for

their regional character. The Ames Historic District provides wonderful examples of Victorian, Tudor, Italianate, and Queen Anne architecture, among others (see Figures 3.20 and 3.21). Although the developers say that the design details are driving house prices up, it is their selection of architecture and their method of building that are partially responsible (Hunziker 1999, Winkleblack 1999, O'Connell 2000).



Figure 3.20. Bungalow in Ames Historic District showing a mixture of uses (a hospital is in the background).

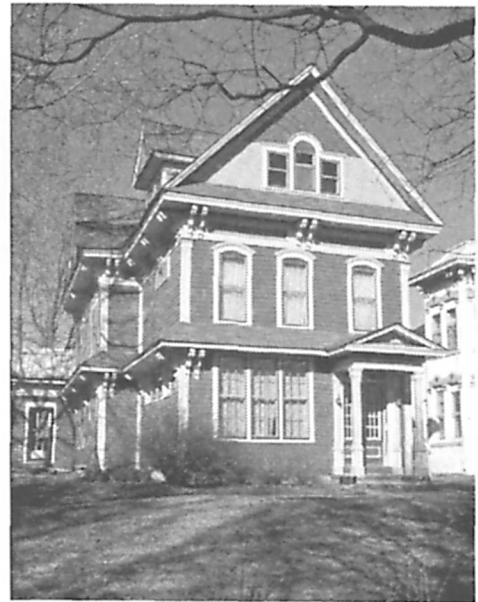


Figure 3.21. Victorian house in Ames Historic District.

Connections. Connections within Somerset or with communities outside Somerset have not been enhanced in the final plan. If anything, they have been degraded. First, the community center is now only open to residents of the surrounding apartments. Second, there are six neighborhood associations, which correspond to the various house types. This indicates that residents may not have an opportunity to make decisions about the entire community, but only about the microcosm in which they live. This increases the chance that people will continue to think of themselves only in relation to the people living in the same type of unit. Third, safe pedestrian crossings have not been addressed. Fourth, the trails that were inserted when the alleys were removed do not create a meaningful network within or beyond the development's borders. The design reveals a number of gaps, especially in the center, when the road hierarchy, alley, and open space plans are combined (see Figure 3.22).

Stange Road. Most likely from a lack of understanding and lack of political will, the city approved the four-lane design for Stange (O'Connell 2000). The city did not fully appreciate the ill effects a major through-road would have on the development, or was unwilling to revisit the street plans contained in the LUPP, or both. Stange is now a two-lane road in each direction and a third lane for bus access and parking have been added along several sections of the street (see Figure 3.23).

Stange is approximately 88 feet wide, including a 16 foot wide median, 28 feet wider than DPZ's original plan. Including the 18 feet for grass and sidewalks on each side, the width of the entire right-of-way totals 124 feet. DPZ designed Stange at 60 feet wide (including the median) with a total right-of-way of 96 feet. In either plan, Stange creates a major pedestrian hurdle. Duany, Plater-Zyberk, and Speck (2000, 69) admonish modern curb radii for increasing the distance that pedestrians must travel to cross streets. In addition to making roads narrower, this principle surely applies to maintaining short crossings as well. This road is now a major thoroughfare and people are using it as a primary access road. Although it is posted at 30 mph, personal observations reveal vehicles traveling at speeds in excess of 40 mph. Duany, Plater-Zyberk, and Speck (2000, 71) note that posting speed limits on roads designed for high-speed use is futile because people drive

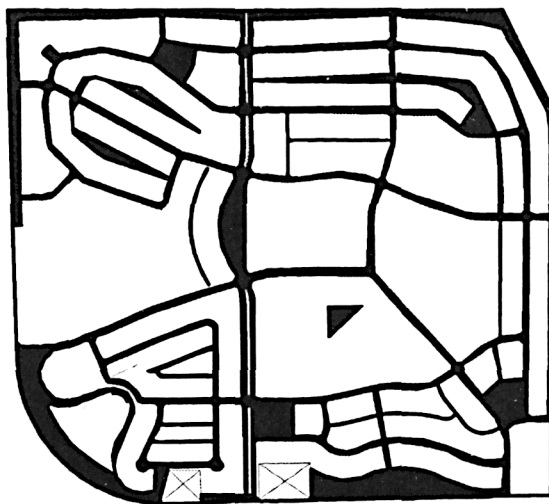


Figure 3.22. Final Somerset design road hierarchy, alley, and open space network.



Figure 3.23. Traffic heading north on Stange Road through Somerset.

at the speed they feel safe. Perhaps, as Mr. O’Connell (2000) indicated, the “side friction” will slow traffic when the project is built-out with shops and other buildings, and when the street trees grow larger. The scale should diminish the importance of the road, but the fact remains that it is now being used as a throughway. As development continues, residents will likely have to rely on city police to enforce speed limits within their community, or stop signs or traffic lights will need to be erected.

Alleys. In several cases, it has been shown that alleys are very important design features for New Urbanist communities. Duany, Plater-Zyberk, and Speck (2000, 81) attest that alleys alleviate the cluttered look of a streetscape lined with garages, trashcans, and utility boxes. A pedestrian-scale is achieved by eliminating garages at the front, bringing houses closer to the streets, and making streets narrower. The original DPZ plan presented the front of houses to the street while garages faced the back alleys. This makes the streetscape more comfortable and interesting to pedestrians.

The initial design for Somerset included 28 separate alleys. The final plan includes only ten. This dramatic change reflects the developers’ apprehension that people will not purchase a house adjoined to an alley. Mr. Friedrich (1999) and Mr. Hunziker (1999) feel that alleys are high-cost maintenance problems for which residents do not like to be responsible (see Figure 3.24). The alley spaces were either converted in the plan to public space, to parking, or to road widening (see Figures 3.25 and 3.26). Several things happened when the alleys were removed. First, in some areas the alleys were replaced with narrow strips of green space. New Urbanist principles indicate that open spaces should be available to the public at large, and not essentially privatized in back yards or used as buffers

(Calthorpe 1993, 90). Martin (1996) reasons that properly designed alleys improve the overall quality of the neighborhood by allowing this space to be utilized in a day-to-day,



Figure 3.24. Alley at Somerset in winter appears well-maintained.

informal manner. The developers may have diminished the opportunities for social interaction by replacing alleys with more nebulous public-private spaces. Second, these open spaces, though replete with trails, do not contribute to an overall network. These disjointed leftover spaces do not encourage community connections, as alleys could have. Third, garages now dominate some of the house facades; the southwest quadrant provides explicit examples. The developers have declared this area as a “town home district” which means most of the lots are narrow, leaving insufficient room for garages at the side. This configuration works well when alleys are employed because garages can be placed behind dwellings leaving the fronts scaled for pedestrians. Without alleys, garages must be placed in the front. Roads have also been redesigned, which multiplies the challenges of facing houses to the streets and garages to the alleys. DPZ’s plan typically shows two lots backing each other between parallel streets, with an alley in-between. However, in some portions of the final plan, roads adjoin building lots on the front and back sides. For example, townhouses adjacent to the school site and Stange Road present their fronts to that street and the backs are presented to the front of townhouses on a parallel street.

