

**URBAN DESIGN OPPORTUNITIES FOR THE STRIP:
IDEAS FOR NEEDHAM STREET**

by

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ABSTRACT

Urban Design Opportunities for the Strip: Ideas for Needham Street

by Michael F. Gray

Submitted to the Department of Urban Studies and Planning on May 22, 1995 in partial fulfillment of the requirements for the Degree of Master in City Planning

The automobile oriented commercial strip is a pervasive part of the American landscape. Lined with fast food restaurants, department stores, supermarkets, and discount warehouses, the strip has become a primary place for commerce in the suburbs and in some places the primary public realm. The strip exists as both the full scaled commercial corridor at the edge of many towns and cities, and as smaller incoherent, poorly planned, unimageable commercial districts at the edge of residential neighborhoods.

This thesis is an examination of the physical approaches to improving commercial strips and one commercial strip in particular. Needham Street in Newton, is a strip environment that is struggling with issues of traffic, image, useability, development pressure, and a general lack of character and coherence.

The methodology for developing ideas for Needham Street is three tiered. The first step is to review the literature of the few people and organizations that have thought conceptually about physical planning and design opportunities to improve the strip. Second, three communities with strip improvement efforts underway were studied. And third, a set of built projects were examined for ideas that might be applied to the whole strip or pieces of the strip.

Ideas generated from this research were sorted and condensed into four physical approaches to improving the strip. These approaches were then applied conceptually to Needham Street with the hope that they will broaden the thinking about the future of this strip.

Thesis Advisor: Professor John de Monchaux

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INTRODUCTION

The strip, as a piece of urban form or simply as an orderless dispersion of uses along a road, developed over the past half century and has infiltrated the landscape of many American cities, towns, and villages. The strip is relentless: one community now fades into another along endless roadways lined with parking lots, one story cinder block structures, and a barrage of plastic signs. As cities and metropolitan regions attempt to contain themselves with growth management policies and urban growth boundaries, these low quality suburban corridors and districts become prime locations for new denser development. As suburban communities start to struggle with traffic, image, lack of connections, and lack of public amenity along their arterial highways, the strip will be transformed.

This thesis explores urban design opportunities for improving the strip. It asks the question: What physical interventions could transform auto oriented strip environments into more humane environments that can be used and enjoyed by pedestrians and people in automobiles? It will explore opportunities through conceptual ideas that planners and urban designers have proposed, through a discussion of "whole strip" urban design efforts currently underway, and through examination of some new forms of commercial development that offer promising ideas for the

strip. Observations and ideas developed from this exploration will be applied to Needham Street, an area of commercial strip development that is trying to improve its image and function. Hopefully, these ideas will help frame efforts to transform Needham Street, and will be a useful taxonomy for strips in other places.

In addition to the physical approaches to transforming the strip, macro forces in economics, retailing, and electronic communications, are also at work. While important, these forces are beyond the scope of this study, which will focus on the physical approaches to improving strip form and strip design.

The Strip Follows the Car: A Brief History of Strip Development

Strip development is closely tied to the rise of automobile usage which started in the 1920s. The evolution from the main street commercial districts, to the strip or, in Chester Liebs words, "From Main Street to Miracle Mile" is tied to the growth of automobile usage. Liebs traces this history in detail and describes it with flare. An abbreviated history of this process provides a common starting point for discussing the strip and how it might be improved.

The increase in mobility that the automobile

provided was unprecedented. Train travel provided a new linear mobility in the 19th century, but automobiles allowed people to travel on their own schedules and easily venture away from the downtown or main street districts where the train stopped. When automobiles first came in contact with main street, “they were viewed by merchants as a novelty, but quickly became a product to sell and service, and a new means to bring people downtown to shop” (Liebs, p9).

As streets became congested with more automobiles, modifications were made to main street. Streets were widened, selected buildings were demolished for parking areas, and traffic controls were installed (see figure i-1). Main Street could not accommodate automobiles at the same rate that the automobile population was growing. As downtown reached its capacity for serving customers arriving by

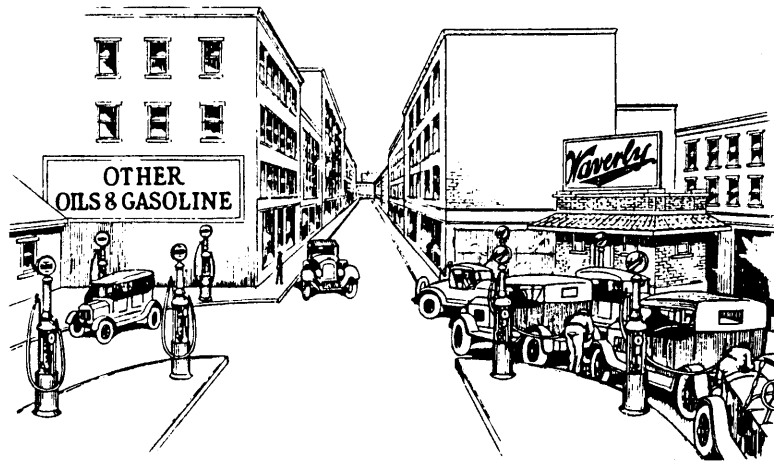


Figure i-1: Cartoon depicting modifications to main street to accommodate the new form of transportation (Liebs).

car, some merchants started to move out of downtown to the corridors where electric trolleys served “streetcar suburbs.” These corridors, which started to develop in the 1870s, attracted merchants at crossroads where the customer base was potentially twice as high. As automobile use increased, these streets became even more attractive to downtown merchants. Within close proximity to housing and the streetcar line, customers could walk, take the trolley or drive to stores along these roads. The commercial success of these environments was exemplified by the phenomena of downtown department stores, such as Woolworth, and Sears, Roebuck & Co., opening branch outlets along these roads.

Beyond the terminus of the streetcar line there was a resurgence of roadside commerce. When the preferred mode of travel was horse and carriage, travelers were accustomed to food, lodging, and service establishments operated out of people’s homes along the early colonial roads and paths. As long distance horse and carriage travel was replaced by railroads, development of roadside establishments went into a remission. The automobile revived this tradition. As people started to drive long distances there was, again, a need for services along the way (see figure i-2).

With the resurgence of wayside business, and the ever increasing numbers of automobiles cruising the rural highways, the small towns and villages along the way started to bear the brunt of the impact. One of the early ideas to mitigate this problem was to build by-pass roads that skirted the village and allowed

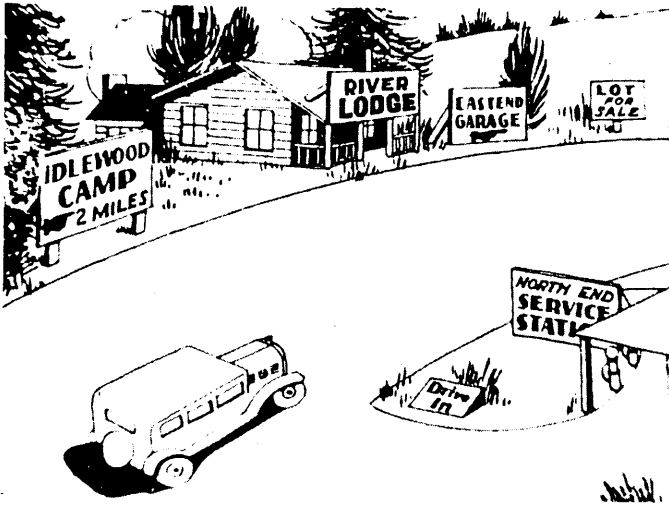


Figure i-2: Roadside services revived for automobile travel (Liebs). passers-by to continue on their way without overwhelming the town. In 1941, Gilmore Clarke, dean of Cornell's School of Architecture expressed his support for by-pass roads:

"How much longer are we going to allow the motor car to continue to destroy the character of our cities and villages? As long as we route through traffic over main street, we delay the day when our communities may function in a normal, orderly way..." (Clarke in Liebs, p25).

By-pass roads were built in many places and they did alleviate downtown traffic, but they also produced more opportunities for highway commerce. In some places evidence of three or four iterations of by-pass roads is still visible.

After World War II and throughout the 1950s and 1960s the vast tracts of undeveloped land,

accessed by these roadways of the early part of the century, were "absorbed by urban expansion" (Liebs, p28). As the post-war suburbs took shape and large populations moved from the streetcar suburbs to new subdivisions, rural highways became commercial corridors specifically designed to provide everyday needs to families arriving by car. Commercial developers and planners abandoned the tradition of building at the sidewalk's edge in favor of stores set behind large parking lots. In the short time between the early 1950's and today

"...the same roads where travelers once rented cabins, and families on a Sunday outing stopped to pick up fresh corn at the farm stand, postwar motorists cruise for a place to buy groceries [at a supermarket], or a suite of bedroom furniture [at a superstore]. The postwar roadside has become the all-purpose, intense, high-speed linear commercial corridor...." (Liebs p.28).

As highways were built and business (and therefore more people) moved to the suburbs, commercial development along radial routes leading in and out of major cities infiltrated other roads in the suburban network. Increased car ownership, larger suburban populations, and crude planning, led to the prolific spawning of commercial strips throughout the suburbs.

Statement of Problem

What is physically wrong with the strip? And why should the strip be changed?

The strip is a public realm that is composed primarily of parking lots and traffic lanes. The public realm should be more... The experience of driving along the strip is monotonous, visually hectic and confusing. Environments should be "readable" as we pass through them... The strip is a poor use of land. We cannot afford to continue developing in this form...

Howard Kunstler describes the strip as a "public realm which is only a conduit for vehicles" (Kunstler, p. 56). Conduits for vehicles are a necessary piece of the 20th century metropolis, and will continue to be for the foreseeable future, but the function of these passageways can be broadened. As commerce moved from "main street to the miracle mile" the suburban roadway became more public—people shop there, people eat there, people work there, and many people live along its edges. Many people use the strip on a daily basis, but the strip does not provide any public amenities. The outcome of "ten thousand highway strips across the land" are "boulevards so horrible that every trace of human aspiration seems to have been expelled, except the impetus to sell" (Kunstler, p.121)

The strip is monotonous. Whether it is a state highway that continues for mile upon mile with a repeating set of stores, glowing signs, and cinder-block buildings, or a grid of streets lined with "asphalt deserts", fast food franchises, and discount marts, these districts, strips, or ribbons of commerce and

asphalt have no imageable character. One community looks like the next. In Kunstler's words:

"The roadside landscape is littered with cartoon buildings and commercial messages. We whiz by them [in our cars] and forget them, because one convenience store looks like the next. They do not celebrate anything beyond their mechanistic ability to sell merchandise. We don't want to remember them. We did not savor the approach and we were not rewarded upon reaching the destination, and it will be the same next time, and every time. There is little sense of having arrived anywhere because every place looks like noplac in particular" (Kunstler, p131)

Whether examining the whole highway strip, or the local shopping center, there is little distinction or character that adds to the public realm.

The strip is wasteful. Single use structures, on single use properties, in single use zones have created districts that overflow during peak hours and are underutilized or empty during other times of the day. Acres of land are devoted to parking, for peak demands, but often they are only 80% occupied. Disconnectedness due to landscaped buffers between adjacent properties, the lack of pedestrian amenity beyond edges of the shopping center buildings, and vast seas of parked cars, preclude any desire to walk. For people that work across the street from restaurants or shopping malls, it is often easier to get in the car and drive to them than to walk across the street for lunch. People living in "residential zones" adjacent to the strip have difficulty accessing its stores except by car.

There are special strips to which these gener-

alizations do not apply. People, such as J. B. Jackson and Robert Venturi, have studied particular strips and have extolled their existence and form, but even they never advocated the strip's further development as the primary public realm of the suburbs. Jackson simply observed the new phenomenon of the postwar commercial highway scene but did not make judgments about the quality of place. Venturi studied the architecture of the Las Vegas strip, which he found to be manifested in signs not buildings, and decided that we should "Learn from Las Vegas." Because of their work Kunstler has called Jackson and Venturi "strip apologists" (Kunstler, p.121), but this is a simplification. There are some strips, such as the Las Vegas strip and Sunset Strip in Los Angeles, where the energy and excitement of the signs and the people "cruising" in their cars creates an experience of its own. The real problem is not with these strips, or with the early strips that Jackson observed for the first time, but with the typical commercial strip that has invaded communities across the country. These pervasive strips are a mundane, wasteful, inhumane piece of the American urban environment. These commonplace strips and strip development need reform.

Definitions

The strip is a term that first surfaced in planning literature in the 50s and 60s when commercial development along highways started to infiltrate the suburbs. Since then other terms such as retail strip, auto strip, strip mall, commercial strip, and highway strip have also appeared to describe a variety of environments. In practice, these terms are often used interchangeably, but they refer to slightly different things.

For example, "retail strip" is often used to describe a block of stores in a neighborhood that are more similar in form to main street than to the sprawling commercial roadways discussed here. The "auto strip" is used to describe a roadway lined with automobile dealers, as opposed to a road lined with commercial uses that are oriented towards customers arriving by automobile. In order to clarify, some terms used in this document are defined here:

- "The Strip" is a roadway or series of roadways lined with commercial establishments and marked by a disorganized character. The level of disorganization or chaos varies. Buildings are typically arranged without regard to adjacent buildings or according to any visible rules. Often, buildings are set behind parking areas. The architecture along the strip is typically of no particular merit and often very utilitarian. Some buildings might exist as vestiges of earlier times, such as a church or a row of stores along the street, but the strip's primary character is defined by sprawling development.

Many strips are characterized by the barrage of bright colored signs that are easily visible from the road (see figure i-3). I will use the term commercial strip or highway strip interchangeably with the strip.



Figure i-3: A typical strip (Liebs).

- The “Strip Mall” is a row of stores set behind a parking lot. The first strip malls were “Park & Shop” centers that were L-shaped structures with parking set in the middle (see figure i-4). Today, strip malls are not always L-shaped, but they are a set of small stores oriented towards a parking lot.
- “Main Street” is a generic term used to describe an environment that is or resembles a traditional downtown commercial street. Buildings can vary in height, but are often between 2 and 5 stories. The buildings line the edge of the sidewalk and parking

occurs at the curb’s edge or parking lots are located behind the stores.

