

1996

Neotraditional Neighborhood Development: A Critical Look

Roberta Groch
University of Rhode Island

Follow this and additional works at: <https://digitalcommons.uri.edu/theses>

Recommended Citation

Groch, Roberta, "Neotraditional Neighborhood Development: A Critical Look" (1996). *Open Access Master's Theses*. Paper 746.
<https://digitalcommons.uri.edu/theses/746>

This Thesis is brought to you for free and open access by DigitalCommons@URI. It has been accepted for inclusion in Open Access Master's Theses by an authorized administrator of DigitalCommons@URI. For more information, please contact digitalcommons@etal.uri.edu.

NEOTRADITIONAL NEIGHBORHOOD DEVELOPMENT:
A CRITICAL LOOK

BY

ROBERTA GROCH


A Research Project Submitted in
Partial Fulfillment of the Requirements
for the Degree of
Master of Community Planning

UNIVERSITY OF RHODE ISLAND

1996

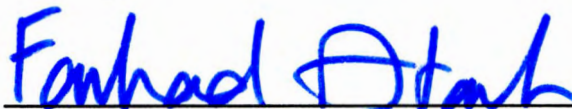
MASTER OF COMMUNITY PLANNING
RESEARCH PROJECT
OF
ROBERTA GROCH

Approved:
Major Professor



Farhad Atash

Acknowledged:
Acting Director



Farhad Atash

ABSTRACT

Conventional suburban design has created sprawl, traffic congestion, and other problems. New urbanists seek to solve these and other problems through the return to design elements found in the early twentieth century American small towns. This research project examines two of the goals of new urbanists: the reduction of auto-dependency while increasing transit use, walking, and biking, and the building of community through architecture, town planning, and design. The study describes the strategies new urbanists propose to achieve these goals, and then examines some reasons why the goals may or may not be attainable. It is concluded that new urbanist techniques should be applied on a case-by-case basis, and that social problems need to be addressed not only through design, but also through public policy. Many of the ideas offered by new urbanists are worthwhile to planners, and recommendations on how to make them work are offered.

ACKNOWLEDGEMENTS

The readers for this project were all extremely generous with their time and knowledge. I would like to thank Howard Foster for his time and suggestions, both inside and outside of the classroom. I would also like to thank Cranston Planning Director Kevin M. Flynn for his comments. Kevin's kindness and good humor made him a welcome resource for this project and for other planning issues. I would especially like to thank Farhad Atash for his endless patience, kindness, and assistance during my time at CPAD, and especially during the duration of this project. Despite his demanding schedule, he always made time for my questions and concerns.

Lastly, I would like to thank my husband, Christopher Sanzo, for his immeasurable support for me while I attended graduate school.

TABLE OF CONTENTS

| | |
|---|----|
| CHAPTER ONE: INTRODUCTION..... | 1 |
| 1.1 PROBLEM STATEMENT..... | 1 |
| 1.2 RESEARCH QUESTIONS AND SIGNIFICANCE..... | 5 |
| 1.3 ORGANIZATION OF THE STUDY | 5 |
| | |
| CHAPTER TWO: TROUBLE IN PARADISE..... | 7 |
| 2.1 THE GROWTH OF THE SUBURBS..... | 7 |
| 2.2 CHANGING FAMILIES..... | 11 |
| 2.3 THE CAR IS KING..... | 11 |
| 2.4 INVESTMENTS IN TRANSPORTATION | 13 |
| 2.5 IMPACTS ON SUBURBAN LAND USE | 15 |
| 2.6 SUMMARY..... | 17 |
| | |
| CHAPTER THREE: TRANSPORTATION ALTERNATIVES..... | 19 |
| 3.1 TNDs AND TODs | 20 |
| 3.2 CHARACTERISTICS | 21 |
| 3.3 NEW URBANIST STRATEGIES FOR THE REDUCTION OF AUTO USE AND DEPENDENCY | 24 |
| 3.4 CRITICS' VIEWS | 27 |
| 3.5 SUMMARY..... | 34 |
| | |
| CHAPTER FOUR: COMMUNITY-BUILDING..... | 36 |
| 4.1 NEW URBANIST STRATEGIES | 38 |
| 4.2 CRITICS' VIEWS | 40 |
| 4.3 SUMMARY..... | 52 |
| | |
| CHAPTER FIVE: CONCLUSION AND POLICY RECOMMENDATIONS..... | 53 |
| 5.1 RESEARCH FINDINGS | 53 |
| 5.2 POLICY RECOMMENDATIONS FOR MAKING IT WORK | 57 |
| 5.4 ENOUGH IS ENOUGH | 67 |
| | |
| REFERENCES..... | 70 |

Chapter One Introduction

1.1 Problem Statement

The focus of this research project is the town planning movement known as "new traditionalism," "neotraditionalism" or "New Urbanism." Neotraditional planning advocates such as architects Andres Duany, Elizabeth Plater-Zyberk, Leon Krier, and Peter Calthorpe, look back to the traditional New England town of the early twentieth century. People would meet each other on the street while running errands to nearby stores, or talk to neighbors over their backyard fence. New urbanists see the features of these neighborhoods as providing the opportunity for human contact that is missing from the auto-dependent suburbs that fill America's metropolitan areas. New urbanism is the antithesis of the contemporary suburb that grew out of Ebenezer Howard's "garden city" concept. Howard wanted to create satellite cities outside of London to give families a healthier living environment (Bookout 1992a). But this kind of development, on the outskirts of metropolitan areas, has led to the haphazard low-density sprawl that characterizes the present-day American suburb. New urbanism draws its inspiration instead from Clarence Perry's neighborhood unit of the 1920s and 1930s, and the walking cities of Europe. However, new urbanism is similar to the Garden City in that it looks to the town as the model for new development. Andres Duany and Elizabeth Plater-Zyberk advocate designing suburban

subdivisions as free-standing towns and creating new “codes” that encourage the physical features of towns (Krieger and Lennertz 1991).

The most famous of the few neotraditional projects that have been completed is the community of Seaside, Florida, although its lack of year-round residents makes it inappropriate as an example of the principles of new urbanism in action. In the years since Seaside, however, neotraditionalism has transformed itself from a “suburban, perhaps nostalgic, vision of community” into “the new urbanism” (Calavita 1994). It encompasses not only traditional neighborhood developments (TNDs) and transit-oriented developments (TODs) but also urban villages, mixed-use activity centers, and compact development. These developments, sited in suburban or exurban locations, have been created to address some of the existing problems of suburban life such as congestion caused by suburb-to-city and suburb-to-suburb commuting, and low-density sprawl. Although their strategies may be different, their goals are the same: make housing closer to stores, community facilities, and jobs to reduce auto use and increase the sense of community (Audirac and Shermeyen 1994).

New urbanists also emphasize public transit, walking, and bicycling over automobile use, and making suburbs more “walkable.” Homes, offices, and stores are integrated to create a neighborhood atmosphere with services and recreation areas located within walking distance of every residence, or one-quarter of a mile. Streets are laid out to provide drivers with alternate routes between two points, and cul-de-sacs are discouraged to avoid the confusing,

twisting and turning dead-end roads of contemporary subdivisions. Alleys run behind every back yard, keeping cars, garages and utility lines off the street. By keeping houses close together and encouraging high-density living, the suburban sprawl that plagues the nation's countryside would be minimized or prevented. Neotraditional suburbs prescribe houses set close to the sidewalk, preferably with front porches to facilitate neighborly conversation. The landscaping and layout of a neotraditional development are designed to be as people-friendly as possible, with sidewalks at the curb, and village greens and plazas. Public buildings are located in a prominent location to create "a stronger sense of place." Through these design techniques, residents will be made to feel that they are part of a community and "not just dwellers in a subdivision" (Bookout 1992a).

The new urbanists point to the fact that the American family no longer "works" in the suburbs of the 1950s; two-income families and single-parent family have increased, while the number of "traditional" nuclear families has declined (Bookout 1992d). TNDs and TODs are supposed to be a way of addressing changing family structures that are not reflected in traditional land use patterns, such as the increased number of single-parent families. Jobs are no longer located just in the center city, and workers may now commute long distances to centers of employment located in other suburbs. New urbanists call the zoning of different uses into separate "pods" sexist, making "women into

chauffeurs” for their children’s activities, which are often located miles from each other (Eckdish Knack 1989).

New urbanists also claim that a sense of identity and community can be created through architecture, town planning, and design, things that have been lost to the residents of modern suburbs. By adopting the urban conventions in the U.S. that were normal from colonial times until the 1940s residents “will get to know each other,” and “watch over their collective security” (Audirac and Shermeyen 1994). However, these admirable goals may now no longer be valid in suburban America. Crime and fear have eroded Americans willingness to trust, leading to unwillingness to have contact with strangers, or even their neighbors. The number of Internet users and personal computer-owners has exploded; the number of hours the average American spends watching television-watching continues to increase (Montague 1993); fewer Americans are joining civic organizations; and the increased use of the telephone to shop and conduct business all point to American life becoming more private and isolated (Putnam 1996). Are the nostalgic ideas that the new urbanists advocate out of place in contemporary American society? Do people want public life and sociability with their neighbors (Southworth 1995)? Can good design change people’s behavior? Can communities that are designed to resemble communities of the past actually *function* like communities of the past? Can the neighborhood or TOD centers function as “the focus of the community” at a time when Americans belong to communities of interest instead (Calavita 1994)?

Although it is important to plan suburbs rather than to just let them happen, is new urbanism the path to be followed in America? The new urbanism may be attractive for many reasons but it may not be a way of “creating” community, especially in a country that cherishes individual freedom.

1.2 Research Questions and Significance

This research project will answer the following questions: first, will new urbanism reduce auto use and increase the use of public transit, walking, and biking? Second, can a sense of identity and community be created through architecture and town planning? The answers are significant because of the growing application of new urbanist principles. It is important to turn a critical eye towards neotraditionalism before it becomes further translated into policy. Already the Department of Housing and Urban Development (HUD) has begun to talk about some of the new urbanist ideas as goals in their publications, and community codes are being changed to accommodate these developments. The viability of the goals and objectives of the movement must be analyzed to ensure that using them as national policy is not misguided.

1.3 Organization of the Study

The paper begins with some of the problems caused by, and inherent in, the post-W.W.II suburban design, particularly traffic congestion and sprawl. The effect of the car on public transit investments and land use patterns is also

examined. Chapter Three looks at the new urbanists goal of reducing auto use and increasing the use of public transportation, and some of the forces that work for and against its attainment. The goal of creating a sense of identity and community through architecture, town planning, and design is examined in Chapter Four. Chapter Five is an overview of new urbanism and the criticism it has generated in the past decade. The final part of the paper contains recommendations, based on the preceding analysis, for using the best of what new urbanism has to contribute to contemporary suburbia and to modern-day planners.

In this study, the terms "neotraditionalism" and "new urbanism" will be used interchangeably. "Neotraditional developments" will refer to the TND, the TOD, or to any neighborhood design that contains the elements that are advocated by new urbanists.

Chapter Two Trouble in Paradise

The low-density, automobile-dependent nature of today's suburbs have created many problems for the average resident, as well as for society in general. This chapter will first look at the historical factors that have led to the sprawl found in so much of the country's metropolitan areas. The current conditions of living, working, and driving in suburbia will be discussed, as well as the problems they have produced. The land use patterns of suburbs and the effect that they have on transportation will also be examined.

2.1 The Growth of the Suburbs

The post-World War II suburb is the product of many forces: the pent-up demand for housing caused by returning veterans, the standardization of housing construction, the drive to make houses in the suburbs more affordable, the American desire to own a single-family detached house, the Federal-Aid Highway Act of 1956, and the "cult of the car" that pervades American culture and everyday life (Jackson 1985). These factors have resulted in our present-day problems of traffic congestion, over-reliance on the automobile, and low-density sprawl in suburbs.

New urbanism looks back to the heydays of Alexandria, Virginia, colonial Williamsburg, and Annapolis, Maryland as the models for mixed-use, compact development. The houses in these places are in rows that are close to the

street. This density, say the new urbanists, is what America was like until low-density sprawl became the dominant land use pattern. However, they are not exactly correct in this nostalgic vision. Urban residents in colonial times actually lived as Americans do now, in single-family detached homes, surrounded by land. There were several reasons for doing this. First, spacing houses away from each other created more comfortable living conditions in the hot, humid summers here, and reduced the danger of fire. Second, land was cheap, and ordinary people could afford to own property, unlike their counterparts in England. Third, the uncertainty of food supplies from the surrounding countryside made having a vegetable garden and orchard a necessity. Fourth, the rise of Williamsburg and Philadelphia occurred at roughly the same time as the "cult of the home" in British culture, when the preference was for owning individual homes (Rybczynski 1995a). Fifth, American cities, unlike their European cousins, had no walls, blurring the edges between what was and was not a city. The spread-out towns of the new world were not simply "functional products," but were the way people *wanted* to live. "Spaciousness in the towns of the New World became a habit almost immediately" (Rybczynski 1995a).