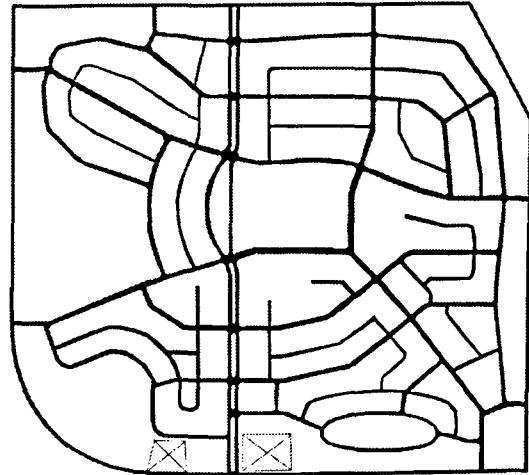


Figure 3.25. Road and alley networks in DPZ plan.

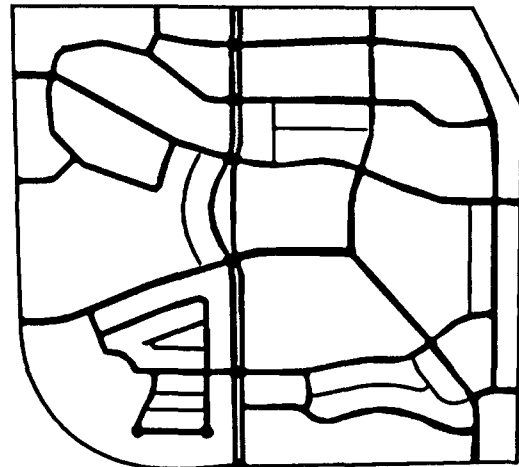


Figure 3.26. Road and alley networks in final developers' plan.

Parking. According to advocates of New Urbanism viable alternatives to large parking lots exist. Strategies include shared parking and using parallel, on-street parking stalls. The DPZ plan utilized more shared parking than the developers' plan did (see Figures 3.19 and). Mr. O'Connell (2000) suggested that the nature of the developers' business arrangement limits shared parking possibilities. Because there is no overriding or controlling corporation and each of the three parties owns and/or builds one third of the lots, it is difficult to arrange parking for shared use. What the developers have done in Somerset is a typical response to the engineering conventions of the past half-century. They increased the amount of parking in all areas of the project, but especially in the commercial zone. The amount of space allocated to parking has at least doubled in the commercial and high-density residential areas. Large expanses of parking have been provided for busy shopping days, not for average daily needs, and those empty lots have not been allocated for apartment dwellers to use after business hours.

Middleton Hills design

The project in Middleton, Wisconsin is a product of DPZ's design principles applied by a developer purposefully trying to create a community. The developer wanted to provide an underlying support structure that encourages neighbors to interact with one another on a daily basis. Many of the principles espoused by New Urbanism have been applied to this challenging site. The Middleton Hills plan is organized on a hilly site within an existing pattern of single-family and townhouse residential neighborhoods. The developers did not alter the design submitted by DPZ. However, a few modifications in design details have been necessary to allow for restrictions caused by the topography. Andres Duany, his design team, and the developer walked through the site and staked the roads to ensure that site grades would not exceed a ten-percent slope. At the same time, they determined the best areas to preserve for open space, quality native planting, or wildlife corridors. Although these items were carefully considered, the site still presented design difficulties. To accommodate the sometimes dramatic slope changes, the Middleton Hills planning office allowed some buildings to exceed the two-story height limit on one side (Miller 2000) (see Figures 3.27 and 3.28). The topography concerned the public works, fire, and sanitation

departments as well. The departments questioned access because of the combination of slope and alley widths (alleys are 14 feet wide with a total 30 foot right-of-way.) Both departments conducted maneuverability tests in neighborhoods with narrow streets. It was determined that the roads did not need to be widened. Instead, the corner radii were increased to allow the trucks easier movement through intersections (Kelley 2000b).



Figure 3.27. Site challenges at Middleton Hills.
Note the outbuilding.



Figure 3.28. Topography at Middleton Hills.

DPZ developed the street hierarchy in response to the topography, working with the site grades where possible. The street hierarchy includes alleys to accommodate automobiles while providing an interesting streetscape for pedestrians. A variety of roads signify various uses. For example, the main entrance is wide (44 feet), but it quickly branches in three different directions, narrowing along the way. Pheasant Branch Road is similar to Stange Road in Ames; it brings people from adjacent developments through the site. The main difference is in their location. Pheasant Branch Road is routed along the eastern edge, close to the retail, but does not bisect residential areas, as Stange Road does. The city of Middleton receives a lot of traffic from within the county, and like Ames, needs more thoroughfares. They considered placing an arterial street through the center of the

development, but with the help of DPZ, quickly realized it would have created a barrier and would have been severely detrimental to the design principles (Kelley 2000b).

Many of the garages are accessed from back alleys (see Figure 3.29). For houses that have attached garages that do not face an alley, garages are set back at least twenty feet from the building façade and accessed either by garage doors at the front or side. The streetscape is enhanced, not only by moving garages to the back or side of houses, but also by



Figure 3.29. Back alley at Middleton Hills.

siting houses close to the narrow streets. Some dwellings are built only a few feet back from the sidewalk (see Figures 3.30 and 3.31). To provide a sense of privacy at the front, many porches rise between two and seven feet above the street elevation. The streetscape is



Figure 3.30. Streetscape created by houses at the sidewalk.



Figure 3.31. Houses hug the sidewalk.

presented as part of the public landscape and is enhanced through explicit landscape codes. These codes require plantings at the front that contribute to an overall sense of a woodland village. They also specifically encourage informal plantings of native materials in the rear

yards to attract birds and small wildlife. Trees are required along alleys for shade and wind shelter. These measures are employed to encourage citizens to share the developer's vision for a strong sense of community.

An overall open space network is created within the community and extends beyond its borders. A wetland and recreation park connects to a number of native open spaces, boulevards, and trails (see Figures 3.32 and 3.33). Forty-four acres, or 29 percent of the total parcel, are dedicated to the City of Middleton, which will provide education and passive and active recreation opportunities for the entire community. Trails also connect to other communities and to a nature preserve to the east of Middleton Hills. Different types of open



Figure 3.32. The wetland park at the left will provide various recreation opportunities.