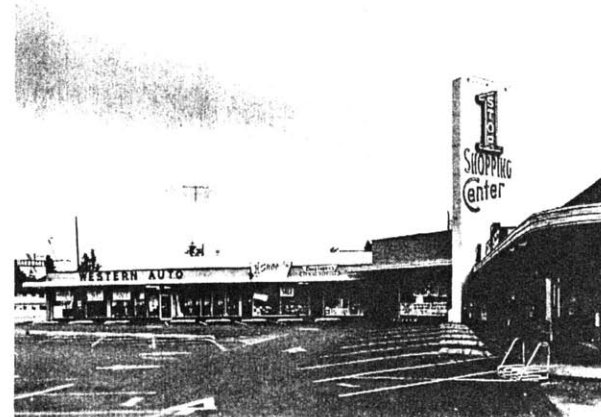


Figure i-4: An early strip mall (Liebs).

This thesis is not concerned with classifying and sorting different types of ‘strips’ or development along strips. Its focus is on the urban design opportunities and ideas for humanizing the strip in its many manifestations.

PART I

Ideas for improving the strip are generated in a variety of forums. Academics and professionals write about them, communities develop them as they plan for the future, and projects are built that are catalysts or precedents for still more ideas. This section of the thesis will examine and array these ideas into a taxonomy that identifies distinct physical approaches to improving commercial strips.

CHAPTER ONE

CONCEPTUAL APPROACHES TO IMPROVING STRIP ENVIRONMENTS: LITERATURE REVIEW

Concern with the visual quality of the roadside environment dates back to the early part of this century when the growing use of automobiles first started to impact urban and regional form. What are today considered charming or historic buildings, and part of the "open road mystique," were the 1930s version of sprawl. As suburbanization occurred in the late 40s, 50s, and 60s, more development occurred along the arterial roads between urban centers and small towns. Early accounts of dissatisfaction with these environments exist (Blake, MacKaye), but until the last 20 or 30 years, there was little thought or writing about what could be done to improve them.

What follows is a review of the conceptual approaches to improving commercial strip environments from urban design and planning literature and reports. There are additional critiques of commercial strips; however, these sources were selected because they are not merely critiques, but they take the extra step and offer ideas for improving these environments. Although the first writings on this subject occurred in 1930, most of the literature is from the past 10 or 15 years. In recent years much of the writ-

ing on this subject has occurred under the auspices of linking land use and transportation planning and/or returning to traditional forms of design and development. With a desegregation of land uses and consideration for urban design, this literature claims automobile dominated environments can be humanized.

Benton MacKaye -1930

Benton MacKaye's writing stems from his concern with the development along highways that was a predecessor to today's commercial strips. Similar to descriptions of today's roadside commercial development, MacKaye described New England's roadside in 1928 as "... a bedlam of filling stations, hot dog stands, road houses, souvenir stores, billboards, and amusement parks." He went on say, "This is not the architecture of the well-ordered town; it is the architecture of the slum: not the slum of poverty but the slum of commerce" (MacKaye in Arendt, p129).

In addition to critiquing this development, MacKaye discussed the idea of the ideal form of roadside development; in 1930 he proposed a system of "townless highways" (see figure 1-1). At this early date, he advocated limiting roadside development in designated "waystations" for gas and fuel while all other commerce and lodging would be in villages sep-

arated from the highway. He believed towns had to be segregated from one another by natural areas in order to have "personality," otherwise they would spread out in "motor slums" along the highway. "Such development does not meet the conception of a true town or unit of society; it is not a town, it is merely a linear spreading of humanity" (MacKaye in Arendt, p130).

In some ways, MacKaye's ideal was realized in the parkways built in the 1930s and the limited access highways that were built 20 years later. But at the same time, the older roads, the roads MacKaye wrote about, continued to develop as "motor slums" of a magnitude far greater than existed in his time.

THE TOWNLESS HIGHWAY & THE HIGHWAYLESS TOWN
AN OPPORTUNITY FOR THE TERCENTENARY

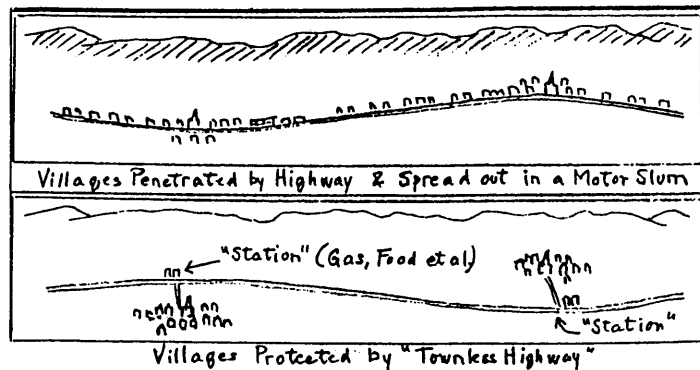


Figure 1-1: The Townless Highway (Arendt).

Kevin Lynch and Michael Southworth - 1974

Kevin Lynch and Michael Southworth provide more extensive concepts about the form of the strip and ways to improve it. In their 1974 paper, "Designing and Managing the Strip," they use Main Street in Waltham, Massachusetts as a case study, and provide a discussion of the "standards and patterns that could bring out the strip's potential as a human environment" (Banerjee, p579). Although their work was based on a main street that was being degraded by strip development, their ideas could be applied to many areas of chaotic commercial development spread out along a busy road.

The pervasiveness of these environments in the American urban environment led the authors to this study. "A product of the streetcar, the automobile, and of private speculation in land, [strips] are one of America's unique contributions to urban form. They epitomize the irresponsible use of the public environment for private gain." The problems with commercial strips are its noise, its confusion, its harsh climate, its monotony, its inhospitality to man on foot, and its overwhelming ugliness (Banerjee, p579).

Lynch and Southworth envisioned alternatives to the way the strip relates to automobiles, pedestrians, public transit, parking and commercial space. Their first alternative is the boulevard approach. Three different boulevard configurations are proposed; the single landscaped median, the "split boulevard" with service lanes, and the "side boulevard." The boulevard solutions were dismissed on the grounds that it did not adequately protect pedestrians from

traffic, bring trees closer to the pedestrian zone, and accommodate bus access (see figure 1-2). In the end, they concluded that “although handsome and lively if the fronting use is intense, they seem wasteful and potentially ‘empty’ at contemporary densities” (Banerjee, p607)

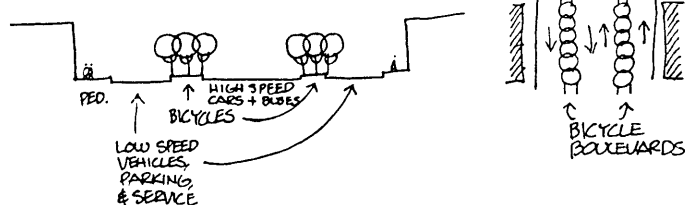


Figure 1-2: Split Boulevard Pattern (Banerjee).

From these traditional boulevard models they developed a dual sided model where pedestrian circulation and cyclists’ access occurs behind buildings while auto access is in the front. Although this approach relates better to adjacent neighborhoods, it is not feasible in the absence of a major redevelopment effort. They also point out that it has the potential to create a street that is only “half as lively” as a street with a single orientation.

New strips, Lynch and Southworth suggested, offer an opportunity for stores to develop along a pedestrian corridor at the center while providing automobile access from roads on both sides (see figure 1-3). Pushed one step further, this model results in a

shopping mall. If the pedestrian area in this “split road with the pedestrian path” is enclosed, it resembles a typical shopping mall without the anchor stores at the ends.

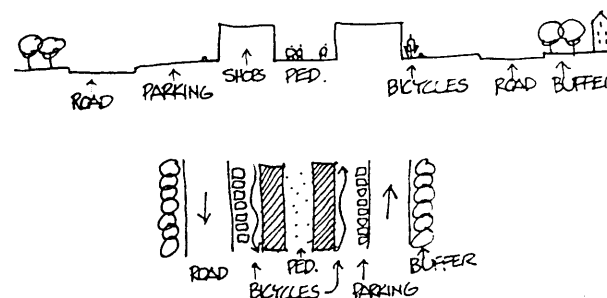


Figure 1-3: Strips as Pedestrian Corridors (Banerjee).

Their discussion of the strip also covers the relationship between the strip and the surrounding residential neighborhoods, and the road’s legibility for its users. Ideas for improving relationships to residential areas include creating gateways to the neighborhoods by carrying residential landscape patterns from intersecting streets to small open spaces along the strip (see figure 1-4). To make the strip more legible, landmarks and nodes of higher development intensity would help differentiate places along the corridor.

The authors’ also proposed that shopping areas easily accessed by automobiles did not have to be strung out along an arterial road and provided alternatives. The last two diagrams in the paper depict shopping strips either linking to two parallel streets or connecting to the arterial in two places forming a

horseshoe. These options provide easy auto access to linear or curved commercial districts while avoiding multiple traffic conflicts with through passing cars (see figure 1-5).

To manage the strip, Lynch and Southworth proposed a “Unified Street Agency” and/or a “Frontage Association.” A Unified Street Agency could consolidate many public functions, such as street and path repair, utilities maintenance, waste removal, and landscaping. It could also create policies, regulations, and incentives for its very limited area. In short, it is one agency with a limited jurisdiction to maintain and manage the public right of way. This agency would be “an administration that would have a stake in the environmental quality [of the strip] and the power to create it.” (Banerjee, p603). Although this type of governmental organization might be useful in many parts of the city, it could be especially helpful in improving commercial strips it would serve as a unifying force in disorganized roadside environment.

Because it might be difficult to implement a Unified Street Agency within the existing structure of many city governments, the authors also proposed a Frontage Association. These private associations are similar to home owners associations of large residential developments and to today’s Business Improvement Districts (BIDs). These associations do not own the right-of-way, but if financed by special assessments, they can invest in the public areas along the road in ways that would benefit all members of the association. In addition to assessments to provide environmental enhancements, these organi-

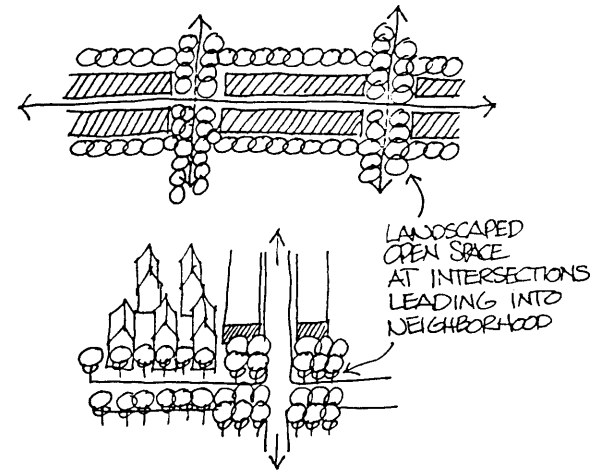


Figure 1-4: Landscape used to mark gateways into neighborhoods. (Banerjee).

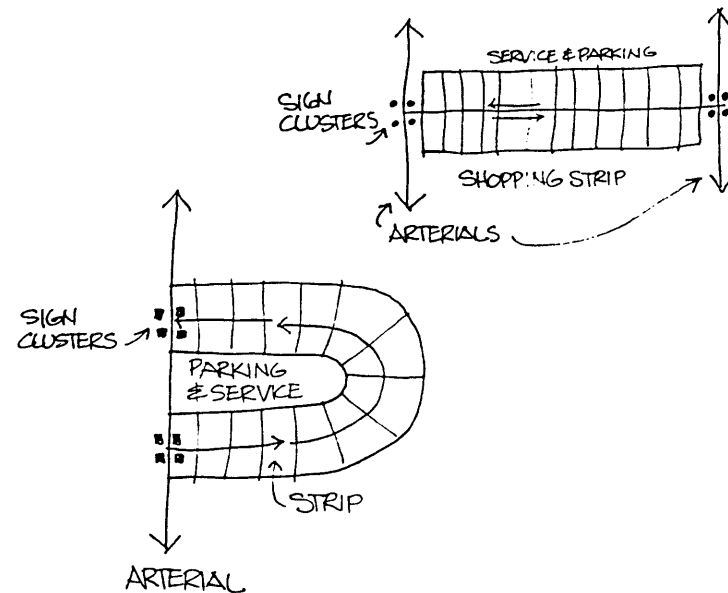


Figure 1-5: Strip connecting arterials and the Loop Form (Banerjee).

zations also offer a more unified voice, political leverage, and persuasive power than disparate land owners from the strip.

Lynch and Southworth's work was written during the oil crisis of the early 1970s, and is partially based on a future "when most people travel by public transportation, bicycle or foot" (Banerjee, p616). While people have retreated from this idea, it remains a worthwhile exploration that provides some interesting and vital ideas for humanizing this type of environment.

Sim Van der Ryn and Peter Calthorpe - 1986

In their 1986 book *Sustainable Communities*, Sim Van der Ryn and Peter Calthorpe discuss reuse and redesign interventions for the strip and conceptualize a redevelopment of a strip in Sunnyvale, California. In a brief description they distinguish between two kinds of strip environments. The first kind consists of older strips that evolved from neighborhood shopping streets and still contain many small businesses. The second kind is a newer strip with "a complete catalogue of standardized nationally franchised services and sales operations" (Van der Ryn, p42). Although their redesign concepts do not explicitly distinguish between these types, this distinction does provide a good overview of different types of strips. In their observations of the strip, the authors point out that redesign opportunities arise from low density, relatively high turnover of businesses, and the strip's "inherent structure as a channel for movement."

The authors believe the importance of strip redesign is linked closely to improvements to typical suburban residential subdivision developments. Because strips often exist on the edge of limited access residential development, one strategy is to build pedestrian connections to neighborhood shopping centers. By concentrating residential uses close to the strip and turning "back doors into front doors" that can be reached by foot or bicycle, the strip provides convenient shopping while reducing automobile use and the space devoted to parking.

The second strategy Van der Ryn and Calthorpe discuss is based on increasing the mix of uses in the "single-purpose sparsely-covered strip." They propose creating a linear mixed-use zone composed of "light industry, offices, places of employment, community facilities, housing, neighborhood shopping, and possibly energy and food production" (Van der Ryn, p42). As redesign proceeds, uses become consolidated, auto access points are limited and the road becomes an exclusive traffic channel without conflicts or "visual pollution." As travel patterns change, one or more travel lanes could be reused as a public transit right-of-way.