Suburban life in America was created when streetcar lines were extended beyond city borders. Speculators began to buy and develop land beyond the city center and build single-family, detached houses. With public transit, people could live farther from where they worked. They could also afford to buy homes in a clean, uncrowded location that became a haven away from the noise and

dirt of the city. To be a success in America meant moving to a more middle-class community, an attitude that continues even today. Most people with a family try to avoid raising children in a small apartment or house (Davison 1995). Single-family detached housing soon became the “American dream,” one that, with the advent of cheaper building methods and mortgage finance programs, almost anyone who worked hard could achieve (Jackson 1985; Scully 1994). The federal government has continued to subsidize this way of life with deductions of mortgage interest from federal income taxes for owners of single-family homes (Pucher 1994).

Rapid suburban growth began early in the twentieth century and is still an issue in most parts of the country. By 1935, one out of six Americans lived in the suburbs (Rybczynski 1995a). By 1950 the national growth rate in the suburbs was ten times that of central cities. Between 1950 and 1970 suburban population doubled from thirty-six to seventy-four million people, and eighty-three percent of the nation’s total growth occurred in the suburbs (Jackson 1984). Between 1970 and 1986 American suburbs grew by seventeen percent (Cutler 1991). The 1990 Census revealed that nearly half of all Americans live in suburbs while only one-third lived in cities (Civilizing suburbs 1994). Suburbia now appears to be the norm.

The passage of the Highway Act of 1956 created 41,000 miles of roads, both through and around cities, and set the course for cars to be more heavily subsidized than public transportation (Rybczynski 1995a). The expressway

system that made suburbs easily accessible to the city also destroyed large parts of city centers, facilitating middle-class flight to the suburbs (Pucher 1994). The farther people could drive from their suburban home to their job, the farther out the next ring of suburbs would be. This has led to long drives from home to work, and now, from home to other destinations.

Cars have changed the pattern of land use and density in America. While America has the highest per capita rate of car ownership, it also has the most extensive suburbanization at low-density levels (Clark 1994). The compact cities of the eighteenth and nineteenth centuries have become the twentieth century's suburban sprawl, characterized by low-density, single-use development. The opening of the first Levittown showed the building industry that housing could be standardized, and soon subdivisions were also standardized. Developments began spreading out from central cities, and show no sign of stopping. In the past two decades, for example, the population of Chicago metropolitan area has increased by four percent while its size increased by forty-six percent (Fisher 1993). From 1950 to 1960 the population of the city remained flat, while the outside ring of suburbs grew by 101 percent. During the 1960s and 1970s the city's population declined while the suburban area continued to grow by at least one-quarter (Rothblatt and Garr 1986). The population in 1992 was 2,768,483 or almost eight percent less than in 1980 (U.S. Bureau of the Census 1994). The suburban population is now the second largest in the country, at 4,537,400 (1995 survey... 1995).

2.2 Changing Families

New urbanists point to the new family structures of today, and the decline of families with what Peter Calthorpe calls "Ozzie and Harriet's lifestyle" (Leccese 1990). According to 1987 Census statistics, only seven percent of American households fit the mold of a working father, stay-at-home mother, and children (Ritzdorf 1993). But fifty-nine percent of couples have a husband and wife that both work at least part time (Leroux and Grossman 1995c). The assumption that the breadwinner leaves in the morning and returns at night from a job in the city is no longer valid. The effects of this new family structure are the lengthening of the morning and evening commuting times and the increased need for every adult in a family owning a car.

2.3 The Car is King

America has the highest rate of car ownership in the world, at 76.5 cars per one hundred people (Downs 1992). This rate has increased by eighteen percent since 1980 (Young 1995). In the past fifteen years, the number of automobiles in America has increased by roughly forty-two percent. The number of licensed drivers increased twenty-nine percent while the general population increased by only sixteen percent (Clark 1994). From 1980 to 1990 the number of kilometers of private car use per person increased twenty-six percent, from 14,598 to 17,002 (Young 1995). Traffic congestion is estimated to quadruple within the next twenty years (Atash 1993). High automobile use has made using

public transit in the suburbs a non-issue to most car-owners: they would never dream of using it for even the shortest of trips. The assumption in the suburbs is that a resident will drive from place to place, an assumption that makes owning a car not just a ritual of status but a necessity as well (Rybczynski 1995).

Using a car to run errands that used to be run on foot contributes to traffic problems. The average miles a private vehicle travels for home to shopping trips in 1990 increased by eighty-eight percent since 1969, to 1,700 vehicle miles traveled (VMT) (Edmondson 1994). For social, recreation, and other family or personal business, the number of VMT jumps to seven thousand. The average private vehicle in 1990 traveled 15,100 vehicle miles, a change of twenty-two percent from 1969 (Clark 1994).

Sixty percent of office jobs are now located in the suburbs, up from twenty-five percent in 1970, according to the 1990 Census (Clark 1994). The percentage of workers traveling alone rose from sixty-four percent in 1980 to seventy-three percent in 1990, a gain of twenty-two million commuters (Clark 1994). The proportion of workers who use mass transit fell from 6.4 percent in 1980 to 5.3 percent in 1990 (Edmondson 1994). Total public transportation ridership rose by two percent between 1980 and 1990 but fell by four percent from 1990 to 1993 (Pucher and Kurth 1995). Public transit makes up only three percent of the total trips taken in America, as opposed to the eighty-four percent of trips taken by car (Young 1995). Even though the number of miles traveled by the average home-to-work commuter have increased by just sixteen percent

from 1969 to 1990, planners seem to be concentrating all of their efforts on slowing or reducing this growth rather than the growth of shopping or other non-work trips (Edmondson 1994). The home-to-work trip is the trip of most concern to planners because commuters are the population that most likely have a choice of transportation modes for their trips, such as mass transit, carpooling, or vanpools.

2.4 Investments in Transportation

Rapid suburbanization has led to more dispersed travel patterns that make public transportation less attractive and more expensive for transit authorities to build (Pucher and Kurth 1995). Federal aid for mass transit fell by fifty percent from 1981 to 1991 while highway spending doubled (Clark 1994). Some studies suggest that total government subsidies for automobiles may range from \$400 billion to \$900 billion per year (Young 1995). But the ubiquity of the automobile in America has not come without a price. The external costs of automobiles in the United States are more than \$300 billion per year, or roughly \$2,500 per car (Pucher 1994). The social costs of auto dependency are also high. They are derived from "negative externalities" that occur when car owners impose higher costs on society at large than they themselves bear. The externalities of automobiles are environmental (air and noise pollution), human (accidents), and economic (traffic congestion) (Jones and Short 1994).

Unfortunately, while other countries are redoubling their efforts at attracting transit riders the United States seems to be growing more anti-transit.

The Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 allows state and local governments to use federal money for alternative modes of transportation. Bicycle paths, walking trails, and rail projects are all eligible for funding under ISTEA. However, one study found that only one percent of eligible funds were going to non-highway projects (Clark 1994). ISTEA provides \$151 billion over six years, \$119 billion for surface transportation and \$32 billion for transit (Wade 1995). But as authorized levels have risen appropriated levels have fallen: federal caps have prevented full release of the funds.

In November of 1995, President Clinton signed a transportation bill for \$13 billion. The bill reduces total transportation funding and shifts spending away from mass transit and Amtrak to highway and airport projects. Subsidies for mass transit were cut by thirty percent, while Amtrak funding was cut by twenty-four percent. The bill also bans any changing of the standards for fuel economy. This prohibits the U.S. Department of Transportation from developing standards for light trucks, vans, and sport/utility vehicles. Clearly, American policy is moving even further towards subsidizing automobile use and discouraging mass transit (Transportation 1996).

Americans also choose to use their cars so frequently because gasoline prices in the United States have remained cheap enough to support high auto use. For example, the price of gas was twenty percent lower in 1990 than in

1980 in San Francisco, adjusted for inflation (Edmundson 1994). This, along with the love affair that Americans have with their cars, has reinforced the auto as the mode of choice for five decades of American life. The car is part of the American heritage of mobility and individualism: automobiles equal empowerment. Other countries also have high car-ownership rates, but the affordability of owning and operating a car allows Americans to indulge unlike their European and Canadian counterparts. Freedom is cherished, and the car gives people the opportunity for spontaneity and privacy (Clark 1994). The car culture that has developed during the twentieth century will not disappear overnight.

2.5 Impacts on Suburban Land Use

Suburbanites want a single-family house located outside the city and are willing to drive great distances to have it. This has been perhaps the most important factor behind the need for a car in suburbia. Suburban land use patterns, unlike urban areas, encourage a separation of uses. Retail areas may be located too far away to walk to, or may be connected only by arterials and highways; they also require a sea of parking next to each building. Suburban residents have to drive to get to shops, recreational areas and other services, very different from a typical urban neighborhood where homes, retail, and public transit are all within an easy walk.

A typical suburban development has wide streets and lawns that also contribute to low-density sprawl, what new urbanists call “cancerous growth rather than healthy growth” (Duany and Plater-Zyberk 1992). Zoning and political preferences encourage low-density sprawl through the requirement of large lots, often one-half to one acre or more, and front and side setbacks. Many suburbs require these as a way of keeping the “rural character” of an area, and to ensure privacy. These requirements are often a not-so-subtle way of keeping out those people who cannot afford to buy large amounts of land. New urbanists, seen as “irate sprawl busters,” want to raise density levels of new suburbs to between twelve and fifteen units per acre, and eliminate large lot zoning (Leccese 1990). Sprawl is the result of traditional zoning practices and is an obstacle to more compact development (Bookout 1992c).

A major problem with contemporary suburban developments is the reliance on a hierarchical network of roads that are not connected. Although the people who live in these developments feel that the restricted access makes it safer, the developments “turn their backs on the community” (Bosselman and others 1990). Suburbs that follow a grid pattern, much like that of urban areas, have many ways of connecting to major arterials outside the development. This spreads traffic more evenly throughout the developments’ entrances and exits, and ties the development into the larger community. Streets laid out on a grid pattern also lessen the confusion that is created by a new community’s

curvilinear road system, where streets often end up in the same place where they begin.

Land-use patterns in contemporary suburbs discourage walking. Streets are not connected because different land uses are segregated and far apart. There are often no sidewalks, creating little or no access by foot or public transportation to daily needs (Southworth 1995). These separated pockets of uses make the option of walking to the store or to a job impossible in many suburbs. As distances increase between residences and needed services, walking becomes undesirable. The lack of sidewalks in most suburban developments makes walking unsafe, unpleasant and inefficient. Residents choose instead to take their cars, adding to traffic problems. With most residents driving everywhere in cars, face-to-face contact in conventional suburban developments is reduced. Most suburban streets are neither safe nor comfortable places for people to be. As a result, social life has turned inwards in America, towards the home and away from public life.

2.6 Summary

New urbanists claim that the problems created by traditional suburban design have led to a way of living that is a long way from the small-town lives of the nineteenth-century Americans. They want to restore the humanity to life in the suburbs by increasing the opportunities for meetings among residents. They will achieve this goal through reducing the use of automobiles, increasing the

use of public transportation, and designing neotraditional developments that create community instead of automobile-centered subdivisions. Is it too late for suburbanites to change their car-dependent ways? Or is there still hope that neotraditional development can affect traffic congestion and auto use? Perhaps the transportation alternatives that new urbanists promote may not be as effective as they are said to be.