Figure 3.33. A native park has been preserved at the left and connects with the wetland park.

space are defined in the design – grassy open areas, wetlands, and stands of untended trees that provide a native understory. These natural parks provide shelter for wildlife and are excellent environments for children to explore and learn.

Many aspects of the design codes and covenants at Middleton Hills help create opportunities for interaction. The language used throughout these documents consistently reinforces the commitment of the developer to provide a quality of life and community existence based on neighborhood interaction and consistency of intent. The overall benefit of the community is referred to numerous times in clear detail. An important strategy to quickly establish community interaction was provided by building the neighborhood store first (see Figure 3.34). Mailboxes, the Middleton Hills sales office, a general store, and a café are all located in this building. Instead of providing mailboxes within the neighborhood, residents

all go to the same location, increasing the opportunities for casual conversations with neighbors.

Civic buildings are located at prominent locations within the community. Commercial buildings are sited at the southern edge, adjacent to surrounding communities and convenient for residents. A church, school, and several smaller public buildings anchor the plan in the community and region. While a larger regional plan was not addressed, the regional character was established during a weeklong charrette conducted by DPZ. The design team studied the site, met with municipal leaders and neighbors, analyzed local codes and ordinances, and established the basic design and codes that will ensure the physical and visual success of the project (Middleton Hills, Inc. n.d.). DPZ and the developer were influenced by the architecture of the region and chose three compatible Midwestern housing styles – Prairie, Arts and Crafts, and Bungalow.



Figure 3.34. Entrance to Middleton Hills. The widest street in the development leads to the Neighborhood store.

A variety of housing types are offered to ensure a range of income levels and diversity of residents (see Figures 3.35 through 3.37). Single-family detached houses,



Figure 3.35. Live/work unit (brick).



Figure 3.36. Senior living.



Figure 3.37. Townhouses.

accessory apartments, live/work units, townhouses, apartments, and a senior living center are arranged in an integrated pattern. Parking patterns are also integrated within the commercial and apartment areas. Shared parking is utilized in the commercial and live/work areas while alleys and streets provide parking for other residences.

Evaluation of the Design and Development Processes

The design and development processes at Middleton Hills and Somerset were distinctly different. At Somerset the City of Ames initiated the village concept based on results from extensive community input related to their Land Use Policy Plan. The city's fact-finding efforts produced evidence that the community wanted something different than what was currently being built in residential developments. People expressed a desire for Ames to be unique, and they wanted a greater sense of community (O'Connell 2000). So, the city set about bringing some changes to the way development is treated. The city saw this land as an opportunity to provide for an unmet market need. The city held a workshop to educate itself and other stakeholders – developers, builders, and citizens – about the concepts of building traditional neighborhoods. There was only one designer from DPZ that worked on the plan, no charrette was held, and once the design package was submitted to the developers, DPZ was not retained to insure that the principles would remain in place. Mr. Duany is known for being able to negotiate, yet keep the intent of the principles intact. There are three developers that collectively own the property of Somerset. The fact that each developer owns and develops one-third of the property creates competing interests among them. The developers did not agree that there was a potential market for something other than the conventional development that they had been building. The developers took a more conservative approach and pushed to make compromises. In the interim, the city must have received mixed signals about whether or not allowing a major arterial to bisect a traditional neighborhood, removing alleys, clustering housing, and sharing parking would compromise the principles.

The Somerset process was opposite of the design process followed at Middleton Hills. At Middleton Hills there was only one developer involved, and he initiated the plan and sought expert assistance from the onset. The city was a willing participant in all stages, but did raise concerns about street widths. Mr. Duany lead the entire process and kept the principles intact during negotiations and compromises. DPZ and the developer wanted to ensure that many different people were involved in the process, so a weeklong charrette included a team of ten to twelve experts who collaborated on site issues and community character. They intensively studied all aspects of the site and surrounding area and spoke

with many agencies and stakeholders (the planning commission, zoning department, economic and community development, fire department, school board, chamber of commerce, neighbors, business leaders, and others). DPZ provided expert assistance at all points of the process and helped the developer and the city to understand the impact each suggested change would have had on their larger objective. For example, DPZ originally suggested street widths ranging from 20 to 24 feet, including parking. The City of Middleton's street width standard is 36 feet, including parking on both sides. Eighty percent of the streets in Middleton Hills are now 28 feet wide, while the remaining 20 percent are 20 to 24 feet. An amicable compromise was reached while the design intent remained intact. Changes have been made in city documents that promote New Urbanist development principles. The master plan has been updated to encourage traditional development, the city is working on a joint plan with the town, and the state of Wisconsin has approved Smart Growth legislation which incorporates traditional neighborhood principles (Kelley 2000b).

Notes

- ¹ Information obtained from Cruse (1996), Fiore (2000), Huntington (2000) and author's observations.
- ² Information obtained from RM Plan Group (1996) and City of Ames (1997a; 1997b).
- ³ Information obtained from Friedrich (1999), Furman (1999), Hunziker (1999), and based on observations of recent developments built in the Ames community.
- ⁴ Information obtained from Duany and Plater-Zyberk (1992), Duany; Plater-Zyberk, and Speck (2000).
- ⁵ Information obtained from NAHB (1999), Warrick and Alexander (1998), and discussions with Ames real estate agents.
- ⁶ The LUPP uses the same language found in books, articles, and publications about New Urbanist planning.
- ⁷ The build-to-line requires that buildings be constructed beginning at that line, not set back from a certain point. Porches or stoops extend in front of that line. In Somerset the build-to-line varies between 6 and 30 feet, depending on the building type.
- ⁸ Leapfrogging is a term used to describe when, due to restrictions, people cannot build what they want within city limits so they build in outlying areas.
- ⁹ The city did not push the developers to hold a charrette and the developers felt that the April 1996 planning conference was sufficient for providing information (O'Connell 2000; Friedrich 2000).
- ¹⁰ The city is in the process of reviewing their recommended parking ratio.
- ¹¹ Southworth and Ben-Joseph (1997, 107) note that the distance most Americans are willing to walk for typical daily trips ranges from 400 feet to one-quarter mile.
- ¹² Information obtained from DPZ (1996), Duany, Plater-Zyberk, and Speck (2000).
- ¹³ Information obtained from Architects Rudi/Lee/Dreyer (1997), and O'Connell (2000).
- ¹⁴ Information obtained from Middleton Hills, Inc. (1999).
- ¹⁵ George Washington Carver Road is the 24th Street extension that angles northward one quarter-mile to the west of Stange Road.