Although their idea was not fully developed, they conceptually applied it to El Camino Real in Sunnyvale. Their "lifebelt" concept is the gradual transformation from the typical strip into a spine of mixed use activity nodes. Development starts at intersections and "grows along an internal pedestrian spine between nodes." Neighborhood-serving commercial services are located at the edges oriented

towards the housing, while other activities occur in solar powered linear buildings close to the road. Limited access to commercial centers “allow the road to fulfill its function as a traffic-bearing arterial.” The authors believe the “lifebelt” concept will transform the strip “from a low-density monoculture to a pulsing polyculture” (see figure 1-6) (Van der Ryn, p49).

Although the “lifebelt” idea is a little farfetched in terms of its super structure form and its dependence on solar power, it is an interesting concept. Commercial development turns around and faces the adjacent neighborhoods that use it, while the road become a more efficient through-way. A two-sided strip oriented onto itself is replaced with two one-sided shopping areas oriented to the neighborhood.

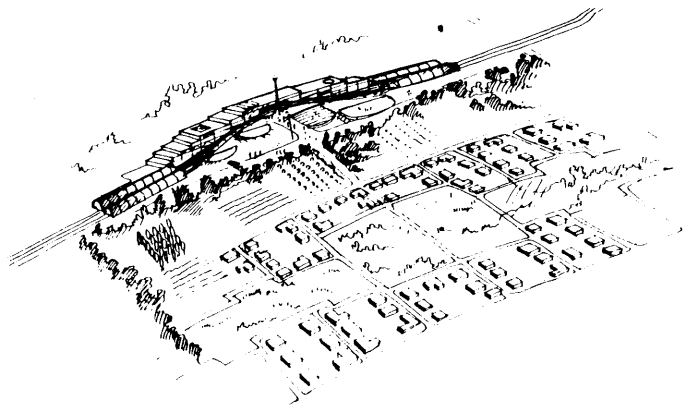


Figure 1-6: The strip renewed as the "Lifebelt" (Van der Ryn).

SNO-TRAN - 1993

SNO-TRAN, a non-profit organization in Washington State, that studies and provides consulting services on issues relating to the integration of land use and transportation planning, developed a concept for redesigning parts of commercial strips. Their publication, “A Guide to Land Use and Public Transportation,” illustrates, in three five year phases how a piece of a typical strip can be transformed into a pedestrian and transit-friendly shopping area.

The three phase process that SNO-TRAN outlines and diagrams is a clear breakdown of the steps that the public sector and the private sector could take to rebuild the strip. The description focuses on the physical elements that encourage more pedestrian and transit activity.

The first phase consists of large public sector improvements in the pedestrian amenities of the right-of-way, while business and property owners provide “graphic” improvements to their buildings and landscape improvements to their sites .

By the end of the second phase, SNO-TRAN envisions consolidated curb cuts and widening of the street to five lanes. By this time, public improvements have renewed developers’ interest in the area, new businesses have opened, and new buildings have replaced some older ones. New businesses will take advantage of underutilized parking lots and provide pedestrian amenities. The transit authority will also upgrade bus shelters.

In the third phase, the area begins to be used more intensely. New residential uses are established

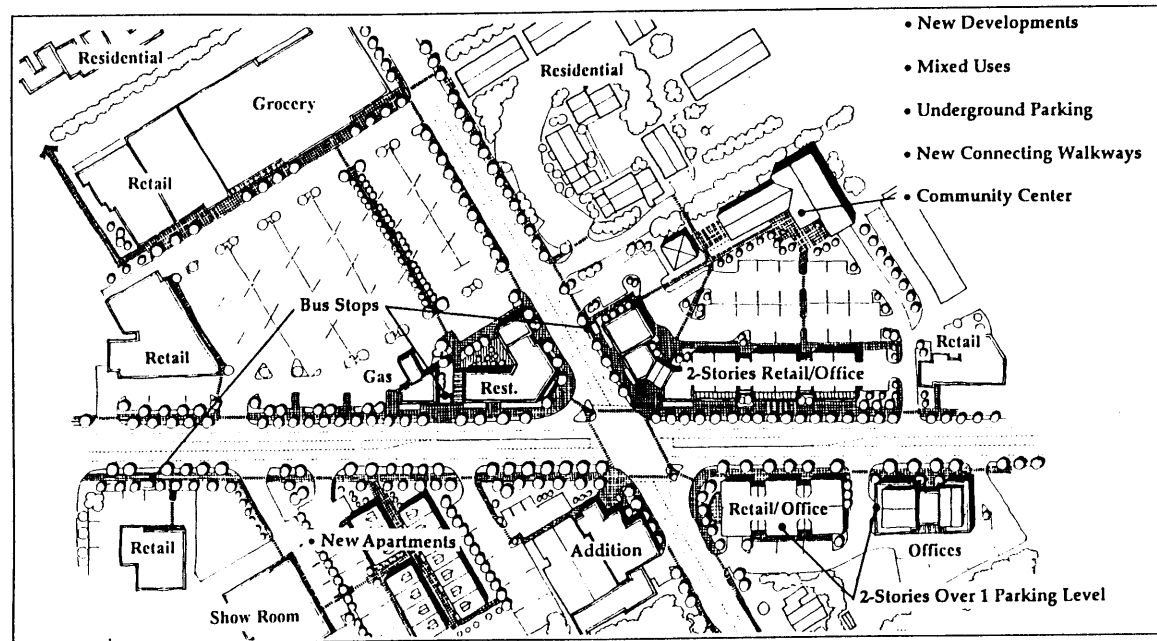
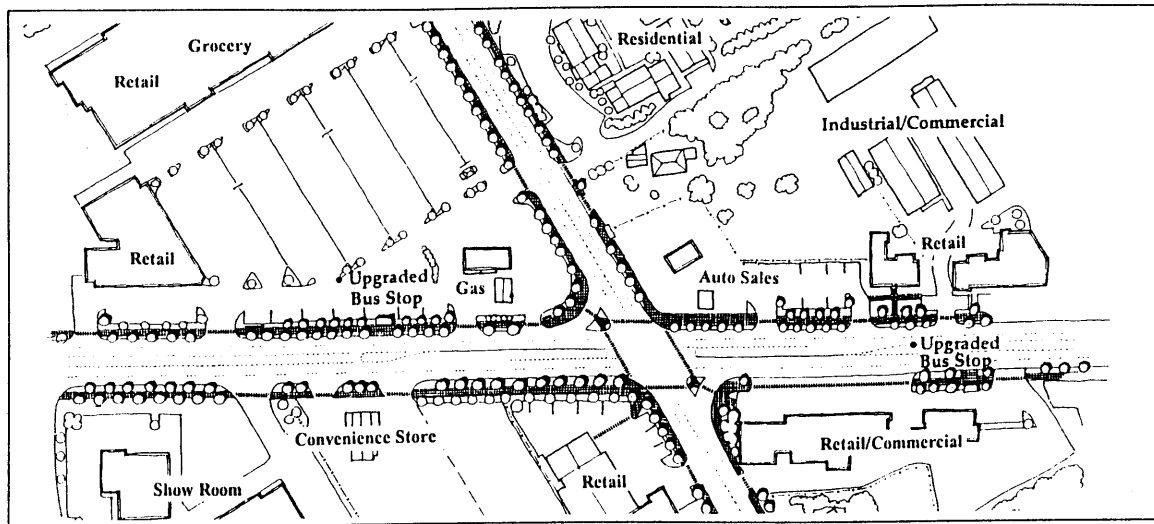


Figure 1-7: Phased strip improvements (SNO-TRAN)

perpendicular to the road, and parking is consolidated under some office and retail buildings. At this time, all four corners of the intersection have buildings fronting on the streets and provide auto access and pedestrian connections to other uses further from the road (see figure 1-7).

SNO-TRAN has provided a practical vision of how public investment and a series of relatively small private sector redevelopment projects can humanize commercial highway environments. The exploration's strength is its infill character. These images incorporate existing large floor-plate buildings with new uses on the site, and still provide easily accessible parking lots.

Randall Arendt - 1994

Randall Arendt, in his book *Rural By Design*, discusses development along highways, "reclaiming existing commercial strips," and "commercial infill development along major roads." Although his planning perspective is rural in nature, his interest in protecting and improving community character make his work pertinent to many more densely populated areas. To different extents, his work addresses site planning issues, landscape, retrofit solutions, the overall form of the strip, and implementation. Arendt characterizes the strip as a "commercial kudzu because it is virtually impossible to eradicate once it is established...." But, goes on to say that its "...outward appearance can be improved and its functions can be broadened" (Arendt, p142).

To reclaim existing strips, he suggests controlling the bombardment and disorder through the "amortization" of plastic signs, and their replacement with heavy planting and vertically organized sign clusters. The addition of street trees will soften and hide character-less architecture and parking lots, and has the potential to create green "gateways" into communities.

Because signage reorganization and tree planting programs are likely to be unpopular with business owners due to the drastic change in visibility, Arendt suggests offering business and property owners a floor area incentive at the sidewalk's edge (see figure 1-8). By building separate small structures at the edge, rentable floor space is increased, views of large asphalt parking lots are buffered, and a sense of townscape is created. Gaps left between new buildings provide a "filtered view" of the older shopping area and the plentiful parking. Arendt also points out that residents say their shopping decisions are influenced by quality of service and reputation of the store, repudiating the merchants claim that full parking lots serve as a subtle advertisement for the stores in the center (Arendt, p145).

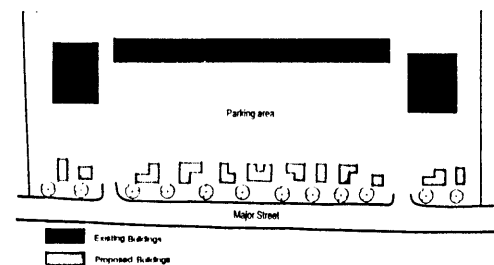


Figure 1-8: Increased retail space at the sidewalk's edge (Arendt)

As commercial strips redevelop, new buildings could be required to front on the street and provide parking along the side or in the rear. Through this gradual redevelopment process a system of interconnected parking lots can provide a secondary circulation system while lessening the impact on through traffic (see figure 1-9). Arendt suggests that as parking is relocated to the back of the stores, facades should be encouraged, through architectural detailing, to reorient to face the parking lot, and pedestrian amenities should be provided along the new fronts of the buildings.

The final example of “reclaiming the strip” in Rural By Design is the effort of the Warren Township in New Jersey to transform an “uninspired collection of parking lots and strip commercial developments scattered around the intersection of two regional arterials” into a town center (Arendt, p145). This is an interesting example not because of the structure of the town center but because of the implementation devices that are employed. To reform development in this part of Warren, officials adopted an urban design plan that proposed a rational network of interconnected streets that create a block structure for the desired type of village development. In addition to the proposed street network, the township also increased density, decreased parking requirements, and limited residential lot sizes in the area to 10,000 square feet.

Although these additional devices are crucial to the success of this particular effort, the idea of a rationalized street network overlaid on the strip has a much broader application. Implementation of new

streets in areas that are already developed is possible, Arendt says, through a planning technique called “official mapping.” An official map is adopted by the local governing body to inform landowners and developers of the preferred location of new streets; construction could happen through land takings, through negotiations at the time of redevelopment or through incentives. (Arendt, p127). As this example demonstrates, a long term plan for improving circulation and bisecting large parcels on the strip is an important element for improving the environmental quality of the strip.

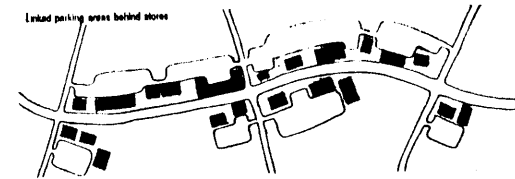


Figure 1-9: Connected parking areas (Arendt)

In terms of function, Arendt suggests that auto uses, such as gas stations, lubrication services, and muffler specialists, which do not mix well with other uses, might be zoned to certain streets perpendicular to the strip. Other perpendicular streets might be used to cluster heavy traffic generators such as fast food drive-through business. In this way, retail, office, and residential development can be used to create the character of the busiest street.

On a larger scale, Arendt like Benton MacKaye favors concentrated development at certain

points along a roadway interspersed with open space and farm land. In some locations, the concentrated development could be hidden behind intense indigenous landscaping to maintain the roads scenic quality while at other nodes vernacular townscapes could develop. In order to create this macro form he suggests "up-zoning" certain areas while "down-zoning" others. To be equitable to landowners in down-zoned areas development rights could be transferred to up-zoned districts. He also points out that because these roads are often state owned and maintained, state governments should reclaim some of their zoning authority to empower them to manage development in these corridors.

Regional Plan Association - 1994

"Redesigning the Suburbs: Turning Sprawl into Centers," is a 1994 study by the Regional Plan Association (RPA) in conjunction with a regional planning council in New Jersey. This study addresses a site in New Jersey that includes a commercial strip and an adjacent historic village. The site examined in this case study is particularly important because many commercial strips have developed along roads that by-passed older village centers.

Effectively joining auto oriented development and commerce to nearby historic centers is a challenge. The RPA case does not provide packaged solutions or detailed approaches, but it does acknowledge the importance of linking and mixing these development types. Because of the retailer's need for

a large volume of traffic and large scale facilities to keep costs down, they are often incompatible with historic villages. The RPA realized this incompatibility and does not advocate allowing big box stores in historic centers, but does suggest they be linked to historic centers with pedestrian ways and smaller scale infill development.

RPA has also examined commercial strip environments as part of a visual simulation project (Working Paper 15, 1992). They produced renderings of the strip that clearly delineate potential development patterns for commercial areas along roadways. The first rendering is an example of existing conditions while the other two are alternative outcomes of the same amount of development (see figure 1-10). Without words, jargon, or imagined stretches, the RPA renderings create a vision of a strip that is accessible to cars and pedestrians, and incorporates many uses and building types.