Chapter Three Transportation Alternatives

Automobiles liberated Americans from the collectivist tyranny of mass transit, of being dominated by fixed schedules...the private automobile made each individual king of the road. (Vandersteel and others 1995)

New urbanists say that traditional neighborhood development (TND) will reduce auto use within a development *and* generated by a development, as compared to a contemporary subdivision. They also say that these developments will promote walking and biking while increasing the use of public transportation. Auto use, as measured by looking at the number of auto trips and/or VMT and vehicle hours traveled (VHT), will also be reduced. Traffic congestion will also be diminished by an interconnecting network of streets and by the reduction of vehicular trips and VMT that result from high-density, mixed-use pedestrian-oriented development (Lennertz 1991; Duany and Plater-Zyberk 1992; Duany and Plater-Zyberk 1995). The rising costs of public transit and the lack of success that transportation planners have had in getting people out of their cars point to changes in land use and density patterns as a way of easing gridlock (Crane 1996). However, before these changes become further entrenched in policy documents, a closer look at the fact and fiction of the TNDs effect on traffic is needed. This chapter will discuss the transportation-related features of TNDs and TODs and if the goal of the reduction of the auto use and dependency by TNDs and TODs is achievable.

3.1 TNDs and TODs

The basic unit of the TND is the neighborhood, ranging in size from forty to two hundred acres; groups of neighborhoods are arranged into “villages” or “towns” (Bressi 1994). Shops, services, and civic buildings such as the town hall, churches, and theaters are located in a “town center” that serves as the focal point of the development. The town center is no more than a five-minute walk, or roughly one-quarter of a mile, from all residences. This is the maximum distance that new urbanists say the average resident will walk from their homes. The half-mile wide “village scale” of neotraditional developments encourages walking and the reduction of auto use by accommodating a higher percentage of trips within the neighborhood itself (Lerner-Lam and others 1992). This scale, originally part of the “neighborhood unit” approach to planning of the 1920s, also encourages residents to interact with each other, drawing them out onto the street (Crane 1996). TNDs that are built or under construction include Seaside; Kentlands in Gaithersburg, Maryland; Charleston Place, in Boca Raton, Florida; Cornell, near Toronto; Haymount, near Fredricksberg, Virginia; and Belmont and South Riding in Loudon County, Virginia.

TODs, also known as “pedestrian pockets,” are mini-towns that are built around transit stops served by light and heavy rail and buses that connect a TOD to other parts of a metropolitan area. The TOD may contain residences, shops, and office buildings, and a town center built into an attractive, pedestrian-scale development. The densities of TODs must be higher than that of

traditional subdivisions, about twelve units per acre, to provide the ridership necessary to support transit (Leccese 1990). The TOD may include large-scale office development but, unlike TNDs they are not intended to be economically self-sufficient (Audirac and Shermeyen 1994). Their primary function is to link an alternative transportation mode to a larger region and to make it easily accessible to residents (Crane 1996). TODs also assume that residents will have needs and interests beyond their neighborhood (Handy 1991). Laguna West, located twenty miles south of Sacramento, and The Crossings in Mountainview, California are two examples of TODs.

3.2 Characteristics

Density. Neotraditional neighborhood developments rely on residential densities that are much higher (at least eight units per acre) than typical suburban densities (one to four units per acre). The density must be high to support both the businesses located within the development and public transportation. Unlike most conventional subdivisions there is no minimum building setback: lots are only one hundred feet deep and multiples of sixteen feet wide (Post 1994). By raising density levels of new suburbs, less land will be used and sprawl will be reduced.

Land use. Although the mixing of land uses enables residents to accomplish more with each local trip, historically, it is argued that residential areas should be protected from incompatible uses such as retail (Bookout 1992d). New

urbanists argue that the mixing of land uses creates the opportunity for bringing “the human scale” to commercial and residential activities, and creates activity both day and night (Duany and Plater-Zyberk 1995). Mixing land uses also provides rental units above stores and garage apartments behind single-family houses, promoting affordable housing within the TND and mixing economic classes (Crane 1996).

Circulation. Much has been made of the new urbanists’ return to the use of the interconnected grid pattern of roads in TNDs, as opposed to the more common curvilinear and hierarchical road system used in modern subdivisions. New urbanists deride this practice because it creates traffic bottlenecks at the one or two points of access to main collector roads outside the subdivision. However, they also add that the layout for streets need not be in a grid but must be laid out in a well-connected pattern. This facilitates alternative auto and pedestrian routes to as many destinations as possible, spreading out the traffic from a development. Traffic engineers argue that drivers will go faster in such a layout (Lerner-Lam and others 1992). New urbanists counter that other traffic “calming” techniques should also be employed, such as narrower streets that are no larger than necessary for emergency vehicles, or no more than forty feet of pavement. This will slow down traffic and give the neighborhood a more human scale (Duany and Plater-Zyberk 1995). However, to get approval for narrow streets and intersections, some TND developers have had to make the streets private and pass the cost of maintaining them on to homeowners (Langdon 1995).

Street hierarchy, from arterial to collector to local street, is non-existent in TNDs (Kulash and others 1990). Traffic signals are no greater than sixty seconds long, to be more “pedestrian-friendly” and to encourage mid-block crossing. Traffic signals found on most arterials normally have cycle lengths of from 120 to 180 seconds (Kulash and others 1990).

Parking. On-street parking, usually discouraged in contemporary subdivisions, acts as a buffer between pedestrians on the sidewalk and cars moving in the street while providing parking for guests. Parked cars also cause drivers to go more slowly. Regularly spaced trees placed close to the street function in the same way, providing visual interest to the driver as well as shade and a canopy for the streetscape. Curb radii, typically designed to let cars take turns at dangerously high speeds, are shorter in TNDs to provide pedestrians with shorter crossing distances. Critics say that cars parked along straight streets give a motorist less reaction time to brake for pedestrians who cross mid-street. A curved local road with little on-street parking is perceived to be the safest option, especially for children (Bookout 1992e). “On-street parking has been shown to contribute to mid-block traffic accidents” (Kulash and others 1990). Parking for the retail centers is located behind stores.

Alleys. Alleys lead to garages behind homes so that garage doors will not be the dominant feature of a neighborhood as seen from the street and sidewalk. They also facilitate on-street parking and narrower house lots (Lerner-Lam and others 1992). Putting the garage behind the buildings is “philosophically

correct," according to Peter Calthorpe, because it will make the car less convenient and foot or transit more convenient (Leccese 1990). But it will also make it less agreeable in the winter when alleys have not yet been plowed and the car is stuck in the garage. Some homeowners may feel that this urban feature gives too much access to the back of their property, and will mean less privacy (Bookout 1992e).

Life on the street. Sidewalks, an amenity that may be absent from most subdivisions, are five feet wide in TNDs, not the usual four. Porches are the most visible feature of a house and, with no minimum front setback required, are close to the activity on the sidewalk. Taken together, these elements combine to create a street that contains cars and parking but does not sacrifice the comfort of the pedestrians who use it and the people who live on it. The street "becomes the social glue" of the community, and life is brought back outside as it was in the small towns of nineteenth century America (Leccese 1990).

3.3 New Urbanist Strategies for the Reduction of Auto Use and Dependency

Walking trips. Walking becomes a more attractive option when other uses are reachable and the distance from a person's home is decreased. Communities with "traditional" streets do generate more trips by foot than do cul-de-sac communities (Handy 1992). High densities and mixed uses can make a

difference in the frequency of pedestrian trips, and it is these new urbanist components that may be the most beneficial to reducing VMT and VHT.

Mixed use and high density. Transit ridership is positively related to the density of residential and employment sites near stops. Doubling densities in urban areas results in a reduction of both the number of cars owned and the VMT per household (Crane 1996). Changes in the degree of pedestrian access seem to have no effect on either. If land use and density patterns are appropriate, more people may consider walking or biking. Urban neighborhoods that are located near transit stations and have roads that are primarily on a grid pattern generate fewer non-work trips by car (almost two-third vehicle hours traveled) and lower rates of solo commuting than neighborhoods designed for automobile circulation (Cervero 1995; Cervero and Gorham 1995). It is noteworthy that the occasional TOD or TND surrounded by automobile-oriented neighborhoods appears to have a negligible effect on commuting by transit (Cervero and Gorham 1995).

Although it seems simplistic, the closer people live to a transit stop the more likely they are to take it. In Washington, DC a study found that sixty percent of people who lived within one thousand feet of a transit stop, and also worked near one, took public transportation. In San Francisco one percent of people who do not live within walking distance of a transit stop use it, while forty percent of residents who live near a station *do* use it (Calthorpe and Isley 1990).

New technology. The goals of the new urbanists are to reduce auto use as measured by the number of trips generated, VMT and VHT, and to increase the

use of other modes of transportation, such as walking, bicycling, and public transit. These goals may be attainable due to technology that was not available until recently. More people are working out of their homes and telecommuting: 7.6 million Americans telecommute, a number that is expected to grow to 25 million by the year 2000 (Greengard 1995). Telecommuting would not only reduce the number of cars in traffic but would also protect the environment by conserving resources. It is estimated that telecommuting saved 178 million gallons of gasoline in 1992, worth \$203 million (Clark 1994). Technology has already created telecommuting centers in New Hampshire and Colorado, and new self-contained urban villages may spring up in the near future (Cervero 1995).

Conventional zoning practices may not allow residents to work at home. Some workers may telecommute for only part of the day and work at an office for the other part. Also, workers often must drive to their telecommuting centers. This may detract from the traffic reduction benefits of telecommuting (Handy and Mokhtarian 1995). However, the main obstacle to this option appears to be more social than technological. Many workers do not want to give up the interaction they have with fellow employees (Bae 1993).

Extracurricular activities. New urbanists claim that today's parents have become chauffeurs to their children, driving them from activity to activity, while children of an earlier time would walk or take their bicycle to any after-school sport or class. Children now have the opportunity to learn more and be more social because

the automobile has made more activities reachable. Parents have the choice of letting their children participate in extracurricular activities that may not have been available forty years ago (Bookout 1992e). But the distances between these activities and a residence are often so great that a parent may spend a large part of his or her free time in a car, driving children to places that are otherwise inaccessible.

3.4 Critics' Views

Transit issues. While the reduction of automobile dependence and the increase in use of other modes of transportation are admirable goals, critics argue that there are many forces at work against the attainment of these goals. The federal government has historically subsidized automobile use at the expense of mass transit, and it now appears that Uncle Sam is getting out of the game entirely. Taxes, fees, and user charges account for only sixty percent of government expenditures for roads, with the rest being subsidized through general revenues. Transit supporters argue that these costs must be made tangible to drivers through gasoline taxes and registration fees at both state and federal levels if drivers are to be motivated into finding other alternative modes of transportation (Clark 1994).

As a result of U.S. policy, Americans have never taken to mass transit as their European counterparts have. Americans will probably never give up their cars. Cars are everywhere because they are popular, and they are popular

because they give people a better quality of life (Zygmunt 1993). People do not choose to use mass transit for either work or other trips when a car is available. In Miami, a new twenty-one mile rail system has been operating with only fifteen percent of the predicted ridership (Beardsley 1993). In Portland, a city known for its transportation planning, transit use on its' light rail corridor declined from eleven percent in 1980 to eight and a half percent in 1990. Between 1986 and 1992 Portland's traffic congestion increased by seventy-three percent because the road system could not handle suburb-to-suburb traffic (Zucker 1996). Public transit does not offer competitive service in the areas that are most important to American drivers: scheduling and convenience. In Los Angeles County, for example, the mean travel time for solo drivers is twenty-one minutes, carpoolers twenty-seven minutes, and bus passengers forty-two minutes (Bae 1993). While some people may take public transit because it is the "right thing to do," most people will not be persuaded to take transit by even the most dire predictions about pollution and the environment (Van Vugt and others 1995). "Forget altruism: Americans value time, material comfort, and individual freedom [and] transit fails to address such values ..." (Beardsley 1993). With no real cost advantage in taking public transportation over taking a car most people will continue to drive.

Transit planners assume that most commuters go straight from home to work, then straight back home in the afternoon. This pattern is no longer true in the suburbs. For example, in Los Angeles, roughly thirty percent of commuters

stop on their way home to run errands or to pick up a child, many of them women (Edmondson 1994). Women also may not feel safe taking public transportation. Driving alone gives today's commuters the flexibility that transit does not: the chance to go when and where they want to go, and the chance to do it in private (Zygmunt 1993). Workers want the opportunity to run errands and attend to business, particularly during their lunch hour. For many people who work, a car is essential for the unpredictable demands of a job and a family (Edmondson 1994).

The retail component. Many planners think that the most difficult part of the TND plan to achieve is the integration of retail and commercial uses in the town center. In this era of chain stores and "big box" retail, few retailers will be willing to move from high-volume spaces to stores that look and function like mom-and-pop businesses for the sake of nostalgia. Once small businesses open in a TND there is intense competition from large retail stores that can price items lower, and carry a selection that a shopper expects today (Anthony and others 1994; Rybczynski 1995c). In this age of high auto use, households drive to large stores for major shopping trips. Moreover, lugging home groceries on foot will not appeal to most buyers accustomed to driving. Because of this it may be not feasible for a TND to contain stores that carry more than staples like milk and bread (Bookout 1992e).