CHAPTER 4. CONCLUSIONS AND RECOMMENDATIONS

*Change succeeds when it is fresh but not too radical or disorienting,
so that it rhymes across time and space.*

Douglas Kelbaugh
Charter of the New Urbanism, 2000

Conclusions

The principles of New Urbanism attempt to remedy some of the alleged sociofugal aspects that are characteristic of conventional suburban neighborhood developments. In general, these principles aim to diminish the role of automobiles in communities and reestablish the primacy of the pedestrian through streetscape design; to assert the primacy of the public or civic realm over the private domain; to increase residential densities; and to provide diversified land uses and a diversity of housing options. An overriding goal is to provide a variety of opportunities for chance encounters among residents, which (it is assumed) can lead to eventual understanding and lessen the mistrust and antisocial behavior that exudes when people are not presented with these opportunities on a daily basis. This study explores New Urbanist principles as they were applied to two Midwest communities. The new neighborhoods of Somerset in Ames, Iowa and Middleton Hills in Middleton, Wisconsin were selected as case studies that incorporated varying degrees of New Urbanist principles.

An evaluation matrix was developed as a tool to summarize the design and development processes at Somerset and to evaluate how various stakeholder groups influenced the outcome of the designs. The matrix included five stakeholder groups as dependent variables and seven design issues as independent variables, and was used to identify and contrast the needs and wants of the various stakeholder groups.

The matrix reveals that all the groups, to varying degrees, influenced both the initial DPZ plan and the eventual final plan for Somerset. The City of Ames and DPZ exerted the most influence on the initial DPZ plan, although the developers promoted their interests throughout the process. The final plan presently being implemented by the developers reflects their resolve to modify the DPZ plan to accommodate their focus on sales and profit objectives rather than long-range community goals.

A second table was developed to compare the initial Somerset plan with the final Somerset plan, and to compare the designs for Somerset with that of Middleton Hills. In particular, the plans were evaluated to determine the extent to which New Urbanist design principles were employed in the plans. The initial plan does not incorporate all standard New Urbanist principles, although it is a design which employs many New Urbanist ideals. From the “purist” New Urbanism standpoint, the initial plan has a number of shortcomings: the regional context was not established because no charrette was held prior to the design stage; in many instances pedestrian connections within the scheme and among its adjacent land uses were not well-planned; the open space planning lacks a unifying network; and, most significantly, a major arterial street bisects the community.

The final plan does not address these limitations of the initial plan, and it further compromises additional New Urbanist principles. The community connections were not enhanced, the arterial bisector was widened, many alleys were eliminated, and the amount of parking was increased. In addition to these larger issues, the road hierarchy was modified; the clubhouse, initially conceived as a “civic” amenity, will no longer be open for the entire community to use; civic buildings are not prominently located to anchor them in the community; housing types are generally segregated within the development; access to the pond is reduced; and many open spaces have been compromised or privatized. Many of these changes diminish the sense of public ownership and overall community goals of creating a social, walkable community environment.

Segregating the housing types and privatizing the clubhouse to render it exclusive are especially contradictory to New Urbanist community-building principles. These changes appear to have been made at the request of the developers, who lacked confidence in the feasibility of many New Urbanist ideas which run contrary to their established practice. Also, removing many of the back-alleys and replacing them with ambiguous community space, which may well become de facto private space, tends to degrade the streetscape and leaves no memorable or accessible pedestrian network in its place. The fact that heavily trafficked Stange Road bifurcates the development presents the biggest problem for neighborhood connectedness. This feature will certainly restrict community interaction across the divide.

Under the prevailing circumstances, the final Somerset plan may be the best resolution for a prototypical alternative development in a town where controlling development interests have not changed in decades. Somerset is, in effect, being constructed as a hybrid community displaying both conventional development practices as well as some of the New Urbanist strategies. It is unclear at this point whether Somerset and its compromises will be more effective than conventional development at fostering community interaction, but this hybrid approach may allow people to become accustomed to “urban” qualities while they are reassured by more familiar “suburban” aspects. Somerset may also allow the city and the developers to assess whether the physical and social environment created by New Urbanist design will attract buyers, and whether it is a viable option for future neighborhood development. Even though the final scheme fails to produce a “pure” New Urbanist village, the resulting community will provide a test case from which the city and developers can learn.

In contrast to the final plan for Somerset, the community of Middleton Hills faithfully incorporates most New Urbanist principles. Few principles were compromised, but some details required modification to accommodate topographic extremes. For example, some of the buildings were allowed to exceed the two-story height limit on one side to allow for garages on the opposite side. Due to concerns about slope and alley widths, the corner radii were increased on some of the alleys to accommodate larger service vehicles. In the main, however, these detail modifications are not substantial departures from New Urbanist principles. Throughout the process, the designers worked closely with the developer to ensure that the intent of the design was carried forward.

The design and development processes differed between Somerset and Middleton Hills. At Somerset, the city initiated the alternative community and at Middleton Hills the developer initiated the project. There were four main factors that differentiated the process followed at Somerset from the one employed at Middleton Hills. First, each developer in Somerset owns and develops one-third of the property, thereby creating competition among them and leaving no overarching structure for decision-making and community development. Second, only one DPZ designer was involved in the design process when there is usually a team of designers and experts working together. Third, there was no pre-design stage

charrette, another aspect usually integral to the process. Fourth, there was no expert left in charge to ensure that the intent of the principles were followed.

The design process at Middleton Hills was more characteristic of other DPZ projects. In the typical case, a developer who recognizes the potential for New Urbanist design seeks the expertise of the DPZ design team, and the local government is the entity that tends to create obstacles at the design stage or during implementation. DPZ was fortunate in this case to work with a developer who was completely “sold” on New Urbanist principles, as well as a city leadership that was enthusiastic about the project from the beginning and supported regulatory changes as needed to make the development a reality. Andres Duany himself led the process and negotiations to ensure the intent of the plan. A public charrette was held and many different consultants were involved in the process, resulting in a greater level of public involvement and a wider array of expertise at the planning stage. DPZ continued as consultants throughout the development process, which lent continuity to the project and tended to assure compliance with the original design intent.

The design process at Middleton Hills suggests that a motivated landowner will produce a housing development more true to New Urbanist principles than a process initiated by a motivated city and, in effect, foisted upon developers who are less inclined to experiment. The City of Ames identified the potential for introducing unique and attractive layouts which could lead to an enhanced community way of life. The city was attempting to offer an alternative choice in an atmosphere dominated by conventional development styles since World War II. Despite the city’s intent, the developers’ focus on sales and profit has tended to thwart many of the objectives of New Urbanism.

Ironically, proponents of New Urbanism such as DPZ, Philip Langdon, and James Kunstler, blame many of the ills of conventional suburbia on local city governments. City leaders are inherently conservative and typically resist radical changes to standard development forms proposed by innovative developers, fearing these changes would compromise the quality of the community. This case study features reversed roles: the city is excited about the potential of New Urbanism and is willing to promote it, but the city encounters resistance from the developers. The question faced by the city of Ames, and

perhaps municipalities elsewhere, is whether government has a role to play in promoting alternatives to conventional housing.