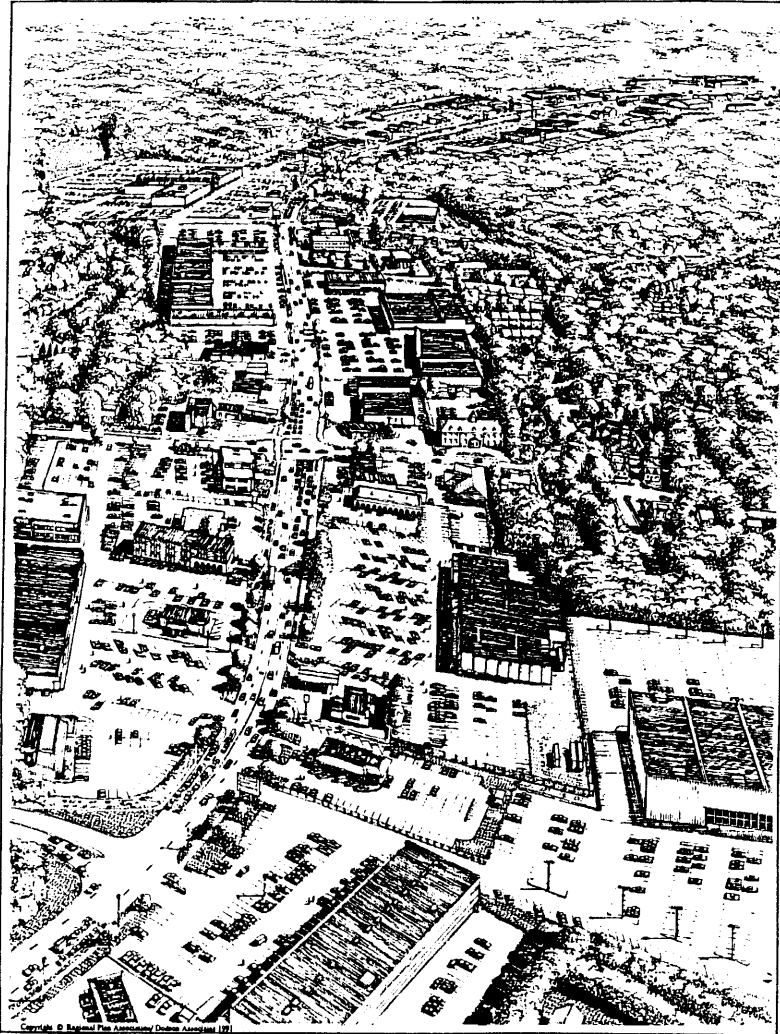
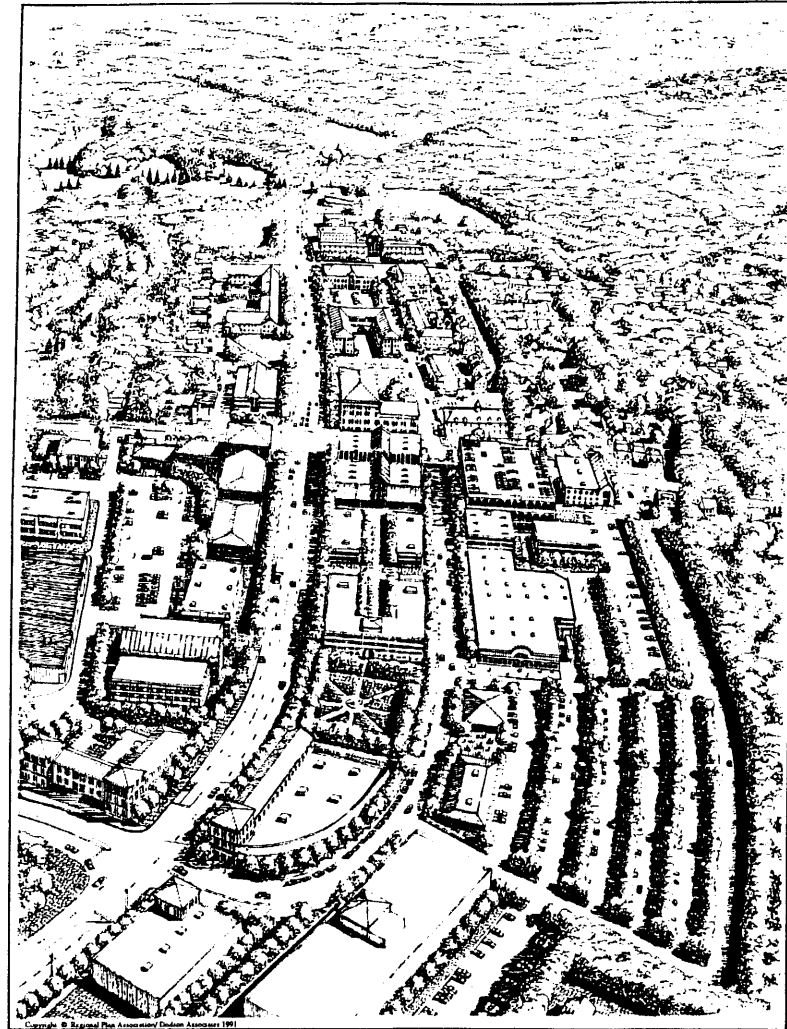


Figure 1-10: The strip before



The strip after (RPA)

CHAPTER TWO

WHOLE STRIP URBAN DESIGN PLANS: CASE STUDIES

Few communities have taken on the challenge of improving the strip from an urban design standpoint. In many places, towns have used the strip as a place to push undesirable uses that are not appropriate to downtown. In communities where automobile transportation is necessary for all activities, the strip often replaces main street. Three communities which are trying to reverse this situation and integrate the strip into the fabric of the surrounding area are Riviera Beach, Florida, the cities along Highway 99 in Snohomish County, Washington and the city of Bellevue, Washington.

Although each of these communities and their strips are different, they have all embarked on efforts to transform automobile dominated commercial districts. Each community has a vision of what they would like their strip to become and are in the process of implementing change.

RIVIERA BEACH, FLORIDA

Riviera Beach is probably most well known for its flashy appearance in the book, *The New Urbanism*. In this book, a neotraditional concept, "traditional neighborhood development (TND)," is applied to this small city at the northern edge of West Palm Beach, Florida. The plan depicted in the book was designed for a large part of the city, but the backbone, and main corridor of the plan, is essentially a commercial strip.

The Community Redevelopment Agency (CRA) of Riviera Beach has special planning and development authority, including the power of condemnation, over a 705 acre district within the city. The area is a half mile wide corridor between the Intracoastal Waterway and the railroad tracks that run north-south. US Route 1, locally known as Broadway, is the main corridor of the city. The original Urban Design Plan encompassed the entire CRA.

Present day Broadway is in the same condition as it was at the time the plan was created in 1991. Walking up and down the street it becomes immediately apparent that, at a previous time, parts of Broadway operated as a traditional "main street." This is particularly noticeable at the intersection of Broadway and Blue Heron Boulevard. The combination of suburban development standards, the state

mandated removal of parallel parking, and development further from this center have significantly eroded the original character of the street and created a medium-scale commercial strip (see figure 2-1).

The Urban Design Concept

In late 1991, the CRA's director, Mr. Rielly, and urban designer, Mark Schimmenti, initiated a planning effort for the CRA region to create ideas and visions



Figure 2-1: General character of Broadway (1/4/95).

for the city. A typical neotraditional scheme emerged from a week long charrette process. The core of the plan was the restoration of Broadway from its current broken state into a densely developed traditional "main street." The plan also included new development standards for residential neighborhoods adjacent to Broadway and the creation of a new Civic Center on the waterfront.

The photo montages of Broadway's potential future are dramatic. The street is lined with three to four story buildings all with arcades and balconies. Retail uses exist on the ground floor, and residential and office space exists upstairs (see figure 2-2). The contrast of the neotraditional build-out and the current development standards build-out is compelling.

Aside from the successful use of computer imaging and photo montages to create and compare "visions" of the future, the plan is not exceptionally innovative. The idea behind the plan is to change the image of Broadway by recreating a "main street." This reclamation of Broadway will be done through the use of traditional south Florida building forms and a new set of development standards.

Translation to a Master Plan and Code

The attempted implementation, and the lessons the experience provides for city planners are the most interesting aspect of the CRA's effort. While the city of Riviera Beach shares all the natural amenities of its wealthier neighbors, such as Palm Beach, it is one of the poorest cities in the county. Many of the

region's industrial activities –regional port, power plant and fishing industries– have been pushed out of other cities into Riviera Beach.

The first problem encountered trying to implement the plan was not with the Urban Design Plan per se, but with the director of the CRA. The community and the Board of Directors became concerned that the director was substituting flashy plans for action. Rielly eventually left. When Neil Creilly took over, he was instructed not to “take the CRA’s money and spend it on endless master planning exercises that are going to sit on the shelf, but to get some development started” (Interview with Neil Creilly, 1/6/95)

The first changes to the concept of creating a main street out of Broadway occurred in the translation from the Schimmenti Urban Design Plan to a Master Plan. Input from the community made it clear that adopting standards that required a vertical mix of uses and very specific site planning, from the north end of Broadway to the south end was an unrealistic approach for the whole district. For this reason, the Master Plan requires main street nodes or areas separated by land that is zoned for “general commercial.” Places along Broadway where the character of main street is most important are still regulated by neotraditional standards, but the idea of creating the genteel southern street, depicted in the visualization, along the entire length of Broadway was recognized as unrealistic. The city felt they had to provide some opportunities for less expensive development along Broadway.

The blocks fronting the intersection of



Figure 2-2: Visualizations: existing Broadway; build-out with typical standards; build-out with New Urbanist standards (Katz).

Broadway and Blue Heron Boulevard, and areas along Broadway adjacent to the new Waterfront area were designated as “downtown” or “city” streets that require development standards with all of the urbane features of the espoused by the neotraditionalists or new urbanists. The code, organized by street hierarchy, demands all of the site planning and use requirements that contribute to good urban or small town streets: 100% street frontage, build-to lines, active ground floor uses, transparent storefronts, vertical mixing of uses, and on-street parking.

In addition to the site planning and development standards, the Master Plan also adopted an architectural code. This code details acceptable building materials and architectural style. The purpose of the code is to “ensure an architectural aesthetic that complements the ‘maritime community’ theme of south Florida” (Riviera Beach Master Plan, p25).

The next step in translating the urban design vision to a master plan was to establish a threshold level of redevelopment at which point the Master Plan Code provisions become mandatory. The plan set this threshold at an exterior improvement or expansion cost of more than 30% of the assessed value of the property. New investment of less than 30% is permitted without implementation of the Master Plan Code, but architectural standards do apply. These requirements were established because the CRA did not want to discourage small scale improvements; at the same time, they felt that the architectural improvements were the most important element for creating a new image for the city.

The Master Plan is a strong, cohesive plan, with one major hole. The plan presents a clear set of principles, with a simple innovative way of conveying the requirements of development in each area based on a street classification system and some descriptive diagrams. But deep inside the plan, in the section called “The Master Plan as a Set of Rules,” lurks a backdoor which allows all the principles of the plan to be overridden by the judgment of the CRA’s board of directors (i.e. the City Council). This is not an uncommon in many plans because most cities allow variance to be granted from zoning regulations or master plan requirements, but in Riviera Beach, this approach will likely become the rule as opposed to the exception.

These judgment calls will have serious ramifications for the transformation of Broadway. As an example, we can look at the current proposal for a Walgreens drug store on the site of a present car wash at the corner of Broadway and Blue Heron Ave. At this corner, both streets are designated as “downtown streets” and are slated to become a node of more intense development. The Master Plan identifies this area as the future “city center” with buildings up to 8 stories featuring arcades or cantilevered overhangs for shade and protection from rain. It also mentions buildings being set back at the corner to “create the impression of a broad plaza or court” (Riviera Beach Master Plan, p12). The proposed Walgreens building which is being supported by the community and the board, meets none of the stated site planning, density, or use requirements in the Master Plan. The

building does meet the architectural standards with its Mizner-esk style, but has no relationship to the street or corner, and is simply a “graphic” improvement over a typical strip building (see figure 2-3).

Creilly explained that members of the Board, which lacks a planner or architect, considered the rendering of Walgreens with its landscaped parking lot a large improvement over the car wash that is currently on the site. “The board does not understand things like building scale or the relationship of buildings and streets. And, in a community like this, frankly those things are not all that important” (Interview with Neil Creilly, 1/6/95).

After talking with Creilly further, it became clear that he felt the Urban Design Plan and the reflection of it in the Master Plan could significantly change the development pattern along Broadway if it were the code for a wealthier city. A city like Boca Raton or Palm Beach would have a planner and architect on the board of directors who would be better informed about the importance of detailed site planning controls and have more potential development options from which to choose. “In this community, it is more important to fill vacant stores, and get new buildings on vacant lots,” he said. In Riviera Beach, the Walgreens proposal is one of the first new developments in years.

Another example of the mismatch between the economic reality of Riviera Beach and the Urban Design Plan is evident in the requirement of residential uses on the second floors of new buildings. The rediscovery of the importance of vertical mixed use is

a current trend in many newly urbanizing areas; it will activate commercial streets for more hours of the day, bring people closer to their jobs so they travel less, and will increase safety by putting more “eyes on the street”. Second and third floor residential uses are an important ingredient to creating a traditional main street. Unfortunately, Riviera Beach has a large supply of housing within a few blocks of Broadway, and numerous vacant or abandoned sites for future development. If people can buy a single family house on a



Figure 2-3: Proposed Walgreens on corner designated for "downtown streets" (1/6/95).

quite street very inexpensively within a short walk (or drive) of “main street” it is not likely that there will be much demand for housing in apartments along the State highway. In this type of economic and physical environment, it does not make sense to require new

buildings to include a housing component on the upper floors. This kind of reality check is important to a plan, like this one, that places so much emphasis on one building type or use.

Summing up his feelings about the Urban Design Plan for Riviera Beach, Neil Creilly said, "it was a good plan and vision in the wrong place and at the wrong time." It was "Rolls Royce" thinking in an area that currently needs a pick-up truck to make things happen.