The reliance on retail as an essential part of the town center is the "Achilles' heel" of the TND concept. Stores must be built at the same time as

residences to ensure that there is enough of a market to support them. Because the retail element is such a big part of the TND amenity package, the co-dependence of retail and housing makes it critical that both succeed. A convenience store needs two thousand customer visits a week to survive. Most TNDs have less than one thousand residences, making it likely that stores will have to be subsidized by the developer indefinitely (Pearson 1990). Most developers would be unwilling to financially support this amenity over a long period of time.

Changing behavior. Ridesharing programs have had little success, and carpooling has become increasingly unpopular. The number of workers who carpool fell from 19.7 percent in 1980 to 13.4 percent in 1990 (Clark 1994). Ridesharing and transit use may not even be an option for those commuters who participate in a “flextime” program at work, or who work at odd hours (Edmondson 1994). It is also difficult to maintain a high rate of participation in these programs. After initial interest wears off, workers go back to driving themselves (Edmondson 1994).

Commuter traffic is not likely to be affected by a TND in the area, as most residents will have jobs outside the development: only about a twenty-five percent “in-town” level of employment is the best that can be expected (Lerner-Lam and others 1992). Evidence shows that jobs and housing mutually “co-locate” to keep commuting times and costs manageable. This implies that

people who move to neotraditional developments do so to more efficiently reach jobs that are located elsewhere (Levinson and Kumar 1994).

Through transportation demand management (TDM) the volume of traffic and VMT are decreased by actions such as offering travel alternatives, providing incentives to use them, and getting enough participation in the management programs (Orski 1990). Some critics say that more transit use, ridesharing, and telecommuting are *not* needed to reduce congestion, and new automobile technology that will address emissions problems *is* needed (Bae 1993). It will, perhaps, be more difficult to change people's transportation behavior than to improve automobile design. But every full bus removes 40 cars from traffic, and every full railcar does away with 75-125 cars (Clark 1994). Surely if more people were to take public transit it would reduce the number of cars on the road.

People who live in a TND or a TOD will still use their cars when they want to visit friends or go to a restaurant outside the development (Lerner-Lam and others 1992). It is unrealistic to think that TOD-dwellers will only go to places served by transit. Cars may be needed in a TOD and a TND just as much as they are needed in a conventional subdivision.

Accessibility. Although several studies point to VMT reduction in neotraditional developments, as compared to more conventional subdivisions, these studies also assume that trip frequencies are fixed, a condition that rarely occurs in the real world. Recent studies have shown that, contrary to what the new urbanists

have claimed, the number of non-work trips generated by neotraditional developments can actually *rise* because of the increase in access of grid-like land use patterns (Audirac and Shermeyen 1994; Ewing 1995; Crane 1996). Driving distances *are* shorter, resulting in shorter trip lengths, due to more compact development and a grid-like street network: but people will also take *more* trips by car (Crane 1996). It appears that accessibility to regional activities has much more to do with trip frequency than do density or land use patterns; the benefits of accessibility are in the form of shorter auto trips and *not* in shifts to alternative modes of transportation (Ewing 1995). The overall conclusion is that the use of a grid-like pattern results in either no difference or in higher automobile use than in comparable non-grid developments (Crane 1996).

The grid pattern also encourages drivers to go faster than they would on the curving streets of conventional subdivisions. This is why developers abandoned the grid in the 1950s in favor of the cul-de-sac: to slow down local traffic and to reduce access to a neighborhood. The reintroduction of the grid has met with some resistance from traffic engineers and planners due to this safety concern.

New urbanists believe that accessibility affects all household travel behavior, from trip rates to mode choice, and studies do support this assumption (Levinson and Kumar 1994; Cervero and Gorham 1995; Handy 1995). Do land use patterns or accessibility matter in this age of almost ubiquitous auto ownership and cheap travel costs? Yes and no, according to a variety of

studies. Accessibility of residences to a mix of land uses such as shops, schools, and other homes allow for the linking of trips and result in the reduction of vehicular travel. The key to reducing the number of non-work trips is to have supporting uses near work centers, such as daycare facilities, a post office, and retail (Unterman 1991). If a workplace is located near a variety of other activities then the number of trips taken in connection with work increases. This also reduces the number and length of trips that are not connected to other trips (Ewing 1995). By concentrating different activities in centers, accessibility to activities can be maintained (Ewing and others 1993).

Critics argue that most households do not co-locate either home or work sites to minimize commuting times and costs. One study concludes that commuting distance and time are not dependent on land use patterns, and that commuting costs do not have a strong influence on commuting time. The attempt to shape land use structure will have a disappointing impact on commuting patterns, even if the jobs/housing balance is changed (Giuliano and Small 1993). A 1991 survey found that only about twenty-five percent of Americans say that closeness to work is the primary factor in selecting housing (Bookout 1992d). Consumers think that the size and cost of a house give it its value, not its proximity to a job. Also, people change jobs so often today that a family cannot afford to move every time one breadwinner has to commute to a new job. It is fair to say, without more conclusive empirical evidence, that a

change in land use may or may *not* reduce auto travel (Cervero and Gorham 1995; Crane 1996).

Although households located near urban transit stops will use transit more, critics say that these households are smaller and poorer than the households that would be located near transit in suburban developments (Ewing 1995). Also, many Americans do not want to move to suburban developments to live at density levels found in urban areas, and will not do so unless heavily subsidized by the government. Because a home is a family's greatest single investment many buyers may not want to stray too far from conventional developments. A 1989 survey showed that only thirty-four percent of homebuyers preferred the qualities of a TND to those of a conventionally planned suburb (Bookout 1992e). Residential mobility research has also shown that most homebuyers will accept high density as a tradeoff for affordability, but that it is neither permanent nor desirable (Audirac and Shermeyen 1994). A survey of homebuyers found that, although they liked the idea of community and the option to walk places, many said that they would choose a bigger house on a bigger lot that cost just as much as a small lot and minimal setback found in a TND (Post 1994).

3.5 Summary

The amount of empirical data available on the traffic implications of TNDs and TODs makes conclusions difficult to draw. Higher densities and proximity to

a transit stop may make people consider public transit more than they would in low density areas, but the evidence of the automobile's hold on American society is overwhelming. Reducing the auto-dependent ways of the average driver will be difficult, if not impossible. The freedom and opportunity that cars offer makes giving them up an option that most people will not consider. Density and land use changes may make a slight change in how often Americans use their cars, but until traffic congestion and the cost of ownership become unbearable for the average car-owner the automobile will continue to dominate the landscape.

Although TNDs may help keep households to a one- or two-car maximum, it is unrealistic to think that people's travel behavior will be changed through physical design (Lerner-Lam and others 1992). Even Andres Duany and Elizabeth Plater-Zyberk admit that "when an automobile trip is necessary to arrive at a transit stop, most potential users will simply continue driving to their destinations" (Duany and Plater-Zyberk 1994). It may also be naïve of planners and new urbanists to impose policy on people rather than to respond to their preferred life style (Walsh 1989).

Chapter Four Community-building

Social integration is important, but a new design gimmick, however pretty, will not cure our social problems. (Landers 1992)

“Community” is an elusive thing. Although people cannot define it, they know when they are experiencing it. Community may be felt on a large scale, like a town, or on a smaller scale, like a neighborhood. It seems that, whatever it is, everyone strives for a sense of it in their lives. New urbanists claim to be able to build a feeling of community in their developments through good design. This chapter will first begin with the new urbanist strategy for giving a development recognizable features. It will then examine in detail some of the societal trends and theoretical flaws that work against the new urbanists’ claims.

But how can one measure “community”? A “community of place” refers to a geographically defined place, while a “community of interest” is aspatial, such as a church group, job, or hobby club (Nasar and Julian 1995). Variables used for determining “community” are difficult to measure. Variables can be common rituals and similar language; homogeneity; identification with a shared history; identification with one’s neighborhood; membership in a community, as measured by a sense of belonging and a feeling of a common bond with other residents (Buckner 1988); social interaction, as measured by emotional and informational support networks; attachment to place, as measured by social ties; active participation in a group; and the formation of neighborhood organizations

and informal ties to neighbors (Unger and Wandersman 1985). The feeling of “we-ness” is determined by how strong these variables are in a neighborhood. The years one has lived in a neighborhood, a resident’s level of education, and the neighborhood itself seem to be strong indicators of sense of community (Buckner 1988).

The idea that a sense of identity and community can be created through architecture, town planning, and design rests on the assumption that design and scale are factors in the way people decide how, and with whom, they will socialize. This idea is not new. It was popularized in the 1920s and 1930s as “physical determinism” and fell out of favor in the planning profession by the 1960s. Planners came to believe that social objectives could not be achieved through engineering the way a physical environment was shaped (Audirac and Shermeyen 1994). New urbanists are concerned not only with the structure of places but also with how people *should* live and work within them (Bookout 1992e). They say that “a designer’s decisions will permeate the lives of residents” (Lennertz 1991). The return to this idea is met with incredulity from some critics. They say that “the urban landscape around the world is littered with the failures of social [or physical] determinism,” including the tower blocks of public housing projects (Landers 1992).

4.1 New Urbanist Strategies

Town planning and design standards. The developments use focal points at the end of straight streets to draw the eye. Bell towers, porticos, steeples, and obelisks all serve as landmarks for the driver and resident. New urbanists use these design features to create an easily recognizable place that is also pedestrian-oriented (Bookout 1992a). Buildings like the post office, the library, the hardware store, and the town hall are clustered into “outdoor rooms” for the community around a village green or town square, and serve as focal points of a development. They act as places for people to meet and strengthen relationships. These places also bring people together and anchor them to the landscape. A town center and a village green helps create a sense of place and community by giving residents the opportunity to gather. “By providing suitable civic buildings and spaces, democratic initiatives are encouraged” (Duany and Plater-Zyberk 1995). The stores in the town center invite people to browse, stop and chat, and give passers-by the sense that there are people inside as well as things to buy (Hester 1993). Residents are also better able to safeguard each other’s collective security by having defined, accessible public spaces. New urbanists want to create places that enhance the sense of community in everyday life.

By putting houses closer to the street and to each other, residents and passers-by can more easily socialize. The pedestrian scale creates an increased perception of a neighborhood and, consequently, neighborliness

(Audirac and Shermeyen 1994). Circulation is designed to accommodate pedestrians and encourage walking.

Architectural standards. Architectural styles in TNDs try to capture the look of an American small town. Row houses, picket fences, pitched roofs, shutters, and clapboard siding all recall earlier and simpler times. Architects study the vernacular architecture of the region as well to create a development that looks as if it belongs with existing development.

Walkability. Several studies show that walking trips rise in comfortable and safe areas for walking. Walking requires “safety, concentrated, mixed land uses, and a variety of activities and service within reasonable distance of home” (Unterman 1991). Walking does become a more attractive option if other uses are accessible and the distance from a person’s home is decreased. Communities with “traditional” streets do generate more trips by foot than cul-de-sac communities (Handy 1992). Better access leads to shorter trips by both foot and car, so the chance of people meeting on the street of a TND is increased over that of traditional subdivision (Crane 1996).

Third places. Communal places for meeting other people are becoming more important. These “third places,” in contrast to the primary and secondary places of home and work, satisfy the human need to be social. They places provide the opportunity for people to escape from the private and lonely worlds that technology has created in America, especially with more people working at home.

Coffeehouses, cafes, brewpubs, and bookstores all allow people to escape the restrictive spheres of job and home, and go to a casual place where they can reconnect with other people and “get away from it all.” The number of espresso bars and coffeehouses in the United States in 1989 was 2500. That number has since doubled, and is expected to quadruple by 1999. The number of microbreweries and brewpubs has tripled since 1989 (Khermouch 1995). Past generations had the grist mill, the general store, the town square, and the soda fountain to go to and “hang out” with others. Nowadays, the laundromat or health club may play that role. The fact that many communities are rejecting Wal-Marts and other big box retailers as a way of protecting the feel and scale of Main Street may be a sign that Americans are no longer willing to live in places that encourage anonymity.

4.2 Critics' Views

Social and economic mix. As discussed above, a recent study found that changes in the degree of pedestrian access or local shopping had no significant effect on the number of vehicle miles traveled per household. Also, people rarely walk when they can drive (Crane 1996). A 1989 survey found that roughly two-thirds of those looking for a house would choose a “homogenous” neighborhood over a “mixed” neighborhood with multiple uses. People buying a home are more concerned about the return on their investment than they are in the greater good of society (Bookout 1992d).