If a product is of significant importance for human need or quality of life, then government may have an interest in endorsing or advocating that product. For many people, a house is the most expensive investment they will ever make. One of the roles of city government is to maintain a standard degree of livability for its residents – this includes ensuring reliable utility systems, keeping streets free of debris and snow, helping to create strong school systems, and promoting housing at various income levels. Cities approach this task by using comprehensive planning and by creating regulatory codes for development such as zoning ordinances and design regulations for the subdivision of property. The comprehensive plan, which ideally reflects a democratic, public consensus, attempts to create a vision for the community by defining land uses and providing a balance of commercial/industrial, multi-modal transportation systems and other infrastructure, low-income dwellings, upper- and middle-income dwellings, and resource conservation and management. Given its leadership role in guiding comprehensive planning, it is reasonable to propose that municipal government could play a role in advocating innovative forms of residential development, which can be shown to overcome some of the problematic aspects of conventional planning practice.

City officials who take this sort of advocacy stance will inevitably encounter some resistance from landowners and developers who may feel threatened by further development regulation or by challenges to tried-and-true development practices. Some might contest the idea of city government pro-actively guiding the development of private property, as opposed to the idea of the city as a reactive agent which merely responds to market activity and protects the status quo. The contrasting experience of the Ames and Middleton examples indicates that different communities have distinctive and widely differing development cultures; the case of Somerset suggests that government-led development initiatives may be a necessary municipal function within a conservative development culture, if the case can be made that innovative neighborhood design is not only an important livability issue but an economic issue as well. Many cities limit their definition of quality of life to essential services, basic amenities, low taxes, and positive economic development. Typically, local

economic development is focused on employment and tax revenue. “Livable” community design can also provide a boost to the town’s economy by building a place that entices future growth and development.

It may be the case that in the typical instance, city leaders must be careful not to push too hard as they try to more actively guide development. There is always the possibility that if developers are not allowed to do what they want, then they will take their business elsewhere. This threat requires solid regional development plans and agreements for economic and social integration between communities, towns, and cities. On the other hand, Ames may be an ideal candidate for city-guided development innovation, because the municipality of Ames is not, for the most part, contiguous with competing municipalities (as is the case, for example, in Des Moines), so the city exerts a greater degree of control over the range of local developable sites.

House buyers will not, on their own, create demand because a typical buyer will not have the knowledge to realize the subtle but important benefits achieved by good community planning. One of the reasons conventional development is so widely accepted is because of successful advertising. Marketing materials usually highlight amenities; they do not usually mention community, walkability, scale, or other traditional neighborhood ideals. Since New Urbanist concepts are unknown to many people, it is critical to foster public awareness of the possibilities for neighborhood design to provide the basis for a different kind of community life. New Urbanist principles are intrinsically holistic, but they can be misapplied as merely an aesthetic code when not fully understood. In order to engender the level of public support necessary to sustain a city government’s advocacy for this type of development, promoters must create a clear distinction between superficial “urbanism” and development which comprehensively applies New Urbanism’s principles.

The founders and supporters of New Urbanism have, unfortunately, tended to exacerbate misunderstanding by way of their focus on architecture and streetscapes – not only in their marketing imagery but also in their design approach. For those concerned with holistic planning of neighborhoods, a great area of concern is the treatment of the landscape itself. Although parks and street trees are incorporated by DPZ and similar firms to provide scale and contribute to a pleasant streetscape, these after-the-fact palliative “landscape”

designs are no substitute for comprehensive land use planning and layout within the development. The case of Somerset, with its shortcomings in the areas of open-space connectivity, suggests that the project could have benefited from involvement by a broader range of community designers such as landscape architects, recreational planners, and ecologists. When Duany, Plater-Zyberk, and Speck (2000, 80) denounce the landscape architect's attempts to "make ugly suburbs attractive," they betray a predisposition toward an understanding of landscape as primarily an aesthetic, rather than ecological, phenomenon. DPZ would assign landscape architects the task of "correcting for the spatial deficiencies of the urbanism," and even if this limited undertaking were to be appropriate, it would be difficult to achieve this on the minimal budgets typically afforded for landscape improvements. A better approach would be an integrated effort among architects, landscape architects, planners, engineers, and other design consultants. One architect, historian, and educator believes, "that priority should now be accorded to landscape, rather than to freestanding built form" (Fampton 1995, 90). If the landscape, holistically considered, had been a priority at Somerset, many of the problematic aspects of the final scheme – aspects which defy essential New Urbanist principles – could have been mitigated.

Recommendations

Many of the recommendations include more rigorous implementation of principles outlined in the *Charter of the New Urbanism*, in the interest of a holistic approach to community planning and design. The "purest" forms of New Urbanism seem to be the rare cases in which an owner-developer had the resources and the powerful, sustained motivation to see the entire project through. Middleton is an example of this, as is the archetypal New Urbanist resort town of Seaside, Florida (owned/developed by real estate heir Robert Davis and designed by DPZ).

In the more typical case, New Urbanist developments will, like Somerset, be created as negotiated entities, with different stakeholder groups exerting influence on the eventual outcome. Understanding this, a city government would do well to anticipate the competing interests that exist, and to plan for negotiations by creating opportunities for public input and by taking the lead in fostering public awareness of the favored design concepts. It may also

be more realistic and advisable for a community to introduce New Urbanist concepts incrementally; one approach is to follow the example of Ames and seek “hybrid” opportunities to explore the feasibility of particular design strategies. A great challenge of this hybrid approach is to successfully integrate proposed principles with current systems and styles of development. Somerset may not feature wholly “integrated” New Urbanist design principles, but it does feature elements which provide the basis for evaluation. There are some back-alleys, for example, complemented by “intact” streetscapes on the front side; also, despite the segregation among housing types, there is a far richer mixture of these housing options than in any other postwar subdivision in Ames.

Another strategy for communities is to conceive of incremental, “test-case” New Urbanism on a scale greatly reduced from Somerset. At 150 acres, Somerset will develop rather slowly in a town with the population of Ames – meaning that not only will the developers’ return on investment be slow to materialize, but that the establishment of neighborhoods and the potential demonstration of the viability of the concept may take a long time to come about. Development on the scale of Somerset may well be feasible in areas of greater population; Ames, and similar-sized communities, could “experiment” more effectively by encouraging development of smaller parcels.