Current Efforts

Creilly believes that a large new development, that would act as a catalyst for higher quality development, would have a larger effect on Broadway than the regulations and small parcel by parcel redevelopment projects. In order to bring large new projects into a city like Riviera Beach aggressive salesmanship and "deal making" are important. Creilly is currently talking to the Rouse Company and the County Convention Center officials about the possibility of a mixed-use convention and retail development along the waterfront that would open its "front door" on Broadway. One high quality project has the potential to set a strong precedent, if not for the whole street, at least in the immediate area.

In addition to long term planning, and active salesmanship, the CRA also invests in short term, results oriented, programs. Interim efforts in Riviera Beach include an incentive sponsored by the CRA to encourage activities such as facade and landscape

improvements, and informational efforts like the Demonstration Block program where the CRA pays 75% of the cost to renovate the city theater and the other stores along the block. Although these programs will have only a small physical effect on the street, they are steps that will start to transform the image of the district and eventually revitalize it.

Ideas and Lessons

The first and clearest lesson from Riviera Beach is that economic reality cannot be overcome by computer generated visualizations alone. Although photo montage techniques are a powerful tool for peering into the future, a real place with real needs requires a careful match between future visions and current reality.

From a physical standpoint, the idea of creating a traditional street is an option that would improve the image of any strip. On Broadway, this approach is a natural fit because of the street's history and the remnants of main street past. The grid layout in the city also provides many connections to interior streets and easy access for parking behind buildings.

Although it is unlikely that a full-scale strip without a main street history would evolve in this way, the Riviera Beach plan does provide some ideas and lessons for humanizing other strips. In the images from Schimmenti's concept, smaller buildings take over the parking lots along the street while some of the existing large floor plate buildings remain behind the row of neotraditional buildings. Although not

specifically mentioned in the plan, this demonstrates an idea for transforming strips or parts of strips into high quality "A" streets while intersecting or parallel streets would be of less importance. These less important "B" streets could accommodate less desirable building forms and uses. In this case, the new "main street" buildings create the "A" street space, while other uses such as the large Barnett Bank office building would be accessed off of an intersecting "B" quality street. In essence, the high quality "A" street is a layer along the edge of the strip development, and allows businesses such as gas stations, tire stores, and drive through restaurants to locate out of sight on "B" streets.

In the Master Plan, there is discussion of creating a by-pass road to relieve some of the traffic pressure on Broadway without having to widen it. Street widening is often an issue along busy commercial streets and if a by-pass road is feasible it creates other development options as well. The use of the parallel Avenue E in conjunction with Broadway to create a "one-way pair" could also be applied to other places. The by-pass road could be used to avoid the new downtown area or, if developed with standards similar to those along Broadway, could create the potential for a larger downtown development area. Concentrating new development between two major roads would provide plenty of access and possibly provide critical densities to support public transportation. The area in between Broadway and Avenue E could develop as the city blocks of the downtown or as a series of alleys and "B" streets that accommodate

less desirable uses.

Lastly, the conceptual change from a homogeneous "main street" in the Urban Design Plan, to the node oriented system of "downtown" streets and streets zoned for "general commercial" seems to be a good compromise and one that will reappear in other strip improvement plans. One possible conflict: For the image and experience of the strip as a whole, these nodes should be situated at equal distances so that people could predict their occurrence easily. But, for use by adjacent neighborhoods, nodes are most useful if they are close to housing and provide everyday needs. These two conditions might not coincide.

HIGHWAY 99, SNOHOMISH COUNTY, WASHINGTON

Lynnwood and Edmonds are suburbs north of Seattle. Highway 99, a road that runs from the Mexican border to the Canadian border, cuts a sprawling swath through both cities. Once the west coast's primary north-south highway, it has been surpassed for long distance travel by Interstate 5. In Lynnwood and Edmonds, Highway 99 continues to be used for through traffic but it has also become a major shopping area for both cities. While development along the road has always had a "roadside" character, it developed into a full-scale commercial strip in the 1970s and 1980s.

If strips were graded on the number of Kmart's, Office Depots, Car and Truck dealerships, or Kentucky Fried Chickens along a 10 mile section, Highway 99 would be placed in the top of its class. If strips were rated by the lack of hospitable pedestrian environments, it would graduate summa cum laude. In every sense of the term, Highway 99 is a sprawling commercial strip (see figure 2-4).

In 1987, Snohomish County and the cities of Lynnwood and Edmonds created the Highway 99 Task Force to develop a long-range plan to "stimulate and promote economic development along the business corridor" (Highway 99: Streetscape Improvement Guidelines and Schematic Urban Design Plan, pV). Members of the Task Force included officials from each jurisdiction and property owners along the seven miles of road. Over a two year period the Task Force developed the "Highway 99 Baseline Report." This report was created to serve as the basis for a multi-

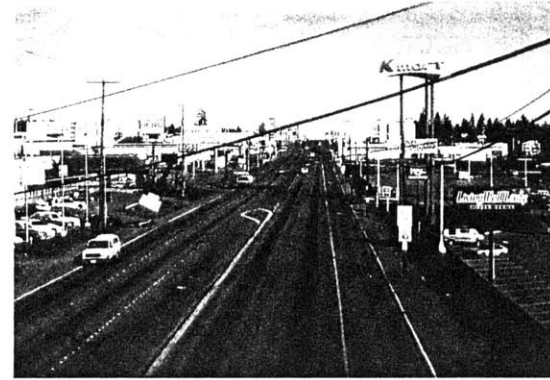


Figure 2-4: Typical character of Highway 99 (1/25/95).

jurisdictional Highway 99 Master Plan. The report recommends marketing and image improvements, new and consistent development standards for physical improvements, and guidelines for roadway improvements.

A series of public meetings were organized by the Task Force. Input from the public helped rank the issues that needed to be addressed. Items at the top of this list included the enhancement of streetscape, promotion of higher quality development, creation of "locational clues," and improvement of pedestrian access. All of these elements will help establish character and identity in the corridor. Development of the Streetscape Improvement Guidelines and Schematic Urban Design Plan (hereafter, the Highway 99 Plan) was the next step in the planning and implementation of this effort.

The Highway 99 Plan phase of the project started with the creation of a new Task Force and Advisory Committee comprised of many former mem-

bers as well as a few new ones. A variety of streetscape images were evaluated to decide how the committee should focus its work. Although this was not a controlled environmental preference survey, it did help create a common context within which the Committee could discuss the types of environments they valued.

The images which ranked highest reflected landscaped highway edges with sidewalks and curb cuts, buildings close to the street, less parking between buildings and the street, and buildings with "character." After some consensus was reached, the Committee adopted the following mission statement:

"To develop a long range master plan and development guidelines ... to guide development along Highway 99. To promote the implementation of the master plan by making the necessary code changes and development standards common to each participating jurisdiction needed to implement coordinated and controlled growth in the study area" (Highway 99 Plan, pVII).

With a consensus reached, and a mission defined, the Committee set out to hire a consultant. The Committee prepared new guidelines and a Schematic Urban Design Plan with input from the public. While the Highway 99 Plan is not supported by the force of law, it is a useful framework for each of the jurisdictions to use in updating their comprehensive plans and zoning by-laws.

Highlights of the Plan

The development guidelines in the Highway 99 Plan are solid, but they do not create any images, either mental or physical, to display the road's potential. Unlike the Riviera Beach Urban Design and Master Plan, which was heavy on image but light on reality and appropriateness, the Highway 99 Plan approaches improvements to the strip in a piecemeal, yet practical, fashion. Community involvement at the onset of the plan, the multi-jurisdictional factor, and the extent both in length and built form that the Plan addresses are responsible for these differences.

The Schematic Urban Design component of the Highway 99 Plan will "create, over time, an identity for the project area that is unique and superior to the rest of Highway 99" (Highway 99 Plan, pIX). The plan identifies "specialized" areas along the road, that will be developed further and distinguished from each other to create recognizable nodes that will also work together to bring "structure and identity" to the road (see figure 2-5). Nodes along the seven mile route are centered around intersections that provide access to adjoining neighborhoods, bus stops, and more pedestrian oriented development.

The plan distinguishes between "regional nodes" of greater intensity and "neighborhood nodes." Regional nodes are proposed for intersections that carry large amounts of east-west traffic between Highway 99 and Interstate 5. These areas are expected to absorb the largest and most significant new development. Site planning concepts for these areas include taller buildings along the street to create a

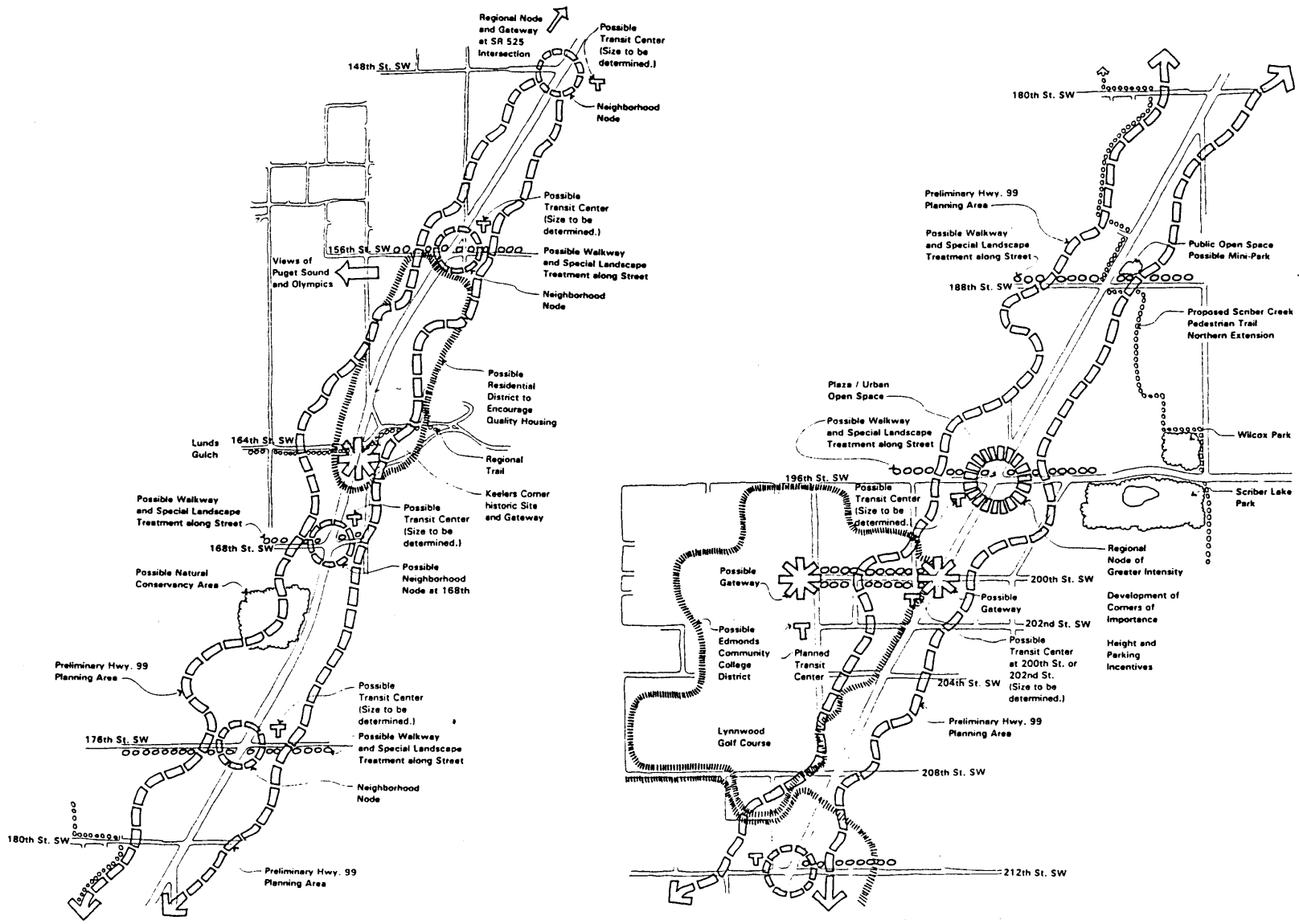


Figure 2-5: Two sections of the Highway 99 Schematic Urban Design Plan (Highway 99 Plan).

“sense of defined space,” and hidden parking behind buildings or below grade. Residential uses will also be encouraged in these areas. Neighborhood nodes will be developed less intensely than regional nodes and locally serving businesses will be encouraged. Buildings will be smaller than those in regional nodes and low parking requirements will be used to encourage pedestrian access.

Linear areas are located between nodes along Highway 99. These sections of the street are reserved for auto-oriented businesses and less intensive development. These areas will continue to be strip-like, but guidelines and standards will emphasize coordination and pedestrian connections between building and uses.

In addition to nodes and linear areas, larger “districts” are defined around Stevens Hospital and the Edmonds Community College. Neither facility is located on Highway 99, but the districts will be defined to integrate the road into the area surrounding each facility to give the institution a presence in the corridor. The Hospital District will have a pedestrian orientation and a potential regional rail station. In the Community College District, an opportunity exists to create a campus character and significantly increase the amount of multifamily housing.

“Gateways” are used in the plan to signify a sense of entry. These landmarks could exist at the north and south ends of the corridor and at important east-west access points. In addition, smaller gateways will identify entry into the districts mentioned above. Signs, special landscape, outdoor art, or spe-

cial buildings will be used to identify the arrival at the highway or at special places within it.

The current Urban Design Plan is very schematic and exists only as symbols on a map. Because the study area is very extensive, schematic design is an appropriate place to begin breaking the anonymous strip down into a system of smaller places with differing character. From this point, more detailed studies of each node and district could be commissioned, over-lay zones could be created, and appropriate master plans prepared.

Lynnwood and Edmonds are planning on setting a redevelopment threshold that would trigger the improved development standards. Although not specifically stated in the plan, both Cities will require that the standards be met if the threshold is surpassed. While exact standards are currently being debated, Darryl Easton of the Lynnwood Planning Department believes they will be based on the percent increase in floor area. A performance standard will be developed where, for example, increases of floor area up to 15% would trigger parking lot landscaping requirements, increases of floor area up to 25% would trigger both parking lot landscape and facade design requirements, and increases of 50% or more would require that the whole site be in conformance.