New urbanists say that most suburbs contain people from only one economic class, and that interaction with different economic groups is rare: “economic segregation is not the American way” (Duany and Plater-Zyberk 1992). Yet many people move to the suburbs out of fear of people who are different from themselves. The suburbs have historically been homogeneous, racially, largely because of whites moving out of the city as the number of non-white immigrants grows (Jackson 1985). The number of developments that are built with gates at their entrances is growing, and many existing traditional neighborhoods are attempting to cut off their grid streets with concrete barriers to keep out non-residents (Southworth 1995). There are even entry gates and security personnel at Seaside (Audirac and Shermeyen 1994). The desire of people to live near those who are more like themselves, and to exclude those who are not, remains strong in America.

Crime. Every year, about one-fourth of all households in the United States are touched by crime. The number of violent crime offenses has nearly doubled from 1972 to 1992. Nearly one-half of the population will be victimized by a violent crime within their lifetime (Miethe 1995). In 1960, fifty-eight percent of Americans said that “most people can be trusted” but in 1994 only thirty-four percent felt the same way (Putnam 1996). The fear of being victimized by crime may be so great that people will alter their behavior to decrease their exposure to risky situations. Not speaking to strangers and avoiding eye contact with passersby on the street are two such precautions. Unfortunately, these are not

compatible with the new urbanist vision of neighborhoods where “casual encounters” will build community. Although many people may want to be friendlier to strangers they may think that it is unwise to do so. Perhaps the perceived lack of safety may also explain Americans reluctance to use public spaces in which to interact. Therefore, public spaces of TNDs may not attain the goal of promoting face-to-face contact between residents.

Design and behavior. Sociologists believe that urbanization and industrialization caused the loss of community and neighborliness in cities. Communities of proximity were replaced by “communities of interest” that have nothing to do with how close one lives to his or her neighbor (Choldin 1989; Audirac and Shermeyen 1994). Socializing with friends who live in another neighborhood also appears to be increasing (Putnam 1996). Peter Calthorpe argues that mobility and privacy have displaced the town common and, as a result, public space lacks identity “and is largely anonymous.” He does acknowledge, though, that the “connection between...social issues and development is elusive and complex” (Calthorpe 1989). One study of community and physical design, for example, looked at two apartment buildings, one with a courtyard and one without a courtyard. The courtyard building was found to have more sense of community than the non-courtyard building. However, the authors were quick to point out that the courtyard itself may not have been the factor that created community: the homogeneity of the residents may have been the reason instead (Nasar and Julian 1995). People sharing the same building

or neighborhood often have many of the same demographic characteristics. If residents perceive that others are like themselves, they may be more likely to develop friendships with other residents. It appears that the link between physical surroundings and people's behavior remains unclear (Gans 1993).

Public space versus private space. Most recreational activities take place either inside a house or in its backyard. It may take a leap of faith to think that people will suddenly give up television in favor of sitting on a porch (Bookout 1992e). The idea of forcing people outside into public space for their recreation by reducing the amount of their private space may be resisted. A survey found that a minority of those polled would trade less private space for more public recreational space, and most of these households were large in size and of low income (Audirac and Shermeyen 1994). Porches, for instance, are touted by new urbanists as a way to get people to talk to each other. However, resistance to this idea has appeared. New residents to Seaside have started to request rear porches instead of front porches.

Perhaps the flaw that most undermines the new urbanists' community-building plans is the fact that neotraditional developments are *not* independent towns. "A single neighborhood standing free in the landscape is a village" is incorrect (Duany and Plater-Zyberk 1995). TNDs are governed by ad hoc homeowner's association and many are not legally allowed to incorporate themselves into actual towns (Bookout 1992e). Although the developments try to look and function like small towns, without elected governing bodies how will

they form a community? They are also situated within the existing suburban fabric, next to strip malls and fast-food chains, making their small-town design seem out of place (Southworth 1995). There is the danger that TNDs will be placed haphazardly throughout the country by developers wherever they own a piece of land, resulting in “new urbanist sprawl” (Langdon 1995).

New urbanists say that the suburb “spells the end of authentic civic life” (Duany and Plater-Zyberk 1992). But one must ask: whose definition of “authentic” is being used? Historically, American towns did not have focal points as they do in Europe. In America, there was a place for everyone. A cathedral or royal residence was not needed as a centering force to bring people together. The streets were for everyone too, rich *and* poor, but the genteel folk rode in carriages to safeguard themselves from life on the streets, much as automobiles do today. Americans also did not take to public life like Europeans, as “genteel people retreated to the private comforts and refinement of their private homes” (Rybczynski 1995a). Even Alexis de Tocqueville noted during his 1831 visit to America that cities were “a setting for individual pursuits rather than communal activities” (de Tocqueville 1956). Although new urbanists may not like it, Americans will not easily accept the theory that public values are more important than private values.

Andres Duany and Elizabeth Plater-Zyberk write that Americans are “happy with the private realm that they have won for themselves, but [are] desperately anxious about the public realm around them” (Duany and Plater-

Zyberk 1992). But there *is* a popular public realm, one where Americans go and rub elbows with each other on a regular basis: the shopping mall. New urbanists call the mall “only quasi public,” yet people do fraternize there with each other. Food courts, special events, fairs, and walking courses all draw people to their local shopping mall (Khermouch 1995). They may even enjoy the mall more than a town square because it is shielded from the elements. It is also under the watchful eye of a security force, so good behavior is maintained. The mall receives only derision from new urbanists because the space is given over almost entirely to commercial ends. Yet the traditional small-town common that they glorify is very often surrounded by retail stores (Duany and Plater-Zyberk 1992).

New urbanists say that “Americans need to be reacquainted with their small-town heritage” (Duany and Plater-Zyberk 1992). Small-town life can be charming, but it can also be tedious and petty. Will modern Americans, plunked down in the middle of a small town, act like small-town residents? Or will they continue to use their cars and ignore their neighbors, despite the setting? The proportion of people who say that they socialize with their neighbors more than once a year has fallen from seventy-two percent in 1974 to sixty percent in 1994 (Putnam 1996).

Life in America has been turning increasingly private. Computers, faxes, credit cards, portable phones, satellite communications, and other technology have all created instant closeness, eliminating the need to be in one particular

place to accomplish a task. Telecommuters do not have to leave their residences to perform their jobs. People can maintain close friendships even if they are miles apart. Even shopping can be done at home: the total sales of the QVC home shopping network rose from \$7.76 million in 1990 to \$1.39 billion just five years later. Online computer services continue to become more popular. The number of people on the Internet has grown from 1.1 million in 1992 to 30 million in 1995 (Leroux and Grossman 1995c). Subscribers to electronic bulletin boards can socialize with others of like mind, yet the forum provides both intimacy and anonymity for the user (Piirto 1993). One can perform a whole day's business without meeting another human being. Yet, as the barriers of time and space are eliminated through technology many people may feel the need to be rooted in a community more acutely than ever (Gerloff 1994). Although technology is bringing many people closer together, ironically it may also be eliminating the need for face-to-face contact.

Declining participation. The joining tradition that has long characterized American life has been reversed over the last thirty years (Leroux and Grossman 1995c). Voter turnout has declined twenty-five percent from the early 1960s to 1990. Between 1970 and 1993, daily newspaper readership fell by nearly a quarter. More people agree with the statement "the people running the country do not really care what happens to you." The percentage of Americans who say they attend church nearly every week has fallen from forty-one percent in 1972 to thirty-four percent in 1993. Parent Teacher Association (PTA) membership

fell from twelve million in 1964 to about seven million today (Putnam 1996). To be fair, membership in the PTA may be motivated more out of distrust of the school system than by the desire to be part of an organization (Pollitt 1996). But counting all kinds of group memberships, the average number of associational memberships fell by roughly a quarter over the last century. Taken together, what do these statistics mean? Social trust and civic engagement are strongly related, and if the number of people who are willing to be members of a group is falling then the same can be said of the level of trust among a society's citizens (Putnam 1996). Millions of people withdraw from the affairs of their communities every year. What has happened in the United States to cause the level of interaction with others to drop? One answer is television.

One-quarter of Americans say that they would not give up their television set for a million dollars (Montague 1993). Television viewing takes up one-third of Americans' free time during the week, and one-fourth on weekends. It consumes thirty percent of the forty-one hours of leisure time that the average American has each week, and takes up more than four times the amount of leisure time than any other single activity (Spring 1993). The number of hours of television viewed daily in the home, nationally, was seven hours and fifteen minutes in 1993-94 (Leroux and Grossman 1995c). Roughly sixty-one percent of all households with televisions also subscribe to basic cable service. On-demand television now lets viewers decide what they want to watch and when, from movies to sporting events. Although families are spending more time at

home together, they do not spend the majority of that time engaged in collective activities (Haran 1995). Americans now designate less of their time for meals than at any other time in history, choosing convenience over conversation: sales of fast food meals surpassed sale of restaurant meals for the first time in 1994, and that gap will continue to widen (Hollingsworth 1993; Leroux and Grossman 1995c). The typical scenario in many homes at night seems to be that of family members in separate rooms, each watching a different television show.

Town halls are important, but monuments and civic buildings are now more likely to cause feelings of anger and disgust than of pride. Disillusionment with institutions is not evident in new urbanist plans (Tate 1992). In contemporary suburbia, neighbors are more likely to meet in a video rental store or a convenience store than at their town hall. One wonders if these stores will be integrated into the town center or if they are not "traditional" enough for a new urbanist development (Rybczynski 1995c). The act of participation is also an important step in building a community, as "participation is the life of democracy" (Leroux and Grossman 1995c). Will the residents of a TND have the opportunity to come together and make decisions about their development and the way it is designed? This way of creating community may be the most important factor of all in community-building, and one that the new urbanists have no way of controlling (Hester 1993). But today, the emergence of baby-boomers as homeowners and community leaders has created a climate that resists making decisions collectively. Traditionally, this group of Americans has put their needs

before those of others, which strengthens the individualism that makes up the country's psyche (Clark 1995).

Changing definitions. New urbanists are incorrect in their use of the small town as the standard by which Americans should judge community life.

Suburbanization has been the major trend of the past fifty years, and Americans have lived in suburbs and cities for enough generations that they "have come to take metropolitan residence for granted" (Choldin 1989). One should not ask how suburbs differ from an idealized small-town life: suburbs should be considered on their own terms.

The term "new urbanism" refers to the application of land use patterns traditionally found in cities to suburban locations. Yet cities today are starting to become as privatized as suburbs. New developments are often built on a suburban-type floor plan, with large security fences surrounding a group of condominiums or townhomes that face in on each other and turn their backs to the street. Many new urban residents grew up in the suburbs and are unwilling to give up suburban amenities when they move, such as a two-car garage or a sense of security. Developers know that, to lure more suburbanites back into the cities, they will have to "present urban living to suburban eyes" in what many city folk see as "yuppization" (Leroux and Grossman 1995b). Strip malls with parking off-street are becoming more common on city blocks, replacing the small shops that made up the communication centers of a neighborhood. Suburbanites' lifestyles are different from urbanites, too: they are more auto-

dependent, and keep to themselves more than their city counterparts. Today's twenty- and thirty-year-olds are "children of the suburban and TV era," and are half as likely to join associations or vote or trust others as their grandparents (Leroux and Grossman 1995c). The amount of "urbanism" left in urban areas seems to be slowly disappearing.

Instant cohesiveness. Peter Calthorpe calls for a "new paradigm, a new image to be placed in people's minds" (Bosselman and others 1990). Yet communities take a long time to evolve and change. It took fifty years to create the monotonous sprawl of today's suburbia, and new suburbs will not "miraculously spring forth, fully formed, from weekend design charettes" (Fulton 1995). One design firm that specializes in TNDs actually creates a fictional history for the promotional material of each project, so that each would *seem* to have a past. Some buildings are even designed to look as they were historic buildings that have been converted to a new use (Eckdish Knack 1989; Bookout 1992d). This artificial nostalgia emphasizes the lengths to which new urbanists will go to in trying to sell their idea of community. New urbanism "...attempts to deal with difficult modern conditions by invoking, uncritically, a return to 'simpler' virtues" (Rybczynski 1995c). Architecturally based town plans fit people into the plan, when plans should respond to the needs and desires of suburban residents (Jacobsen 1989; Walsh 1989). But the design of many city neighborhoods is along new urbanist lines, and design has been unable to halt the economic and social problems that have led to the decline of inner cities (Fulton 1995).