New Urbanism theory must be supported by solid, case study based research – and this will become increasingly feasible as New Urbanist communities are built-out and are occupied over a period of years. To test the many assumptions the New Urbanists hold dear, there should be empirical studies of built places on a parallel with the intensive scrutiny of 1970s “new towns” such as Columbia, Maryland. Research conducted in real, lived-in three-dimensional places is the key to understanding the way these places actually work. In recent years, many communities have relied upon the Visual Preference Survey™ methodology to gauge citizen preferences for particular environments, and results seem to suggest that people overwhelmingly approve of New Urbanist imagery, and even prefer it to suburban imagery. Now is the time to move beyond imagery and to test the built environments which New Urbanism has inspired.

A fundamental assumption of the New Urbanism is that historic town form, patterned after townscapes from 100 years ago, is viable and adaptable for contemporary life. To

assess this claim, post-occupancy evaluations need to be conducted periodically over a span of time – perhaps in five-year cycles at Somerset, Middleton Hills, and other New Urbanist enclaves. Post-occupancy evaluations assess, among other things, the level of satisfaction of residents. This instrument could help to determine a project's success by demonstrating whether needs are being met, and whether residents adapt their lifestyles in the manner intended by the designer – in general, whether the designer's behavioral assumptions were correct in the first place, and whether the designer properly anticipated future needs. Other authors have recommended that future studies be conducted to evaluate the success of TNDs or other types of New Urbanist communities. It will be essential to explore how New Urbanist development compares with other models. It is this author's recommendation that evaluations be conducted for a variety of residential developments, in order to have a basis for comparison among differing neighborhood types.

In evaluating these places, qualitative questions asked of the residents must recognize a variety of living situations, recognizing a diversity of lifestyle groups. Questions should also inquire about neighborhood satisfaction and social integration. For example, researchers may ask residents whether and how they interact with their neighbors; the number of neighbors that they know and whether physical proximity to neighbors significantly influences relationships; whether they are able or willing to walk to a store or to meet other daily needs without depending on an automobile; whether they would like to be able to walk to meet daily needs; whether there are safe parks and play surfaces for children within walking distance of their dwelling; whether they feel they are part of a community network; or whether they are satisfied with the integration of races and cultures in their neighborhood.

Further, planning efforts need to be made in a comprehensive and interdisciplinary manner, which includes purposeful public involvement. The lesson from the Somerset and Middleton Hills comparison is that the absence of a charrette in Ames in effect short-circuited the public input and perhaps sowed the seeds for later disagreements and misunderstanding among stakeholders. Both Somerset and Middleton Hills feature intensively designed streetscapes, but each reflects some deficiencies in their overall designs for open space planning. At a larger scale of concern, the Somerset neighborhood is largely a self-contained entity with potential for connectedness beyond its boundary unexplored.

This study exposes the difficulties faced by a city attempting to guide the creation of richer communities while, at the same time, showing sensitivity to the concerns of its constituents. This retreat from a pure New Urbanist approach should not be seen as a failure in all regards; rather, it should be viewed as a starting point for merging current development patterns with forms of alternative development. These two case studies will introduce a market for Midwest communities fairly unfamiliar with alternatives. Future development should reference and build on the accomplishments of the designs and processes; look at areas that deviated from the principles; and evaluate whether, in the course of compromise, there were significant missed opportunities that should be secured in new development. This study identified and acknowledged that stakeholder groups played a crucial role in the processes and outcomes of the designs. These communities are building a valuable resource that, after some years of occupation, may gradually influence the expectations of future stakeholders. The communities of Somerset and Middleton Hills, with their unique sets of circumstances and varying needs of unique populations, provides evidence that community design efforts need to be place-specific and stakeholder-responsive.

REFERENCES

- Ames Community Planning Conference. 1996. City of Ames Chamber of Commerce, City of Ames Economic Development, and the Ames Neighborhood Coalition. 13 April. Videocassette.
- Architects Rudi/Lee/Dreyer. 1997. *The architectural guidelines for Somerset*. Ames, Iowa.
- Arendt, Randall. 2000. Essay in *Charter of the New Urbanism*, eds. Michael Leccese and Kathleen McCormick, 29-34. New York: McGraw-Hill.
- Arrington, G. B. 2000. Essay in *Charter of the New Urbanism*, eds. Michael Leccese and Kathleen McCormick, 59-63. New York: McGraw-Hill.
- Audirac, Ivonne, and Anne H. Shermeyen. An evaluation of neotraditional design's social prescription: Postmodern placebo or remedy for suburban malaise? *Journal of Planning Education Research* 13, no. 3: 161-173.
- Bookout, Lloyd W. 1992a. Neotraditional town planning: A new vision for the suburbs? *Urban Land*. January, 20-26.
- _____. 1992b. Neotraditional town planning: The test of the marketplace. *Urban Land*. June, 12-17.
- _____. 1992c. Neotraditional town planning: Toward a blending of design approaches. *Urban Land*. August, 14-19.
- _____. 1992d. The future of higher-density housing. *Urban Land*. September, 14-18.
- Bressi, Todd. W. 1994. Planning the American dream. Essay in *The new urbanism: Toward an architecture of community*, by Peter Katz. New York: McGraw-Hill.
- Brown, Barbara B., John R. Burton, and Anne L. Sweaney. 1998. Neighbors, households, and front porches: New urbanist community tool or mere nostalgia? *Environment and Behavior* 30, no. 5: 579-600.
- Calthorpe, Peter. 1993. *The next American metropolis: Ecology, community, and the American dream*. New York: Princeton Architectural Press.
- _____. 2000. Essay in *Charter of the New Urbanism*, eds. Michael Leccese and Kathleen McCormick, 15-22. New York: McGraw-Hill.

- Cervero, Robert, and Peter Bosselmann. 1998. Transit villages: Assessing the market potential through visual simulation. *Journal of Architectural and Planning Research* 15, no. 3: 181-195.
- City of Ames. 1995. *Land use codes*. 1 July.
- _____. 1997a. *Council action form 20A*. 8 April.
- _____. 1997b. *Council action form 20B*. 8 April.
- Comitta, Thomas J. 2000. Essay in *Charter of the New Urbanism*, eds. Michael Leccese and Kathleen McCormick, 113-119. New York: McGraw-Hill.
- Corbett, Michael N. 1981. *A better place to live: New designs for tomorrow's communities*. Emmaus, PA: Rodale.
- Creese, Walter L., ed. 1967. *The legacy of Raymond Unwin: A human pattern for planning*. Cambridge: MIT Press.
- _____. 1994. Introduction to *Town planning in practice: An introduction to the art of designing cities and suburbs*, by Raymond Unwin. New York: Princeton Architectural Press. Original edition, London: T. Fisher Unwin, 1909.
- Cruse, Richard M., spokesperson for the Neighborhood Group. 1996. Letter from Cruse to City of Ames Planning and Zoning Commission, 3 February.
- DPZ. 1996. *Master plan for Somerset*. Ames, Iowa.
- Duany, Andres. 2000. Essay in *Charter of the New Urbanism*, eds. Michael Leccese and Kathleen McCormick, 161-167. New York: McGraw-Hill.
- Duany, Andres, and Elizabeth Plater-Zyberk. 1992. The second coming of the American small town. *The Wilson Quarterly* 26, no. 1: 19-50.
- Duany, Andres, Elizabeth Plater-Zyberk, and Jeff Speck. 2000. *Suburban nation: The rise of sprawl and the decline of the American dream*. New York: North Point.
- Ehrenhalt, Alan. 1996. Neotraditionalism and the corner store: Can the community of the future support the commerce of the past? *Governing*. December, 6.
- Eppli, Mark J., and Charles C. Tu. 1999. *Valuing the new urbanism: The impact of the new urbanism on prices of single-family homes*. Washington, D.C.: Urban Land Institute.
- Ewing, Reid. 1997. Is Los Angeles-style sprawl desirable? *Journal of the American Planning Association* 63, no. 1: 107-126.