Although many of the guidelines in the plan are landscape oriented, the two planning departments are currently thinking about possible incentives to encourage “hard” improvements. For instance, a program could be developed that allowed required landscape

improvements to be traded for better site planning or building forms. This would create an “either/ or” situation where developers would chose the improvements that are least expensive.

The site planning guidelines encourage buildings to locate closer to the street. This is a crucial component in node areas, but the Highway 99 plan also encourages at least part of the building to front the street in linear areas. The visual effect of this is to break up expansive parking lots between the street and the front of the stores, but at the same time, it creates buildings which are most easily accessed from parking areas along the side or behind. This kind of approach in linear areas might make it more difficult to improve connections between sites.

The section of the plan addressing shared parking provides more promising ideas for auto oriented site planning with pedestrian connections. The plan encourages shared parking through parking ratio reduction incentives and design review. Shared parking in its own right is an important policy for humanizing commercial strips. It also creates opportunities for consolidating curb cuts and creating clusters of big box stores with satellite parking. Siting stores closer together creates shorter, and potentially more pleasant walks (see figure 2-6).

The plan emphasizes the importance of coordinating connections with uses. For example, pedestrian connections between the gas station and the supermarket are not as important as those that might link large employers with restaurants and shopping. Residential connections should also be viewed in the

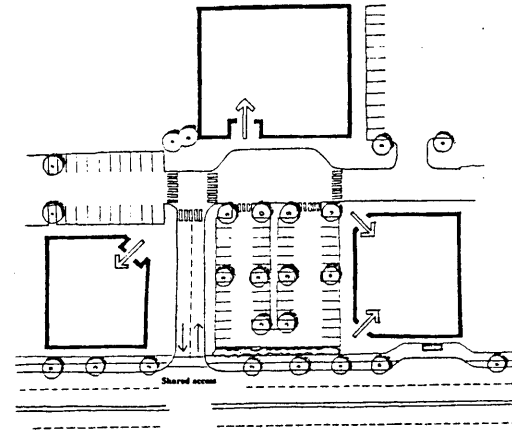


Figure 2-6: Clustering big-box stores provides opportunities for people to park once and walk between establishments (Highway 99 Plan).

same way. Ideally everything should be well connected to both the street system and the pedestrian circulation system, but key connections are an important place to start.

Finally, the plan includes a section on “visual design.” This section provides methods for highlighting and defining entrances to buildings, and other ways to improve the visual character of development viewed from the road or from a pedestrian point of view; it seeks to develop a more “unified design identity” for the highway. (Highway 99 Plan, p47). The guidelines for building entries include a list of nine means for enhancing entries from which two will be required. The list includes items such as a certain square footage landscape around the entry, artwork, canopies, special paving, benches or other pedestrian facilities. Similarly, it is suggested that the facades and scale of new buildings visible from the street

incorporate elements from a list to improve their appearance. In general, the guidelines encourage more detailing on new buildings and suggest the use of similar elements (i.e. roof forms) to create design identity. Overall, the Highway 99 guidelines take a more free-form approach to buildings than the Riviera Beach concept.

Lessons and Concerns

In its early stage, the Highway 99 Streetscape Improvement Guidelines and Schematic Urban Design Plan are a comprehensive start for the three jurisdictions in their effort to improve the strip.

Although a large portion of the guidelines focus on landscape or other "soft" improvements, some important site and system planning components included.

Bringing buildings closer to the street, especially at nodes, is a standard "urban" approach. Buildings in cities and in older town centers line the street to create a main street character. This type of character would improve portions of Highway 99, or any strip, tremendously, but is it appropriate at the edge of seven lanes of traffic moving at 45 to 50 miles per hour? It is possible to create pedestrian streetscapes along large busy roads, but it is typically done with the boulevard model where service roads, parked cars and wide landscaped medians separate fast moving cars and people. On Highway 99, bringing the buildings close to the street without including on-street parking or other buffers from the traffic is not a viable solution.

Creating districts that incorporate the highway into larger areas as opposed to only building along the edge is an interesting idea. The "districts" mentioned in the Highway 99 Plan have the potential to break up the monotony of the commercial strip environment with structures and open spaces that are not usually associated with sprawling commercial areas. Increasing the density of jobs and residences close to the road, creates the potential to mix office, retail, educational, and residential uses in ways that do not often occur in these environments.

Creating continuous pedestrian connections between sites is an important component to improving the useability of the road. People live along streets intersecting Highway 99 and one can currently see people walking to, and between, businesses along the road. The plan realizes the importance of street edge connections as well as more direct cross-parking-lot or cross-property-line connections.

It will be interesting to study this effort to improve and transform seven miles of full-blown commercial strip as it matures. Highway 99 faces the same problems of endless parking lots, massive plastic signs, huge national franchises, traffic, etc. that many roadways in this country face. Any character and distinction that these communities are able to create, and the components and tools they use, will be of help to strips nationwide.

BELLEVUE, WASHINGTON

Bellevue, Washington, across the lake from Seattle, is a city of strips. The combination of the superblock grid, that produced large deep parcels, and the city's post World War II growth created a completely auto oriented downtown by the early 1970s. Suburban development standards in the 50s, 60s, and early 70s created what Jane Holtz Kay described as "strip city" (Holtz, p8) (see figure 2-7).



Figure 2-7: One of many strips in "strip city" (1/26/95).

What is interesting about Bellevue, is not its evolution into a grid of commercial strips, for that is the story of many US suburbs, but rather its effort to transform the suburban grid to an urban grid, or urbane downtown. In 1979, the city wrote the CBD Action Plan and adopted new development regulations. City planners, with the support of the business community and residents, and with a promise to limit commercial infringement on residential areas, increased allowable densities and heights while cut-

ting parking requirement ratios in half. The code was revised to include incentives for open space, ground floor retail, and other public amenities.

The impetus for the Action Plan was the proposal of a new regional mall just off the interstate at the city limits, and slower growth rates since the 1960s. Its vision was, and still is, a mixed-use pedestrian-oriented downtown. In 1981, the city adopted the implementation tool, a distinctive land use code for the CBD area. It was adopted in time to be used during the next period of growth in the area. One of the first redevelopment projects under the new codes was the expansion and renovation of Bellevue Square, the retail mall in downtown.

Transforming Strip City to Real City: Efforts and Approach

The vision behind the land use code is a network of open spaces and pedestrian links. The spine of this network is the 6th Street pedestrian corridor running from Bellevue Square at the west edge of the CBD to the transit plaza in the east. The development of the corridor is intended to be privately constructed, in pieces, by property owners of abutting property as each one redevelops. The plan provides incentives for this corridor construction including floor area bonuses and the right to exceed the height limits in return for a piece of the corridor that meets specific guidelines. A requirement of mid-block connections through buildings or across property along the pedestrian way is also included in the code.

The role of the city in this process is to aid in the development of corridor design guidelines, and, through the review process, ensure that improvements are being made as the property is redeveloped. In addition to incentives for development of the corridor, a frontage association was organized to help author guidelines. These adopted guidelines are very general and do not attempt to create absolute standards, but rather, bring together streetscape elements, ranges in passageway widths, and building-sidewalk relationships to create good urban environments. The guidelines include sections titled “elements of diversity” and “elements of continuity,” intended to create a vibrant mix of forms and uses along the corridor while building a passageway that is greater than the sum of its parts.

The corridor is not designed as one piece; portions of it will be designed as the associated property is redeveloped. Publicly owned streets and rights-of-way make up only 30% of the land area that will form the corridor. The other 70% is privately owned and maintained. Unlike many “streetscape” or public works sponsored improvement projects that are designed, funded and implemented at once or through planned phases, the 6th street corridor is only a framework around which development will occur following a set of adopted principles. The only stick, in this carrot and stick arrangement, is design review by the planning department and city council.

Bellevue does not have an end-state or master plan for the city as a whole, or for the pedestrian corridor. They operate according to guiding principles for

how development should occur and what components should be included. Bellevue seeks to create an urban environment, not a homogeneous pedestrian mall designed and built at once, but rather, a downtown area and 6th street corridor that develops naturally as it responds to conditions over time. Mark Hinshaw, the city’s Urban Designer, summed up this philosophy, “We have stayed away from models and end visions because it is going to change” (Kay, 1991). City building is a long continuous process that will change along the way. Bellevue’s flexible principles will accept and encourage that change. Building by building, project by project, the city of Bellevue is transforming its downtown (see figure 2-8).

Long Term Lessons

While reading articles about Bellevue’s efforts and its 6th street corridor, one may be fooled into thinking that you can go to Bellevue today, stroll down the corridor, and enjoy the “public space that the private sector built” (Hinshaw, p6). This is not the case quite yet. One end of the corridor is complete and is actively used as a transit plaza and sidewalk/retail space that was inserted into the ground floor of the existing office building. The terminus at the other end is the entrance to the Bellevue Square Mall and the associated plaza containing outdoor seating for the surrounding restaurants (see figure 2-9). Both ends have a clean but urban feel, and are exceptional areas of the city. Between these two nodes of the corridor is a small string of sidewalks. These walkways

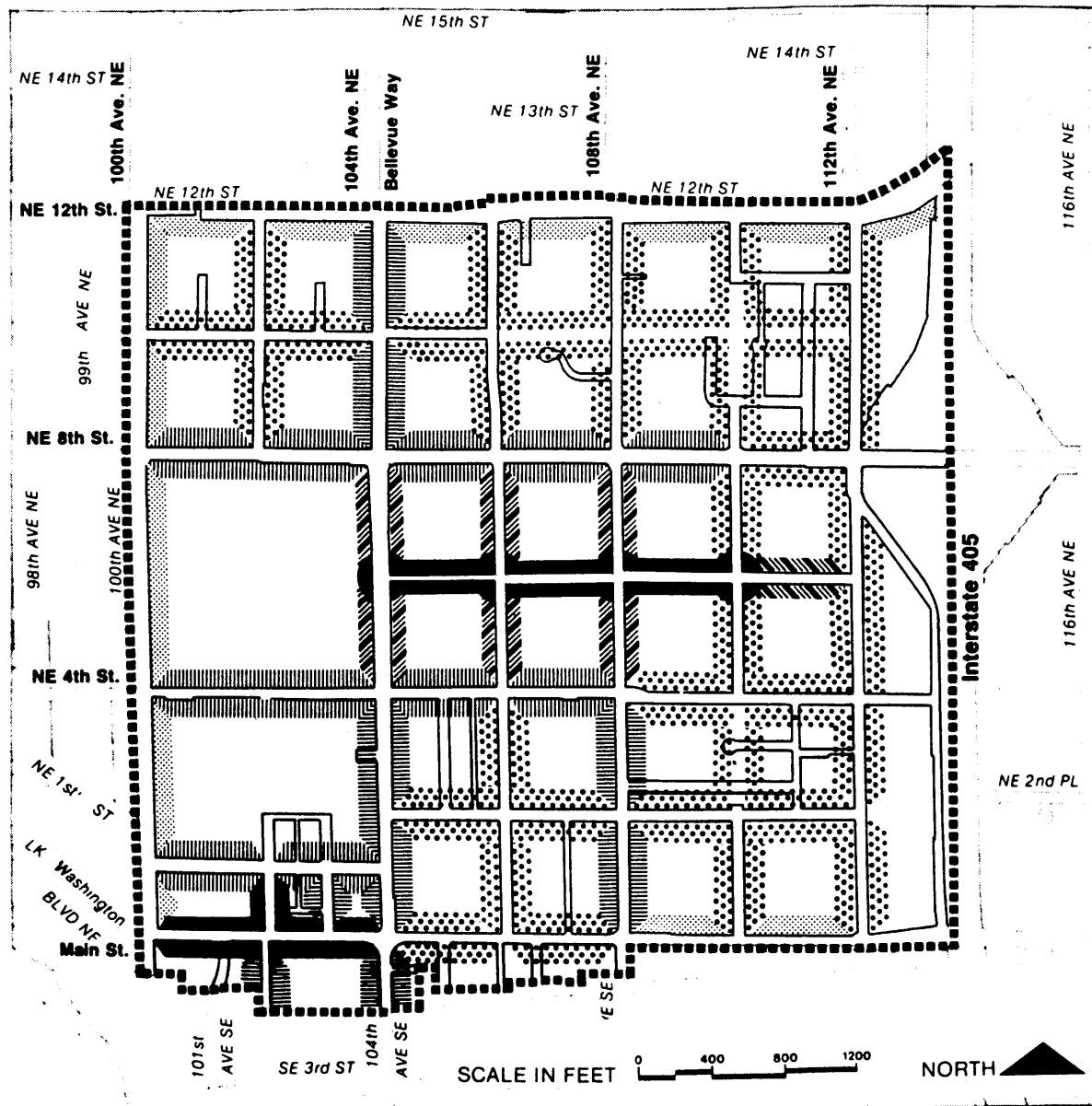


Figure 2-8: Bellevue's plan is a framework that only depicts streets with varying levels of amenity (Bellevue Planning Department).



Figure 2-9: The entrance to the Bellevue Square Mall at the terminus of the pedestrian corridor has been redeveloped to include sitting area and stores at the sidewalk's edge (1/26/95).

bisect parking lots and are fronted by big box buildings (see figure 2-10).

It is important to remember that Bellevue is a work in progress. Floor area incentives work well in times when there is a market demand for new buildings, but when the local retail or office market is saturated and the regional real estate markets collapse, as they did in the late 1980s, incentives are not effective. The corner of the 6th street corridor and 106th street proves this point. In the late 1980s the site was slated for a 30 story building that would have funded all the street level corridor improvements and created a major link in the east-west chain. Before construction could get off the ground, the real estate market crashed and the developer pulled out. Since then the owner of the site leased the existing theater to The Good Guys Discount Electronics store. The Good Guys gutted the structure, added a bold new facade,

and restriped the parking lot.

Someone visiting Bellevue for the first time would think this was a brand new big-box store with all the suburban trimmings right at the heart of downtown. Kevin McDonald of the Office of Planning Policy explained that this is an "interim" use that the city will have to live with until the site is redeveloped again (possibly 10 to 20 years). At some point the land intensive big box store will not be considered the highest and best use of the site and it will redevelop



Figure 2-10: Pedestrian corridor as it passes through parking lots and behind buildings (1/26/95).

again. McDonald does not view the electronics retailer as a setback for the city because their focus is on the long term and they are determined to create a "real" downtown even if it takes 50 or 100 years. During that time, the market will continue to fluctuate and interim uses will be allowed, but the city will continue to focus on the basic framework and vision of a dense urban environment. McDonald explained that

the city is planning on making some “interim” improvements to the corridor, and as part of this process is negotiating with The Good Guys to build a landscaped connection and some sitting areas across the parking lot to the pedestrian way.