It is almost impossible to recreate the past, no matter how much new urbanists would like to. Their romantic, imagined version of small-town life in New England excludes the narrowness and discrimination in favor of remembering only its neighborliness and sense of community (Rybczynski 1995c). This selective recall is a way of dismissing the real problems that are faced by modern-day residents of suburbia, like spiraling crime rates, gangs, homelessness, and racism. Although one can learn from the past, it is simplistic to think that the issues that come between diverse groups of people can be solved through urban design. New urbanists escape the issues by celebrating their vision of “publicness”, “belonging”, and “community” (Bookout 1992e; Anthony and others 1994; Gerloff 1994; Review of... 1994).

The architects of new urbanism are proud that their work “is not clouded in theory or rhetoric” (Bressi 1994). “The matrix for addressing the... principles of the New Urbanism is *design*- not policy planning- and amounts to an aesthetic position” (Moule and Polyzoides 1994). Herein lies the essential problem of new urbanists: they say that their plans will lead to the same results as public policy, but without the policy. Is this really something about which a group of professionals should boast? Without the ability to plan for what people really want, as opposed to what they *should* want, new urbanists are sweeping people out of the picture with their emphasis on design-as-behavior-modifier. New urbanism may be more of a representation of architects’ taste rather than an answer to social and economic problems (Fisher 1993).

4.3 Summary

New urbanism should not claim to solve complex social problems found in suburbs through architecture, town planning, and design. This will only lead to more criticism from the development professions and will detract from the workable aspects of the TND idea. New urbanism should concentrate on physical ideals. Social and economic ideals should be left to those trained in social problems and public policy. Community-building requires the integration of physical ideals with social and economic ideals.

Although Americans may be interacting less with other people than in the past this does not necessarily mean that “community” is dead. People may not take advantage of community events or spaces, but they want to know that they have the *option* of doing so. TNDs put a premium on community rather than on consumption, unlike conventional suburbs (Fisher 1993). This may become more important to Americans as they become increasingly free to live anywhere they want due to technological advances. The need for community may become stronger as location and convenience become less so. Also, as job security and its accompanying economic security disappear, people will need to rely more on family and friends than ever before. If this is true, then the neotraditional suburb may be better equipped to face the future than any other suburban design.

Chapter Five

Conclusion and Policy Recommendations

'Devils Advocate' Question: If TND is such a good concept, why have we had a 40 to 50 year period of land use activity (both by property developers and regulatory agencies) that was oriented in the other direction? (Kulash and others 1990)

In this study I have been concerned with the problem of the goals of new urbanism. In the preceding chapters I have proposed that two goals, decreasing auto-dependency and creating community, entail complex interrelationships that may be best dealt with through policy initiatives and not through urban design. To provide support for these propositions I endeavored to show that contemporary Americans will not easily give up the cherished physically defined suburban way of life, one that involves the increasing privatization of home, work, and recreation. To conclude the study I will first summarize the most important findings of the analysis and then present recommendations to utilize the features of new urbanism that I believe will work in modern-day suburbia.

5.1 Research Findings

This study has demonstrated that new urbanism should not be seen as the answer to all of suburbia's problems. But disparaging all of its' components is not what this study is about. The new urbanists offer a new way to build and a new "take" on a way of living that has created many problems in this country. If building suburbs must continue, then new urbanists have ideas that will help to

make them better places to live, work, and shop. The neotraditional development concept revolves on design, propinquity, and the idea that social consequences follow form (Audirac and Shermeyen 1994). But while the new urbanist model satisfies its design objectives, its transportation, economic, and community benefits are exaggerated.

The transportation changes that new urbanists predict will occur when higher density developments that contain stores and transit are built may be overstated. The automobile is entrenched in American society. There are too many existing auto-dependent suburbs covering huge amounts of land to make it easy to live without a car today. Cars are too convenient and too affordable for the majority of Americans. Those who do not own a car are advised to move to a city that already has a public transit system in place, as suburban life will not be hospitable to them. The cuts in federal subsidies for mass transit are the final blow in the slow death of public transportation in America. Unless transit stops to existing lines are built by private developers, the odds that new developments will be served by public transit seem slim. This is unfortunate for those suburban residents who do not drive, such as the elderly and the very young. There is also little evidence that, even if it was available, public transportation would be heavily used by suburbanites.

By creating more pedestrian-friendly streets, new urbanists say that community will be strengthened through face-to-face contact. While more attractive streets and amenities are excellent ideas for new development, the

reality is that most people today are either too busy or too mistrustful to really get familiar with most of their neighbors. A lively street is always important to a neighborhood, but to conclude that this activity will lead to “a strengthening of democracy” is a bit farfetched. “Community” is a complex thing, especially in our technology-driven society. Instead of using a neighborhood as a laboratory for human behavior, new urbanists should use design principles more for another reason: to make streets attractive again.

There are a few more reasons why caution should be used when applying neotraditional principles. Enmeshed within the neotraditionalists’ views about suburbs are the ways that they think people should live. But what is good for people is not necessarily what they want (Davison 1995). Duany and Plater-Zyberk see modern suburbs as “in need of civilizing” (Krieger and Lennertz 1991). This condescension towards suburbanites will not win people over to new urbanism. The danger lies in the designers of subdivisions becoming too logical about how people should live today. Yes, small-town America had its charms. And yes, Europe does have more public spaces and grand boulevards than America. But contemporary Americans live neither in the nineteenth century nor in Europe. These comparisons only serve as an elitist way of pointing out that the existence of suburb-dwellers is not up to new urbanist standards.

Time is needed. Whether the TOD and the TND work will be obvious once Laguna West and other developments have been around long enough. More

projects need to be built, and existing projects need to reach build-out and studied to see whether they function as their designers intended them. The market for TNDs is not yet tested although Kentlands, a TND outside Washington, DC, appears to be profitable and “outsells its PUD [planned unit development] competition” (Winburn 1992). One study found that, contrary to the claims of developers, zoning for TND sites had no real effect on their value (Slater and Morris 1990). Unfortunately, projects must be built in phases and the charms of a TND may not be obvious until all the different components are in place, specifically the mixed-use town center.

New urbanist plans. Critics of Peter Calthorpe’s TOD or “pedestrian pocket” concept say that, although the need for cars is reduced, cars will still be present. Residents of the historic district of Alexandria, Virginia are irate about Calthorpe’s “Alexandria 2020” project. The plan calls for two new Metro stations, along with other modes of public transit, and a limit of no more than 50 percent of commuters allowed to arrive by car. Residents argue that the development, at eighteen million square feet, 691 townhouses and 5,700 apartments, will create huge traffic and pollution problems even with the car limit. Parking lot sizes are reduced and roads are narrower, but one-fifth of the development’s acreage is still devoted to roads. Nothing prevents people from driving. “I don’t believe that people will magically leave their cars tomorrow just because they live in communities clustered around transit,” admits the developer of Calthorpe’s best-known project, Laguna West (Leccese 1990).

Will it sell? There is a niche for communities designed to look like traditional towns, but how big is it? Will it consist of only those who have enough money to buy into a novelty? Will new urbanists win over the average family homebuyer from low-density houses on curvilinear streets? (Bookout 1992e) TND developers must persuade homebuyers to give up long-held ideas about suburban living. In a Dallas suburb this year a proposed twelve-acre TND drew community opposition, specifically to the high density apartment buildings and the "crime, violence and lower property values" that they would bring (Branch 1996). The developers eventually withdrew the proposal. Although this accusation may not be accurate it shows the level of mistrust and downright hostility that there is towards many of the TND components. Many people do not want to vary from the low-density, single-family detached housing that characterizes suburbia (Audirac and Shermeyen 1994; Post 1994).

5.2 Policy Recommendations For Making It Work

To deal with the problems of traffic congestion and auto-dependency, as well as the lack of a sense of community in suburbia, planners should consider the following recommendations:

Regional cooperation. *More regional planning is needed.* There must be bodies that have real power over highway and transit planning, land use, densities, and development rate (Clark 1994). Establishment of an urban growth boundary, such as the one that Portland has established, will help conserve land.

Unorthodox measures will be needed as more and more land continues to be developed in America at an astonishing rate. Failure to ground new urbanist principles in a regional approach could also “result in thousands of attractive Charleston, Nantucket, and Seaside look-alikes springing up across the landscape...” (Langdon 1995). TODs in particular must be linked to other areas that provide services that are not available locally (Handy 1991). Regional planning seems to be a weakness in many parts of the country, in part due skepticism about the government and the increase of more private-sector planning projects (Clark 1995). This must be overcome if TNDs and TODs are to make an impact on regional problems like traffic congestion.

Multimodal transportation policies. *Increase use of public transportation in the U.S. by looking at strategies used by other countries, such as Canada.* In 1990, Canada had 104 transit trips per capita compared to 38 trips per capita in the United States (Pucher 1994). Between 1970 and 1990, Canada’s public transit systems recovered the passenger loss of the previous two decades. They even increased ridership levels above that of 1950, or 1.4 to 1.5 billion passenger trips, unlike the United States (Pucher 1994). This was in spite of the fact that fares were increased by six percent more in Canada than in the U.S. between 1990 and 1992. Canada covers a much higher percentage of transit costs with passenger fares than does the U.S., which explains why the U.S. has roughly twice the operating subsidy per passenger trip as Canada (Pucher 1994). The federal government of Canada provides virtually no aid to public transit, and is in

fact forbidden from doing so by legislation. The lack of government funding means that, although transit systems cannot rely on subsidies, cities are given more flexibility by adopting whatever transport policies will best respond to their needs (Pucher 1994). There is less bureaucratic delay and subsidies are used more effectively.

Public policy in Canada is geared towards the coordination of land use and transportation. Planned transit lines are extended into the fringes of urban areas *before* development begins to take place. This pro-active strategy ensures that new development will not be totally car-dependent. Mixed-use suburban centers are constructed to ensure that they are adequately served by transit. Suburbs are embraced as a way of relieving crowded cities in Canada. However, suburbs are also more compact than they are in the U.S., with densities roughly three times higher in Canada (Pucher 1994). Regional planning is also much more cohesive than in the U.S. Cities conform to provincial land-use and zoning rules rather than their individual codes.

Build more transit stations near suburban workplaces. New urbanists say that transit will be more viable in ten to fifteen years: but will it (Leccese 1990)?

Although one hopes that public transportation will be expanded the latest federal cuts to point in the other direction. American policy makers and elected officials should make a full commitment to public transportation. Although it would probably be political suicide, the benefits would be enormous. Expanding service and quality will take time and a great deal of money, but ridership

increases can be achieved. Many European countries have seen ridership increase due to a redoubling of efforts by their governments to provide inter-regional service that is convenient and cost-effective (Pucher and Kurth 1995). Public transport can be viable if a clear direction is determined and followed. Using strategies to improve the service, cost, and comfort of public transportation would change the perception of transit as being either inconvenient or beneath a person's status.

Encourage the designation of bicycle lanes on local roads and arterials to give commuters another transportation choice. Many commuters would ride their bicycles to work instead of driving alone. The number of Californians who said that they would be willing to bike to work was twenty-five percent in 1993 (Clark 1994). Many would bike if they had a route that was safe; but most main arterials in the U.S. are made for cars only. Bicycles and pedestrians must share the road at their own risk. Bicycle lanes do have the potential to reduce the number of cars on the road during rush hours. In Denmark, for example, thirty-three percent of people cycle to work. Some American cities *are* changing: Seattle currently has 140 miles of bike paths and trails along main roads. Ten percent of commuters in Madison, Wisconsin bike to work year-round (Clark 1994). Transportation departments should design (or re-design) bicycle lanes into main arterials wherever possible. Employers could also offer on-site bicycle repair facilities and back-up rides for cyclists to make cycling more attractive to solo drivers.

Establish comprehensive ridesharing programs. Corporate America has the money and power to create flexible programs that will reduce the number of solo commuting trips. A company can use financial incentives, such as subsidies and free parking for ridesharers only, to sweeten the pot. Guaranteed rides for workers whose rideshare partners are absent or must leave early will alleviate fears of being stranded. There is a great potential for ridesharing among co-workers, or workers who commute to the same area, to decrease the number of solo drivers nationwide (Smith and Barnes 1994). Ridesharing is also more common in workplaces that have mixed land uses and limited parking (Atash 1993).