Fenimore, Jeff, architect with Architects Rudi/Lee/Dreyer and resident of Somerset. 1999. Interview by author, 23 September.

_____. 2000. Interview by author, 29 June.

Fiore, Ann Marie, resident of Parkview Heights. 2000. Interview by author, 18 February.

Fishman, Robert. 1987. *Bourgeois utopias*. New York: Basic Books.

Frampton, Kenneth. 1995. Toward an urban landscape. Vol. 4, *Columbia documents of architecture and theory*. New York: Columbia University.

Friedrich, Reiny, Broker Owner, Friedrich/Iowa Realty. 1999. Interview by author, 12 October.

_____. 2000. Interview by author, 27 June.

Fulton, William. 1996. *The new urbanism: Hope or hype for American communities?* Cambridge: Lincoln Institute of Land Policy.

Furman, Don, Furman Realty. 1999. Interview by author, 19 October.

Girling, Cynthia L., and Kenneth I. Helphand. 1994. *Yard, street, park*. New York: John Wiley & Sons.

Goldberger, Paul. 2000. Review of *Suburban nation: The rise of sprawl and the decline of the American dream*, by Andres Duany, Elizabeth Plater-Zyberk, and Jeff Speck. *New Yorker*. 27 March, 128-134.

Gordon, Peter, and Harry W. Richardson. 1997. Are compact cities a desirable planning goal? *Journal of the American Planning Association* 63, no. 1: 95-106.

Grabowski-Miller, Jane, Director of Design, Middleton Hills, Inc. 2000. Interview by author, 24 January.

Harris, Richard, and Peter J. Larkham. 1999. Suburban foundation, form, and function. In *Changing suburbs: Foundation, form, and function*, 1-31. London: E & FN Spon.

Hayward, Steven. 1998. Legends of the sprawl. *Policy Review*. September/October, 26-32.

Hoffman, Rob. 1996a. Developers postpone Somerset presentation. *Ames Tribune*, 22 October, A1.

_____. 1996b. Neighbors pleased with Somerset revisions. *The Daily Tribune*, 13 December, A1.

_____. 1996c. Zoning commission endorses Somerset Village plan. *The Daily Tribune*, 19 December, A3.

Horrigan, Paula. 1999. Placemaking by design. In *ASLA Annual Meeting Proceedings, 1999*, 248-250. Washington, D.C.: American Society of Landscape Architects.

Howard, Ebenezer. 1965. *Garden cities of to-morrow*. Cambridge: MIT Press.

Howard, Hillary, Hunziker and Associates. 1999. Interview by author, 28 October.

Huntington, Stuart, resident of Northridge. 2000. Interview by author, 31 January.

Hunziker, Erben, Hunziker and Associates. 1999. Interview by author, 28 October.

Hylton, Thomas. 1995. *Save our land, save our towns*. Harrisburg, PA: RB Books.

Jackson, Kenneth T. 1985. *Crabgrass frontier: The suburbanization of the United States*. New York: Oxford University Press.

Jacobs, Jane. 1961. *The death and life of great American cities*. New York: Random House.

Jarvis, Fredrick D. 1993. *Site planning and community design for great neighborhoods*. Washington, D.C.: Home Builder Press.

Jenson, Jens. 1990. *Siftings*. Baltimore: John Hopkins University Press. Original edition, Chicago: Ralph Fletcher Seymour, 1939.

Katz, Peter. 1994. *The new urbanism: Toward an architecture of community*. New York: McGraw-Hill.

Kay, Jane Holtz. 1997. *Asphalt nation: How the automobile took over America, and how we can take it back*. New York: Crown Publishers.

Kelbaugh, Doug, ed. 1989. *The pedestrian pocket book: A new suburban design strategy*. New York: Princeton Architectural Press.

_____. 2000. Essay in *Charter of the New Urbanism*, eds. Michael Leccese and Kathleen McCormick, 155-159. New York: McGraw-Hill.

Kelley, Eileen, City Planner, City of Middleton, WI. 2000a. Interview by author, 23 January.

_____. 2000b. Interview by author, 27 June.

- Krieger, Alex, ed. 1991. *Andres Duany and Elizabeth Plater-Zyberk: Towns and town-making principles*. New York: Rizzoli.
- Kunstler, James H. 1993. *The geography of nowhere*. New York: Simon & Schuster.
- _____. 1996. *Home from nowhere: Remaking our everyday world for the twenty-first century*. New York: Simon & Schuster.
- Lang, Jon. 1987. *Privacy, territoriality, and personal space – proxemic theory*. In *Creating architectural theory: The role of the behavioral sciences in environmental design*. New York: Van Nostrand Reinhold.
- Langdon, Philip. 1994. *A better place to live: Reshaping the American suburb*. New York: HarperPerennial.
- Leccese, Michael, and Kathleen McCormick, eds. 2000. *Charter of the New Urbanism*. New York: McGraw-Hill.
- Lein-Berger, Christopher. 1998. The market and metropolitanism. *Brookings Review*. Fall, 35-37.
- Leopold, Aldo. 1966. *A Sand County almanac*. New York: Ballantine.
- Lewis, Philip H., Jr. 1996. *Tomorrow by design: A regional design process for sustainability*. New York: John Wiley & Sons.
- Local Government Commission. 1991. *The Ahwahnee Principles: Toward more livable communities*. San Francisco.
- Marcus, Clare C., Carolyn Francis, and Colette Meunier. 1988. Mixed messages in suburbia: Reading the suburban model home. *Places* 4, no. 1: 24-37.
- Martin, Judith, and Sam Bass Warner, Jr. 1997. Urban conservation: Social, green, and affordable. In *Placing nature: Culture and landscape ecology*, ed. Joan I. Nassauer, 109-122. Washington, D.C.: Island Press.
- Martin, Michael. 1996. Back-alley as community landscape. *Landscape Journal* 15, no. 2: 138-153.
- _____. 1999. Social life in open-back neighborhoods: Three case studies. In *ASLA Annual Meeting Proceedings, 1999*, 115-119. Washington, D.C.: American Society of Landscape Architects.
- Marshall Erdman and Associates. 1994. *General Implementation Plan*, Middleton Hills. August.