Another example of interim conditions and uses can be found in the relationship between the new award winning downtown park and the Bellevue Square Mall. The 20 acre circular park just south of the mall has a formal entrance and hard surfaced plaza that fronts the “black hole” entrance to the parking garage under the windowless side of JCPenney (see figure 2-11). The other edges of the park are currently lined by the backs of gas stations, small retail stores, and other uses along much of the perimeter of the four block area. From the pedestrian corridor or the inside of the mall, one is not aware that the park exists and connections to it are circuitous. The poor connections are a result of the siting of the park. The park had to be built on its current location because the property was already publicly owned. These connections to Bellevue Square will only be improved through negotiations with J. C. Penney when they expand or renovate their store.

For many years the city has tried to encourage stores along the edges of the mall to open their facades to the street. They were successful in this endeavor at the front of the mall where the pedestrian corridor ends at the plaza. They have not been as successful on the north side. Nordstroms refused to build an entrance on the street as part of their recent renovation because they were worried about

increased shoplifting. The public investment in the park and the design and location of the park’s entrance could act as a catalyst and design cue to encourage J. C. Penney to open its facade to the street and to the park in the future. Initially the city had no reason to believe that J. C. Penney would entertain this idea, but the company is now considering renovations and is willing to discuss it with the city.



Figure 2-11: Park entrance across from the J.C.Penney parking garage entrance (1/26/95).

Guidelines intended to urbanize the city’s grid of strips have started to show some other interesting results. The site at the corner of 108th and Main Street is designated for high pedestrian orientation on one side and a transition to the neighborhood on the other side. The project is still under construction, but even at this stage it is clearly not a typical Office Depot and Toys-R-Us site plan or building prototype. The side of the building is at the edge of the sidewalk

along 108th Street with some small retail spaces opening to the street. The Main Street side is set back from the street to make space for a new restaurant and deli on the corner while providing a small parking area at the center of the lot. Although it is not an ideal site plan from an urban and pedestrian point of view, the new restaurant at the corner softens the blow of the parking while providing access to it through small passages between the buildings (see figure 2-12).

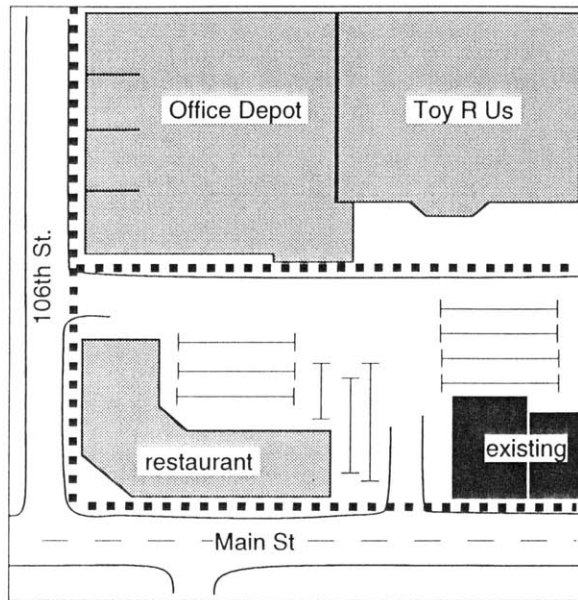


Figure 2-12: Approximate site plan of the redeveloped Office Depot and Toy-R-Us mall.

Originally a higher density mixed use development was proposed for the site, but it was withdrawn when the real estate market crashed. This project is another interim use but the city negotiated for a

design that at least met some of their goals. “What we got is not ideal, but at least we got more urban footprints and better than usual facades” (see figure 2-13). The compromise on the development also illustrates a difference between Bellevue and a strip like Highway 99. In Bellevue, the new Office Depot development is a compromise, whereas on Highway 99 it would be almost ideal.

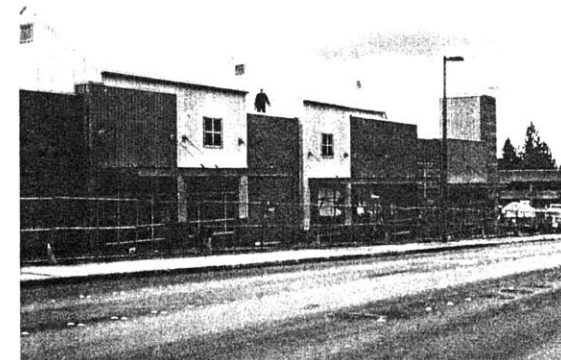
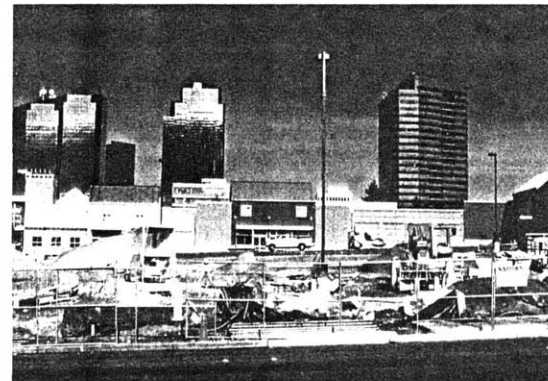


Figure 2-13: This is not the typical form of a discount store. Front view and side view (1/26/95).

Although the city is completely committed to building a real downtown, the Office of Planning Policy is currently debating the 50% reinvestment threshold that sets off the design review process. As it stands, it is an all or nothing endeavor. If 49% of the assessed value is invested in renovations or new construction, design review is minimal. At 50% the city typically pushes for as much as it can get. This level of reinvestment was acceptable during the 1980s real estate boom, but in recent years it has stifled some small scale projects that would have been more beneficial to the city, economically and physically, as interim improvements. The committee currently studying the issue will probably recommend the adoption of a stepped system where different levels of amenities and quality of design are expected based on the level of reinvestment.

The philosophy behind Bellevue's plan is that the market must rule. The guidelines and review process being used to transform Bellevue are tools that complement and work in unison with the market. The city is attempting to harness the market's potential with incentives and partnerships and is trying to nudge developers to make improvements based on the framework that the guidelines provide. In the end, the most important aspect of Bellevue's effort is not the market, the tools, or any one project, but the city's and the community's long term commitment to changing the form and image of the CBD.

CASE STUDY OBSERVATIONS

Each community started with a vision for the future of their strip: Riviera Beach envisions a walkable main street; seven miles of Highway 99 will be marked by a series of nodes with distinguishable character; and, Bellevue will create a dense, urbane downtown. Each vision is developed to a different degree of detail, but none is set in stone. Visions and plans continue to evolve through public participation and changes in the economy, but the important thing is that each community sees beyond the existing road and its haphazard development to a future of a different form.

Regulations seem to be the primary device for implementing change. Each community has, or will, determine a threshold of reinvestment or expansion at which point basic improvements, according to a plan, are required. These basic requirements are layered with the discretion within which city officials, design review boards, and community activists negotiate with developers to best fulfill their objectives. The latitude within which negotiations can occur varies for each community and often depends on the state of the local economy.

This latitude for negotiations has a geographic component and an economic component that either limits or enhances its potential for shaping development. Downtown Bellevue has geographic latitude because it is a desired location for companies and stores in the Seattle area, however, when the economy weakens, their negotiating power decreases and

less desirable land uses and building designs are implemented. A place such as Riviera Beach will also use negotiations to effect change on Broadway. But, here, because of the dire economic situation, the latitude for modifications and improvements to buildings or sites is much narrower, and at this point in time almost non-existent.

Another implementation device evident in all three cases is an informational or educational stage to shape the vision and garner support for the strip transformation effort. The urban design plan for Riviera Beach used life-like photo montages to demonstrate possible futures for Broadway. The Highway 99 project used visual preference surveys to provide the task force members with a common context for discussing different types of development and articulating their ideas about the road. And in Bellevue, a "short course" in urban design principles was used to educate the people involved with writing design guidelines for the pedestrian corridor (Hinshaw, 1983).

In terms of the physical approaches used to create a new character along the strip, there are some similarities between cases. In all three places there is a commitment to, and increased encouragement for, a greater mix of uses. On Broadway in Riviera Beach and in Bellevue, uses are encouraged (or at least not discouraged) to be mixed vertically with retail on the street level and office or housing on upper levels. On Highway 99, mixed uses are encouraged vertically within nodes, and also horizontally on large sites. Mixing uses is encouraged because it

adds activity to developments that are often single purpose shopping centers or office parks and uses parking area more efficiently.

In all three cases there seems to be an interest in bringing new development to the sidewalk's edge, creating a more urban environment. The reason for this is to enhance the pedestrian environment and encourage people to walk from one building to the next. All three efforts are trying to encourage development that will provide more walking opportunities.

The simplest, but most important commonality about these three efforts is their desire to change the strip. As these communities mature, they have decided that sprawling commercial development along the road is not the image they want.

CHAPTER THREE

EXISTING EXAMPLES AND OTHER RETROFIT OPPORTUNITIES

In addition to the conceptual ideas reviewed above and the current “whole strip” urban design efforts of Riviera Beach, Lynnwood, and Bellevue, built projects exist that provide examples and ideas for improving the strip. This is not intended to be an exhaustive catalog of quality roadside development, but rather, a discussion of select projects that exemplify the built, or partially built, outcomes of many of the ideas already discussed. None of the examples that follow were built as part of larger strip improvement efforts, but because development often occurs outside of larger scale urban design efforts, these project by project improvements are important.

The last part of this chapter will discuss some possible improved site planning and retrofit opportunities that might be applied to individual developments along the strip. Some of the ideas presented here are outgrowths of ideas mentioned before while others are purely conceptual opportunities that could be used as part of larger efforts. The underlying theme in the following ideas is that they all include some form of “retrofit” or new site planning alternative. In other words, they are all ideas that could adapt existing conditions to help diversify the strip in terms of

use and/or access. The retrofit examples are site-by-site improvements that, if accumulated, could start to improve the image and functionality of the strip as a whole.

Mizner Park - Boca Raton, Florida

Built on the site of the 15 year old Boca Raton Mall, Mizner Park was a public-private redevelopment project sponsored by the Boca Raton Community Redevelopment Agency. The objectives of the new development for the 30 acre site on Federal Highway (US Rte. 1), were to create an economic and cultural focal point in the community, and create momentum for other new developments in the area (Singletary, abstract). The first two phases of Mizner Park were completed in 1993, with a third phase projected for 1996. When complete, the mixed-use development will include 236,000 square feet of retail and movie theater space, 272 residential rental units, and 262,000 square feet of office space. In addition, the development includes a public amphitheater and a large open space.

Configured as an outdoor mall parallel to Federal Highway, Mizner Park has turned its back to the strip and created an internal street of much higher quality. The internal street integrates park space,

pedestrian movement, automobile access, short term parking, and access to Federal Highway at three locations. The east side of the project provides additional structured parking and pedestrian access from the adjacent neighborhood (see figure 3-1).

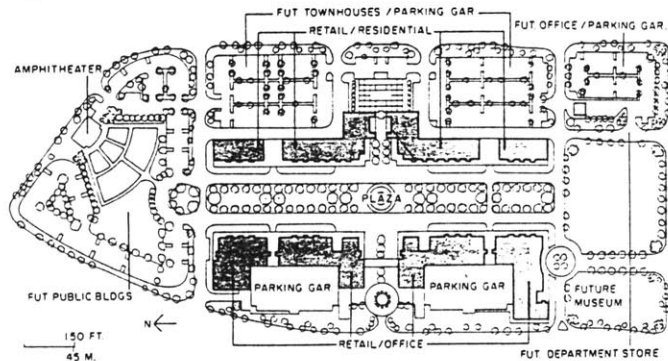


Figure 3-1: Mizner Park site plan (Architectural Record).

The aerial photographs clearly depict the effect of the project on that portion of the Federal Highway strip. This part of the highway is no longer dominated by parking lots, and from a traffic flow standpoint, the ordered access points on both sides of the development disperse cars to satellite garages or short term curbside parking (see figure 3-2).

Mizner Park creates a separate, human-scale pedestrian environment parallel to the road that is similar to Lynch and Southworth's "split road with central pedestrian path" or Van der Ryn and Calthorpe's "lifebelt" concept (without the sustainable energy component). What Mizner Park also does, which neither of the above concepts address, is it integrates suc-

cessfully slow moving automobiles and open space within the pedestrian environment. Although it is only two blocks long (1,000 linear feet total), one can imagine this form of development being extended along Federal Highway or any strip as parcels redevelop. Mizner Park has been financially and physically successful in part due to "...its orientation around a new linear park instead of a somewhat tawdry commercial strip called Federal Highway" (Architectural Record, March 1993, p91).

Mashpee Commons - Mashpee, Massachusetts

Mashpee Commons Town Center on Cape Cod is a neotraditional retail and office development that replaced the 1968 Seabury Shopping Center (see figure 3-3). The original 82,000 square foot strip mall, on a 25 acre site, was comprised of a grocery store, a variety store, and 26 "convenience-oriented" stores set at the center of 416 parking spaces at the intersection of state routes 28 and 151. The redevelopment of this site was driven by the developer's desire to demonstrate to the Cape Cod community that new development could respect local traditions and did not have to add to the sprawling character that exists on many of Cape Cod's major roads. In addition to the town center at Mashpee, conceived by the Cavendish Partnership, a master plan and urban code by Andres Duany and Elizabeth Plater-Zyberk, was adopted for a series of smaller village centers radiating from the main center.

Because Mashpee was "passed over" in the



Figure 3-2: Federal Highway with the original Boca Raton Mall and with the new Mizner Park. Internal street and plaza can be seen at the center of Mizner Park (Singletary). Eye level from the road and the internal street and plaza (1/5/95).