Businesses should offer cash incentives for leaving cars at home. To get workers out of their cars businesses should stop offering free or subsidized parking. When Canada began charging federal workers seventy percent of the local parking rate in 1975 use of public transit rose by sixteen percent, while the number of solo commuters fell twenty-one percent.

Offer less parking for commuters and shoppers. Both Canadian cities and suburbs offer much less parking than their American counterparts. In 1980, Toronto had 198 parking places per one thousand workers, which was roughly half of the average number of spaces found in the top ten American cities. Parking is even restricted in suburban areas. One of Toronto's suburban centers has a ratio of 0.3 parking spaces per one thousand square feet of office

space, as compared to 4 spaces per one thousand square feet in most American suburban office developments.

Raise gasoline taxes to a level that will make it more expensive to drive a car than to take other forms of transportation. Gasoline taxes in Canada are higher than in the U.S., more than twice as high. This may account for the higher number of kilometers traveled per capita in the U.S.: 9,787 kilometers in 1990 as compared to Canada's 8,230 kilometers (Pucher 1994).

Do not pursue "congestion" pricing as public policy. The practice of penalizing drivers through tolls or other fees on heavily used roads only pushes commuters onto other routes and creates new gridlock (Clark 1994). Public education about the social costs of vehicle-dependency can help gain acceptance of other policies that increase the cost of operating a private vehicle (Jones and Short 1994). "Earmarking" part of the revenue generated for resolving problems may make the public more amenable to paying more for the privilege of driving.

Decreasing tax incentives for housing. Although Americans may never totally give up low-density living, decreasing tax incentives for housing would make most think twice about living in the suburbs. It would also increase the amount of revenue generated by the federal government. Neither mortgage payments nor local property taxes are deductible from federal income taxes in Canada, as opposed to the United States. There is much less incentive in Canada for people to buy a single-family home in a low-density area, and the compactness of urban areas also makes it easier to extend transit lines in Canada. Although

Americans may always aspire to suburbia, those who move there should be required to help pay for the problems to which they contribute.

Public policy appears to be the only way to wean Americans from the automobile habit. By reducing the policy bias towards auto use and forcing drivers to pay for the externalities of operation, America can begin to create the higher-density, transit-served suburban centers found in Canada. This would save valuable land from low-density development while giving new urbanism the chance to really put its principles to work.

Infill development. TNDs may work best within existing urban areas.

Opportunities for new urbanist developments appear to be greatest in small and large cities, or in cities where the cost of land is high enough to encourage dense development. New urbanist techniques can be used to bring life back to inner-city neighborhoods that already have densely populated, mixed-use land patterns (Langdon 1995). The creation of "urban villages" would also bring new housing stock into older neighborhoods. Planners should not focus entirely on suburban development at the expense of central cities. The benefit of urban infill would be the conservation of land in outlying areas while revitalizing urban areas.

Another opportunity for infill is in pre-existing, underutilized shopping centers with large parking lots in suburban areas. By bringing in housing and community space, the unsightliness of many older shopping centers can be vastly improved while increasing the value of the site (Langdon 1995; Lockwood

1995). Linkages between existing retail and residential areas are also created in the process. Addison Circle, an infill project under construction in suburban Dallas, will have a high-density residential neighborhood within walking distance of a transit stop, entertainment, retail uses, community services, and office space. Landscaping and public spaces join the uses, creating a pedestrian-friendly atmosphere. The area where the project is being built used to be a typical "edge city," with uncontrolled sprawl and no real town center (Gosling 1996). New urbanism can help in the fight against sprawl in situations like this, but it can also add to sprawl if TNDs are not integrated into existing land use patterns. It is better to use what already exists than to create new towns (Handy 1991; Anthony and others 1994). Strategies like cluster development, greenways, and open space preservation will retain the rural feel of developing areas while meeting the desires of suburban residents (Jacobsen 1989).

Zoning. "Linear" zoning should be limited, with the intention of targeting freeway "strips." Zoning selected places along a highway or main thoroughfare for commercial development will create more concentrated development and minimize the chances that a strip will evolve (Fischer 1993). Locating different uses in activity centers will also link the number of trips needed and cut down on the total number of trips made by a household.

New Urbanists say that if the "codes" are changed, then the built environment will be changed; but is it as easy as that (Calavita 1994)? Ordinances and codes are complicated, and the ones that the new urbanists

propose may be even more so. Devising codes that support neotraditional town design involved a “tremendous amount of time” and regulatory detail when Loudon County, Virginia, went through the process of creating a “rural village and hamlet zoning district ordinance” in the late 1980s (Bookout 1992c). Much depends on the developer, as the co-operation needed between developer and municipality may be extraordinary due to the land use questions that are raised. For example Playa Vista, a TND in Los Angeles, took five years to be approved (Post 1994).

One problem in some of the codes that have been written is vague wording. The legalistic wording that is found in zoning codes is avoided in favor of statements such as “appropriate street widths” and “proper balance” (Fisher 1993). These statements must become more precise if a zoning officer is to easily enforce them. The assumption is that the community-at-large will know what is “appropriate” and will be able to enforce it.

Large-lot zoning and large setbacks work against the new urbanist concept. New urbanism “falls down in the implementation” because of the unwillingness of lenders, engineers, and other development professionals to change the way that subdivisions are built (Langdon 1995). Many PUD ordinances can be used or adapted to implement TNDs, with a few variances. However, ordinances already in place are difficult to change, and no public official wants to reduce established standards (Bookout 1992e). Resistance to the concept comes from homebuilders, fire marshals, transportation officials,

utilities, the postal service, and others involved in development (Winburn 1992). Questions about whether a fire engine or a garbage truck can negotiate narrower streets and curb radii need to be answered before any new codes are adopted.

The Lincoln Institute of Land Policy's publication "Alternatives to Sprawl" endorses the TND idea. It has been recommended as a model code for new and infill development in Florida (Audirac and Shermeyen 1994). Peter Calthorpe has helped the U.S. Department of Housing and Urban Development (HUD) design empowerment zones in low-income neighborhoods (Gerloff 1994; Vonier 1994). The Institute of Transportation Engineers' 1995 "Green Book" for street standards has been written to include neotraditional street guidelines (Post 1994). But these guidelines should be used on a case-by-case basis, adopting only those codes that make sense to a community's users and public officials. What works at Seaside may not work in suburban Phoenix.

Community-building strategies. To improve the sense of community in contemporary suburbia, planners should concentrate on creating pedestrian activity in specific, centrally located spots. Neotraditional components like a town center or green, and grouped civic buildings can become focal points for a suburb. Design changes, such as making sidewalks on main thoroughfares wide enough to accommodate trees, lighting, benches and other street furniture will produce an attractive atmosphere for shoppers and residents. Special events that involve local businesses and community groups can also be planned.

Planners can help build a sense of community by designating “districts” based on land use, neighborhood, or historical significance. By promoting each district through signs and banners, residents and business-owners will have a common link to each other. Neighborhood clean-ups, block parties, and other special events can bring residents together and give them the opportunity to meet people whom they may not have otherwise met. Design changes alone will not improve community: people must become involved as well.

5.4 Enough is Enough

New urbanists are wrong to call their movement a “revolution.” It is either the natural evolution of suburban form or it is retrograde. Andres Duany has said that planners “are the cause of our urban and suburban ills.” This is an odd thing to say about a group of people who stand between the TND concept and actual implementation. By dismissing planners as “bureaucrats” new urbanists seem to forget that the process of building a subdivision rests on bureaucracy. Bureaucrats get things done. If new urbanists tone down their “missionary fervor” and stop their attacks on the construction industry, traffic engineers, and the planning profession perhaps there would be more acceptance of ideas that can contribute to an expansion of choices in suburban areas. Until more empirical research is done about its benefits the development professions will continue to question new urbanism.

Suburbs need to be rethought to slow down the environmental and social erosion that they cause. Suburban housing requires specific elements: close contact with nature, a freedom of living not offered in cities. To try to increase densities while still offering the elements that people look for in suburban living seems to be a more pressing issue than designing whole new villages. What is now needed from architects is a new approach to suburban housing, not more suburban design (Davey 1993). The development industry will balk at new ideas, but they are less likely to do so about individual houses than about whole mixed-use "towns."

What is essential now is a middle ground between PUDs and TNDs, one that takes the best of both models to meet the needs of contemporary lives. This "contextual town planning" would consider the individual elements of a site: environmental, regional, cultural, and historical (Bookout 1992e). Most importantly, the needs and lifestyles of those who will live in the developments and the way that they will use it must be taken into account (Jacobson 1989). Instead of following a predetermined formula, architects and planners should consider the land and the future residents (Bookout 1992e). For example, homebuyers should not be forced into living at higher densities. The desire to live in suburbs will not simply shrink when densities are increased. Americans enjoy having a yard and land around their homes, and this enjoyment should not be disparaged or dismissed (Davey 1993).

The idea that people can shape the world around them according to their

wishes is a "fatal conceit" (Levinson and Kumar 1994). The new urbanists seem to be suffering from the same handicap from which the practitioners of the City Beautiful movement of the 1920 also suffered. While those men had the inability to face up to the reality of the American City, the new urbanists seem unable to face up to the reality of the American Suburb. People will not give up old habits just because someone tells them that they should.

REFERENCES

- Alden Branch, Mark. 1996. No neotrad in my backyard, Dallas suburb says. *Planning* 62, no. 1 (January): 20.
- Anthony, Carl, Elizabeth Deakin, Walter Hood, Clarisse Lula, Peter Owens, Carolyn Radisch, Greg Tung, and Rick Williams. 1994. The new urbanism: Expanding the vision for the design professions, a roundtable discussion. *Berkeley Planning Journal* 9, 81-108.
- Atash, Farhad. 1993. Mitigating traffic congestion in suburbs: An evaluation of land-use strategies. *Transportation Quarterly* 47, no. 4 (October): 507-524.
- Audirac, Ivonne, and Anne H. Shermeyen. 1994. An evaluation of neotraditional design's social prescription: Postmodern placebo or remedy for suburban malaise? *Journal of Planning Education and Research* 13, no. 3 (Spring): 161-173.
- Bae, Chang-Hee Christine. 1993. Air quality and travel behavior: Untying the knot. *Journal of the American Planning Association* 59, no. 1 (Winter): 65-74.
- Beardsley, Charles. 1993. Slow ride on the Fast Mail. *Mechanical Engineering-CIME* 115, no. 10: 4.
- Bookout, Lloyd W. 1992a. Neotraditional town planning: A new vision for the suburbs? *Urban Land* 51, no. 1 (January): 20-26.
- _____. 1992b. Neotraditional town planning: Cars, pedestrians and transit. *Urban Land* 51, no. 2 (February): 10-15.
- _____. 1992c. Neotraditional town planning: Bucking conventional codes and standards. *Urban Land* 51, no. 4 (April): 18-25.
- _____. 1992d. Neotraditional town planning: The test of the marketplace. *Urban Land* 51, no. 6 (June): 12-17.
- _____. 1992e. Neotraditional town planning: Toward a blending of design approaches. *Urban Land* 51, no. 8 (August): 14-16.
- Bosselman, Peter, Peter Calthorpe, Fred Glick, Wolfgang Homburger, and Edmond Kagi. 1990. Suburbia: Ready for foot and rail? *Landscape Architecture* 80 (July): 58- 60.

- Bressi, Todd W. 1994. Planning the American dream. In *The new urbanism: Toward an architecture of community*, ed. Peter Katz, xxv-xlii. New York: McGraw-Hill.
- Buckner, John C. 1988. The development of an instrument to measure neighborhood cohesion. *American Journal of Community Psychology* 16, no. 6: 771-791.
- Calavita, Nico. 1994. The new urbanism. *Journal of the American Planning Association* 60, no. 4 (Autumn): 535-537.
- Calthorpe, Peter. 1989. Pedestrian pockets: New strategies for suburban growth. In *The pedestrian pocket book: A new suburban design strategy*, ed. Doug Kelbaugh, 7-20. New York: Architectural Press.
- Calthorpe, Peter, and William Isley. 1990. Pedestrian pockets. In *Master-planned communities: Shaping exurbs in the 1990s*, eds. Anne V. Moudon, Bill Wiseman, and Kwang-joong Kim, 71. Seattle: University of Washington. Quoted in Farhad Atash, 1993.
- _____. 1995. Why go anywhere? Millions of people could be liberated from their vehicles. *Scientific American* 273, no. 3 (September): 118-120.
- Cervero, Robert, and Roger Gorham. 1995. Commuting in transit versus automobile neighborhoods. *Journal of the American Planning Association* 61, no. 2 (Spring): 210-25.
- Choldin, Harvey M. 1989. Apartness and togetherness in Louis Wirth's "Urbanism as a way of life." In *Suburbia re-examined*, ed. Barbara M. Kelly, 11-22. New York: Greengard.
- Civilizing suburbia. 1994. *Wilson Quarterly* 18, no. 3 (Summer): 135-137.
- Clark, Charles S. 1994. Traffic congestion: Can America win the battle against gridlock? *CQ Researcher* 4, no. 17: 387-404.
- _____. 1995. Revitalizing the cities. *CQ Researcher* 5, no. 38: 899-915.
- Collura, John. 1994. Evaluating ride-sharing programs: Massachusetts' experience. *Journal of Urban Planning and Development* 120, no. 1 (March): 28-47.
- Crane, Randall. 1996. Cars and drivers in the new suburbs: Linking access to travel in neotraditional planning. *Journal of the American Planning Association* 62, no. 1 (Winter): 51-65.