- McKenzie, Evan. 1994. *Privatopia*. New Haven: Yale University Press.
- McHarg, Ian L., and Frederick R. Steiner, eds. 1998. *To heal the earth: Selected writings of Ian L. McHarg*. Washington, D.C.: Island Press.
- Michman, Ronald D. 1991. *Lifestyle market segmentation*. New York: Praeger.
- Middleton Hills, Inc. n.d. *Informational Material*, Middleton Hills. Middleton, WI.
- _____. 1999. *Neighborhood Codes and Covenants*, Middleton Hills. Middleton, WI. Fall.
- Mouchly, Ehud, Pike Oliver, and Larry Netherton. 1998. Changing consumer preferences. In *Trends and innovations in master-planned communities*, ed. Adrienne Schmitz and Lloyd W. Bookout, 99-112. Washington, D.C.: Urban Land Institute.
- Moule, Elizabeth, and Stefanos Polyzoides. 1994. The street, the block and the building. Essay in *The new urbanism: Toward an architecture of community*, by Peter Katz. New York: McGraw-Hill.
- Mumford, Lewis. 1938. *The culture of cities*. New York: Harcourt, Brace and Company.
- _____. 1953. *The highway and the city*. New York: Harcourt, Brace and World.
- _____. 1957. Introduction to *Toward new towns for America*, by Clarence S. Stein. New York: Reinhold Publishing.
- Murphy, Ron, Broker Associate, Friedrich/Iowa Realty. 1999. Interview by author, 7 October.
- NAHB. 1999. Smart growth: Building better places to live, work, and play. *NAHB's Smart Growth Report*. Washington, D.C.: National Association of Home Builders.
- Nelessen, Anton C. 1994. *Visions for a new American dream: Process, principles and an ordinance to plan and design small communities*. Chicago: American Planning Association.
- Norberg-Schulz, Christian. 1979. *Genius loci: Towards a phenomenology of architecture*. London: Academy Editions.
- O'Connell, Brian, Director of Planning and Housing, City of Ames. 1999. Interview by author, 28 September.
- _____. 2000. Interview by author, 22 June.

- O'Donnell, Thomas R. 1998. It does not take a village: The concept is to prevent sprawl, but some in Ames say it's too costly and risky. *The Des Moines Register*, 30 July, B10.
- O'Toole, Randal. 1999. Dense thinkers. *Reason*. January, 44-52.
- Pawlukiewicz, Michael. 1998. Environmentally responsible development. In *Trends and innovations in master-planned communities*, ed. Adrienne Schmitz and Lloyd W. Bookout, 67-81. Washington, D.C.: Urban Land Institute.
- Popcorn, Faith. 1991. *The Popcorn report: On the future of your company, your world, your life*. New York: Doubleday.
- RM Plan Group. 1996. *Land use policy plan for Ames, Iowa*. May.
- Rusk, David. 1995. *Cities without suburbs*. Washington, D.C.: Woodrow Wilson Center Press.
- Rybczynski, Witold. 1991. Living smaller. *Atlantic Monthly*. February, 64-78.
- _____. 1995. *City life: Urban expectations in a new world*. New York: Scribner.
- Schmitt, Eden, City Planner, City of Ames. 2000. Interview by author, 18 May.
- Schmitz, Adrienne. 1998. Changing consumer preferences. In *Trends and innovations in master-planned communities*, ed. Adrienne Schmitz and Lloyd W. Bookout, 83-98. Washington, D.C.: Urban Land Institute.
- Schor, Juliet B. 1991. *The overworked American: The unexpected decline of leisure*. New York: Basic Books.
- _____. 1998. *The overspent American: Upscaling, downshifting, and the new consumer*. New York: Basic Books.
- Shoshkes, Ellen. 1989. *The design process: Case studies in project development*. London: Architecture Design and Technology Press.
- Sitte, Camillo. 1945. *The art of building cities*. New York: Reinhold Publishing Corporation. Original edition, 1889.
- Solomon, Daniel. 1988. Life on the edge: Toward a new suburbia. *Architectural Record*. November, 63-67.
- _____. 1992. *Rebuilding*. New York: Princeton Architectural Press.

- Southworth, Michael. 1997. Walkable suburbs? An evaluation of Neotraditional communities at the urban edge. *Journal of the American Planning Association* 63, no. 1: 28-44.
- Southworth, Michael and Ben-Joseph, Eran. 1997. *Streets and the shaping of towns and cities*. New York: McGraw-Hill.
- Speck, Jeff, Senior Designer, DPZ Town Planners. 1999a. Interview by author, 19 October.
- _____. 1999b. Interview by author, 17 December.
- Stein, Clarence S. 1957. *Toward new towns for America*. New York: Reinhold Publishing.
- Taylor, Rosemary, original landowner. 1999. Interview by author, 18 November.
- Urban Land Institute. 1999. *Parking requirements for shopping centers*. Washington, D.C.: Urban Land Institute.
- Unwin, Raymond. 1994. *Town planning in practice: An introduction to the art of designing cities and suburbs*. New York: Princeton Architectural Press. Original edition, London: T. Fisher Unwin, 1909.
- Walsh, Michael. 1999. Thinking small pays off for big homeowners. *Wisconsin State Journal*, 22 August.
- Warrick, Brooke, and Toni Alexander. 1998. Changing consumer preferences. In *Trends and innovations in master-planned communities*, ed. Adrienne Schmitz and Lloyd W. Bookout, 11-24. Washington, D.C.: Urban Land Institute.
- Weiss, Marc A. 1987. *The rise of the community builders: The American real estate industry and urban land planning*. New York: Columbia University Press.
- _____. 2000. Essay in *Charter of the New Urbanism*, eds. Michael Leccese and Kathleen McCormick, 89-93. New York: McGraw-Hill.
- Weiss, Michael J. 2000. *The clustered world: How we live, what we buy, and what it all means about who we are*. Boston: Little, Brown.
- Winkleblack, Chuck, Hunziker and Associates. 1999. Interview by author, 21 October.
- Wright, Gwendolyn. 1995. *Building the dream: A social history of housing in America*. The Cambridge: MIT Press.
- Wright, Robert. 1994. *Land use in a nutshell*. St. Paul, MN: West Publishing.