- Cutler, Blaynne. 1991. Growing through the cracks. *American Demographics* 13, no. 8 (August): 38-43.
- Davey, Peter. 1993. Sustainable suburbia. *The Architectural Review* 193, no. 1161 (November): 4-5.
- Davison, Ian. 1995. Viewpoint: Do we need cities any more? *Town Planning Review* 66, no. 1: iii-vi.
- de Tocqueville, Alexis. 1956. *Democracy in America*. Translated by Richard Heffner. New York: Mentor Books.
- Downs, Anthony. 1992. Stuck in traffic: Coping with peak-hour traffic congestion. Washington, DC: Brookings Institute.
- Duany, Andres, and Elizabeth Plater-Zyberk. 1992. The second coming of the American small town. *Wilson Quarterly* (Winter): 19-50.
- _____. 1994. The neighborhood, the district, and the corridor. In *The new urbanism: Toward an architecture of community*, ed. Peter Katz, xvii-xx. New York: McGraw-Hill.
- _____. 1995. Neighborhoods and suburbs. *Design Quarterly* 164 (Spring):10-23.
- Eckdish Knack, Ruth. 1989. Repent, ye sinners, repent: Neotraditional town planning in the suburbs. *Planning* 55, no. 8 (August): 4-13.
- Edmondson, Brad. 1994. Alone in the car. *American Demographics* 16, no. 6 (June): 44-51.
- Ewing, Reid. 1995. Beyond density, mode choice, and single-purpose trips. *Transportation Quarterly* 49, no. 4 (Fall): 15-24.
- Ewing, Reid, Padma Haliyur, and G. William Page. 1993. Getting around a traditional city, a suburban PUD, and everything in-between. In *Proceedings from the 14th International Pedestrian Conference*. Boulder, Colorado: 21-30.
- Fischer, Adelheid. 1993. Smoothing out life in edge city: How to turn sprawling suburbs into comfortable, compact communities. *Utne Reader* 55, no. 32 (January-February): 32-35.
- Fisher, Thomas. 1993. Do the suburbs have a future? *Progressive Architecture* 74, no. 12 (December): 36-41.

- Fulton, William. 1995. Viewpoint: True believers go too far. *Planning* 61, no. 7 (July): 50.
- Gans, Herbert. 1993. *People, plans, and policies: Essays on poverty, racism, and other national urban problems*. New York: Columbia University Press.
- Gerloff, Robert. 1994. The new urbanism takes hold: Anti-suburb architects are finally getting some respect. *Utne Reader*, no. 63: 28-31.
- Giuliano, Genevieve, and Kenneth A. Small. 1993. Is the journey to work explained by urban structure? *Urban Studies* 30, no. 9: 1485-1500.
- Gosling, John R. 1996. Addison Circle: Beyond new urbanism. *Urban Land* 55, no. 3 (March): 19-22.
- Greengard, Samuel. 1995. All the comforts of home: The right technology, used effectively, keeps telecommuters dialed in- from home, from work, from anywhere. *Personnel Journal* 74, no. 7 (July): 104-7.
- Handy, Susan. 1991. Neo-traditional development: The debate. *Berkeley Planning Journal* 6: 135-144.
- Handy, Susan, and Patricia L. Mokhtarian. 1995. Planning for telecommuting: Measurement and policy issues. *Journal of the American Planning Association* 61, no. 1 (Winter): 99-111.
- Haran, Leah. 1995. Families together differently today. *Advertising Age* 66, no. 42: 1-12.
- Hester, Randolph T. 1993. It's just a matter of fisheads: Using design as a means of building community. *Small Town* 24, no. 2 (September/October): 4-13.
- Holleran, Michael. 1995. Past and present. *Journal of the American Planning Association* 61, no. 2 (Spring): 272.
- Hollingsworth, Pierce. 1993. Convenience is king. *Food Technology* 47, no. 8 (August): 28.
- Jackson, Kenneth T. 1985. *Crabgrass Frontier. The suburbanization of the United States*. New York: Oxford University Press.
- Jacobson, Thomas E. 1989. Sins of the neotraditionalists. *Planning* 55, no. 11 (November): 29.

- Jones, Tom, and Jack Short. 1994. The economics of transport costs. *The OECD Observer*, no. 188 (June/July): 11-14.
- Khermouch, Gerry. 1995. Third places. *Brandweek* 36, no. 11 (March): 36-40.
- Krieger, Alex, and William Lennertz, eds. 1991. *Andres Duany and Elizabeth Plater-Zyberk: Towns and town-making principles*. New York: Rizzoli.
- Kulash, Walter, Joe Anglin, and David Marks. 1990. Traditional neighborhood development: Will the traffic work? *Development* 21 (July/August): 21-24.
- Landers, Howard M. 1992. Quoted in Lloyd W. Bookout. Neotraditional town planning: Toward a blending of design approaches, 14-16. *Urban Land* 51, no. 8 (August), 1992.
- Langdon, Philip. 1995. The urbanist's reward. *Progressive Architecture* 76, no. 8 (August): 82-90.
- Leccese, Michael. 1990. Next stop: Transit-friendly towns. *Landscape Architecture* 80 (July): 47-53.
- Lerner-Lam, Eva, Stephen P. Celniker, Gary W. Halbert, Chester Chellmen, and Sherry Ryan. 1992. Neo-traditional neighborhood design and its implications for traffic engineering. *ITE Journal* 62, no. 1 (January): 17-26.
- Leroux, Charles, and Ron Grossman. 1995a. Modern-day pilgrims: The frontier of suburbia. *Chicago Tribune*, 27 December, sec. 1, 1 & 12.
- _____. 1995b. Neighbors anonymous: Suburbia comes to the city. *Chicago Tribune*, 28 December, sec. 1, 1 & 12.
- _____. 1995c. A danger to democracy: A new silence. *Chicago Tribune*, 29 December, sec. 1, 1 & 8-9.
- Levinson, David M., and Ajay Kumar. 1994. The rational locator: Why travel times have remained stable. *Journal of the American Planning Association* 60, no. 3 (Summer): 319-32.
- Lockwood, Charles. 1995. Suisun City, California. *Urban Land* 51, no. 5 (May): 20-26.
- Miethe, Terance D. 1995. Fear and withdrawal from urban life. *Annals of the American Academy of Political and Social Science* 539 (May): 14-29.

- Montague, Claudia. 1993. How viewers feel about TV. *American Demographics* 15, no. 5 (May): 34-41.
- Moule, Elizabeth, and Stefanos Polyzoides. 1994. In *The new urbanism: Toward an architecture of community*, ed. Peter Katz, xxi-xxiv. New York: McGraw-Hill.
- Nasar, Jack L., and David A. Julian. 1995. The psychological sense of community in the neighborhood. *Journal of the American Planning Association* 61, no. 2 (Spring): 178-184.
- 1995 survey of buying power. 1995. Supplement to *Sales and Marketing Management* 147, no. 9: B5.
- Pearson, Clifford A. 1990. The new new towns. *Builder* 12, no. 1 (January): 294-301.
- Piirto, Rebecca. 1993. Taming the TV beast. *American Demographics* 15, no. 5 (May): 34-41.
- Pollitt, Katha. 1996. For whom the ball rolls. *Nation* 262, no. 15 (April) 9.
- Post, Nadine M. 1994. Putting the brakes on suburban sprawl. *ENR* 232, no. 19: 32-6.
- Pucher, John. 1994. Public transit developments: Canada vs. the United States. *Transportation Quarterly* 48, no. 1 (Winter): 117-128.
- Pucher, John, and Stefan Kurth. 1995. Making transit irresistible: Lessons from Europe. *Transportation Quarterly* 49, no. 1 (Winter): 117-28.
- Putnam, Robert D. 1996. Bowling alone: Democracy at the end of the twentieth century. Forthcoming in a collective volume edited by Axel Hadenius. New York: Cambridge University Press.
- Read all about it: The new urbanism's message comes in many varieties. 1995. *Progressive Architecture* 76, no. 8 (August): 86.
- Review of *The new urbanism: toward an architecture of community*, by Peter Katz. 1994. *The Wilson Quarterly* 18, no. 4 (May): 91-2.
- Ritzdorf, Marsha. 1993. Land use, local control, and social responsibility: The child care example. *Journal of Urban Affairs* 15, no. 1: 79-91.
- Rosenbaum, David B. New urbanism, big time. *ENR* 235, no. 8 (August): 22-4.

- Rothblatt, Donald N., and Daniel J. Garr. 1986. *Suburbia: An international assessment*. New York: St. Martin's Press.
- Rybczynski, Witold. 1995a. *City life: Urban expectations in a new world*. New York: Scribner.
- Rybczynski, Witold. 1995b. How to build a suburb. *Wilson Quarterly* 19, no. 3 (Summer): 114-126.
- _____. 1995c. This old house. *The New Republic* 212, no. 19: 14-16.
- Scully, Vincent. 1994. The architecture of community. In *The new urbanism: Toward an architecture of community*, ed. Peter Katz, 221-230. New York: McGraw-Hill.
- Slater, David C., and Marya Morris. 1990. A critical look at neotraditional town planning. *PAS Memo*, American Planning Association (November): 1-3.
- Smith, Bob, and Kathleen Barnes. 1994. Ridesharing: A tough sell. *HR Focus* 71, no. 11 (November): 5.
- Southworth, Michael. 1995. Suburban design. *Journal of the American Planning Association* 61, no. 2 (Spring): 268-270.
- Spring, Jim. 1993. Seven days of play. *American Demographics* 15, no. 3 (March): 50-53.
- Tate, Anne. 1992. Review of *Towns and town-making principles*. *Progressive Architecture* 73, no. 11 (November): 102-103.
- Transportation. 1996. *CQ Weekly Report* 54, no. 1 (January): 16-18.
- Unger, Donald G., and Abraham Wandersman. 1985. The importance of neighbors: The social, cognitive, and affective components of neighboring. *American Journal of Community Psychology* 13, no. 2 (April): 139-169.
- U. S. Bureau of the Census. *City and county data book: 1994*. Washington, D.C.: GPO, 1994.
- Unterman, Richard K. 1991. Can we pedestrianize the suburbs? In *Public Streets for Public Use*, ed. Anne Vernez Moudon, 123-131. New York: Columbia University Press.

- Van Vugt, Mark, Ree M. Meertens, and Paul A. M. Van Lange. 1995. Car versus public transportation? The role of social value orientations in a real-life social dilemma. *Journal of Applied Social Psychology* 25, no. 3: 258-78.
- Vandersteel, William, Ted Schulte, and Bette Dewing. 1995. Americans would never trade cars for trains. *The New York Times*, 23 September, 14 (N), 22 (L).
- Vonier, Thomas. 1994. HUD discovers the vision thing. *Progressive Architecture* 75, no. 4 (April): 13-14.
- Wade, Beth. 1995. Clinton: Fewer appropriation for transportation in '96 than in '95. *American City and Country* 11, no. 3 (March): 38-42.
- Walsh, Robin D. 1989. Cars forever. *Planning* 55, no. 10 (October): 32.
- Winburn, William A. 1992. The development realities of traditional town design. *Urban Land* 51, no. 8 (August): 20-1, 47.
- Young, Dwight. 1995. *Alternatives to sprawl*. Cambridge, MA: Lincoln Institute of Land Policy.
- Zucker, Melvin Y. 1996. Imperfect Portland. *Planning* 62, no. 3 (March): 31-32.