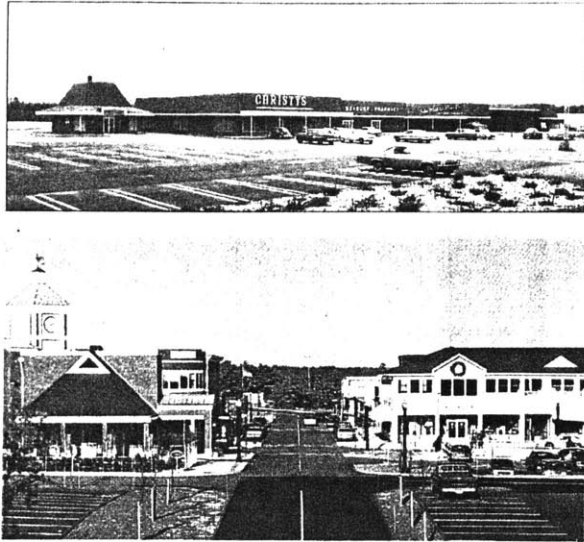


Figure 3-3: The New Seabury Shopping Center and Mashpee Commons (Architectural Record).

Cape Cod building boom of the 60s and 70s, it was spared the “chaotic roadside commercial boom” that afflicted many other towns on the Cape (Architectural Record, March 1989, p84). Mashpee Commons is part of a larger “town” building effort, but because of its location at the intersection of two major arterial roads and its history as a strip style shopping plaza, it provides an example that can be applied effectively to intensely developed strips.

The redeveloped site is designed to function as a town center with retail space, offices, a movie theater, institutional uses, and future residential uses. Some of the original structures were subdivided and adapted with new facades and roof treatments to fit the town center architectural theme. All new construc-

tion is traditional in scale, construction materials, and architectural detailing, and is situated along arcades or around small plazas. Access from the road is achieved through a new internal street system that creates a set of four blocks on the site that was previously dominated by a simple shopping center and its parking. Limited on-street parking is provided, and surface lots at the periphery absorb the remainder of the parking needs (see figure 3-4).

Mashpee Common in its current unfinished state, or in the form of its final build-out, is a manifestation of a higher density, mixed-use, pedestrian friendly node along a rural roadway or an improved commercial strip. Similar to Benton MacKaye’s “townless highway” concept, Mashpee Common is a village with “personality” that is separated from the road. In a more contemporary context the “neighborhood” or “regional” nodes envisioned by the Highway 99 Plan could be developed in a manner similar to Mashpee Common. The Highway 99 Plan envisions nodes that are centered around and bisected by the highway, but nodes of intense activity could also develop on a corner or multiple corners of an intersection. Mashpee Commons is growing from the middle of the site towards the edges of the highway and the planned neighborhoods. Large parcels along any strip could redevelop and evolve in this way.

Mashpee Commons is a successful example of: 1) mixing uses on a site that originally included only shopping and parking, 2) reusing existing structures for new development, and 3) providing a framework for growth and connections to surrounding

areas. The goal of merging a variety of commercial, civic, and entertainment activities in one place to provide a convenient, accessible, and pleasant environ-



Figure 3-4: Mashpee Commons site plan. Internal street network provides curb side parking, additional parking occurs at the periphery (Katz).

ment has been met. In terms of Mashpee's appearance from the road, it is still a work in progress. Future development is proposed in locations that will screen large parking areas from view. In the absence of new development, intense landscaping, similar to that used at Mizner Park, could soften the view of parking lots or structures.

Kentlands - Gaithersburg, Maryland

Kentlands is one of the most widely publicized neotraditional projects by Duany, Plater-Zyberk (DPZ). While it is primarily a residential development, the project also includes a large shopping center. Due to changes in the economy and internal financial problems, many iterations of the commercial component of Kentlands were developed. The challenge from the beginning was to create a hybrid between standard formulaic commercial design, that produces typical strip style development, and a traditional downtown (Krieger, p52). The design proposals and the conceived build-out of the existing center integrate big box structures, smaller stores, and adjacent neighborhoods in ways that serve local clientele arriving by foot and regional clientele arriving by car.

The first conceptual proposal was to build a series of department stores with large parking lots on the highway side and town-scaled commercial development feeding into the finer grained neighborhood on the other side (see figure 3-5). This proposal provided the visual prominence and automobile access that large retailers require without segregating com-

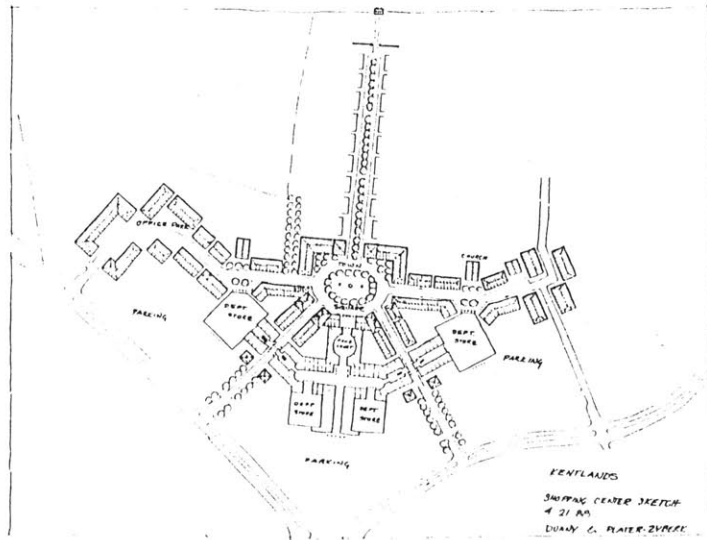


Figure 3-5: First conceptual proposal for Kentlands commercial development (Krieger).

mercial development from surrounding residences. The only drawback of this approach is that it requires two entrances to stores and most retailers only want one entrance, although this does vary depending on the individual store and location. There are examples of large department stores with multiple access points, but many retailers depend on floor layouts that have only one.

A modified version of the first proposal was originally adopted into the master plan. The large department stores were moved to the edge of the highway and were connected to the neighborhoods through “main street” corridors (see figure 3-6). The department stores were positioned in their familiar

spot as anchor stores flanked by smaller stores. The design is very similar to the classic mall prototype, except that the main walkway is a small street instead of an enclosed concourse. This site plan also provides the department stores with high visibility from the highway and plentiful parking close to the entrance. The small village shops are arranged in blocks that are bisected by roadways through the parking lots. By the time retailers, developers, and



Figure 3-6: Plan originally adopted for Kentlands. Big box stores situated at the roads edge and at end of main street corridors (Katz).

planners agreed on this design, the economy had collapsed – the retail developer backed out and the project was not developed as planned.

After the original commercial development fell through, a new smaller set of lower caliber tenants eventually committed to leasing space on a more prototypical big box commercial site. To ensure development of a shopping center, design compromises were made. The development that was built includes connections to adjacent residential areas but they are via passageways along the sides of buildings. These passages have been enhanced with gateway features and streetscape elements such as benches and landscape, but the earlier goal of main streets seamlessly connecting retail and residential uses was not reached (see figure 3-7).

While the original plan fell through, the site



Figure 3-7: Existing mall at Kentlands. Pedestrian connection to residential district (12/25/94).

planning of the existing development was built to allow infill development at a later stage. The U-shaped strip mall and expansive parking areas that exist today are planned to easily accommodate the construction of blocks and streets to create a dense village (see figure 3-8). Currently there are no proposals for improvements to the shopping center, but the

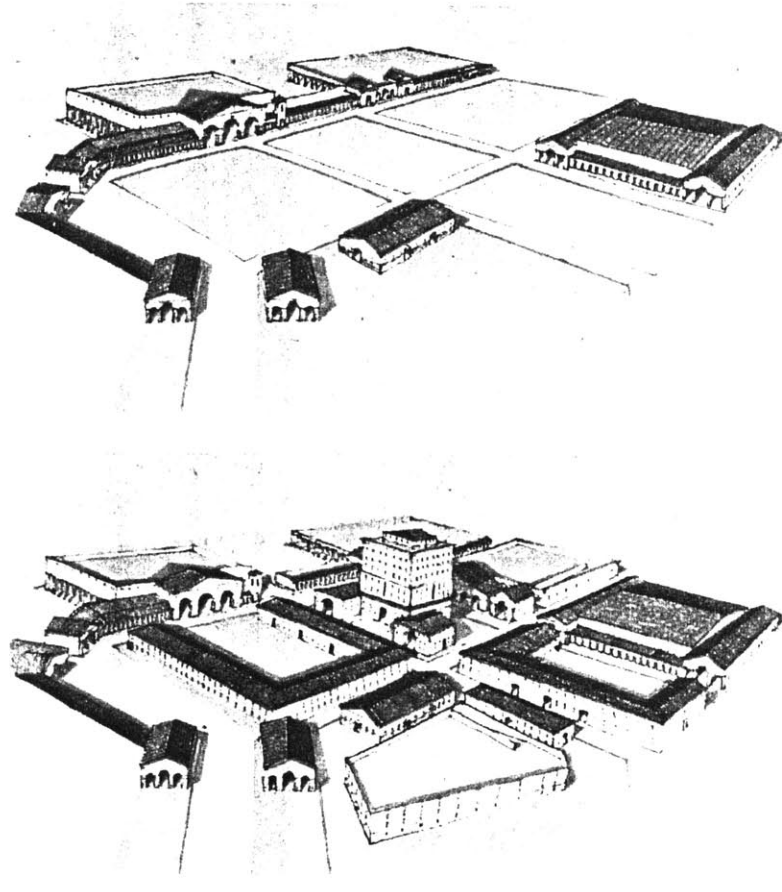


Figure 3-8: Conceptual infill for the existing of mall at Kentlands (DPZ).

opportunity exists for the future. Infilling parking lots with new development and new uses is important for three reasons: 1) it provides yet another configuration for integrating big box structures with smaller buildings and use; 2) it is an excellent example of building around a framework that is adaptable and reusable; and, 3) it provides a vision for the possibility of infilling expansive parking on other sites. Excess parking areas have been built on in many places, but it is most often in the form of “out parcels” or “pads” at the corner of the site that have no relationship to the existing shopping center and its associated walkways. The Kentlands shopping center provides an opportunity to build a village center on the parking lot.

The Designer Strip

The “designer strip” (Arendt, p138) is the result of strict landscaping, signage, and architectural controls that create a visually benign roadside environment. These strips are most common in wealthy cities with lush environments, particularly in California and Florida. The combination of regulations, design review, and negotiations in these communities have convinced national franchises to build contextually appropriate buildings, or at least modified versions of their standard store.

Some of the most prominent features on the strip are nationally recognized gas stations and fast food chains. A recent report by Ronald Fleming of the Townscape Institute documents many cases where gas and fast food franchises have redesigned their

nationally recognized outlets to respect community character and minimize visual pollution. Although many of Fleming’s examples of quality franchise design are found in historic districts, his report “Saving Face” also includes some examples from the strip (see figure 3-9).

Unique building design and detailing is necessary to improve strip environments. Standardized signs and building forms along American highways create the homogenous “geographies of nowhere”

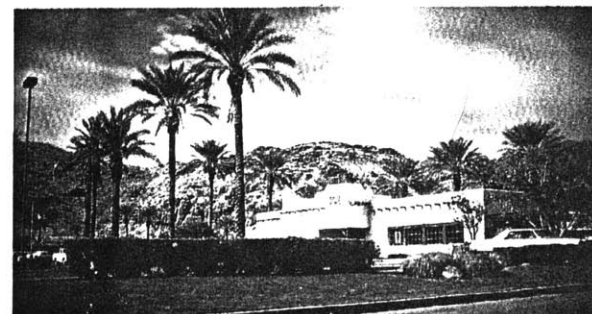


Figure 3-9: Contextually sensitive development on the strip (Fleming).

(Kunstler, 1993). Architecture and landscape, that relates to the context of the site, to the regional and environmental conditions of the area, and reflects local concerns can change the face of automobile oriented commercial corridors and control visual pollution. In addition to the gas station and fast food study conducted by Fleming, other examples exist of visually pleasing strip malls, often with the word "plaza" incorporated in their name (see figure 3-10). These projects are developed to create a retail environment with an image superior to other shopping centers on the same strip. They include extra landscaping, architectural detailing, and consistent sign graphics, but are not even remotely related to "plazas" in the urban sense of the word.

Designer strips are only a partial improvement over the typical strip; they are visually suppressed in terms of signage and iconic architecture, but often just as disconnected from surrounding neighborhoods and as unusable by pedestrians as uncontrolled strips. The encouraging lesson from these areas is that corporate franchises are willing to deviate from standard designs. Ian Veroni, architect for the Safeway Corporation in Calgary, stated that if Safeway (or other chain stores) wants a site bad enough they are willing to make changes. Ronald Fleming stresses that if they are not willing to make changes to suit the site and the goals of the community, they should not be granted the necessary permits; often they can be convinced to compromise.

Economic considerations in retail and franchise development are important to business and to the tax

base of the city or town. The short term view that the outlet must be developed quickly and effortlessly to start making a profit right away, can be countered with



Figure 3-10: Shopping "plaza" in Florida. Includes lush landscaping and subdued sign graphics, but is still an isolated shopping center along a busy strip (1/4/95).

a long term outlook; improved design creates higher property values. A Gruen, Gruen, and Associates study for the city of Thousand Oaks California demonstrated that design review and requirements for franchises to improve landscaping, screen parking, and display “market-style” signs have increased property values along a commercial strip in the city (Fleming, p8).

Parking Lot Stepping Stones

“Parking lot stepping stones” (Kulash) is a concept that is similar to some of the ideas that DPZ explored in their Kentlands shopping center schemes. These oases of green space and small retail establishments would be located in under utilized parking lots to provide quality pedestrian space and increased development on single use sites. Because of the numerous shopping centers and strip malls set at the far end of large parking lots, it is necessary to find ways to break up these expanses of asphalt and make them more usable. The Kentlands schemes effectively addressed issues of creating access for both pedestrians and automobiles on new sites, but the stepping stone concept could be used to improve existing sites with financially viable businesses.

The opportunity for building stepping stones across parking lots arises from the current practice of leasing or selling part of a large site for development on a “out-parcels” or “pad.” These secondary uses on a site are often fast food franchises, convenience oriented retail, or services such as cleaners, photo pro-

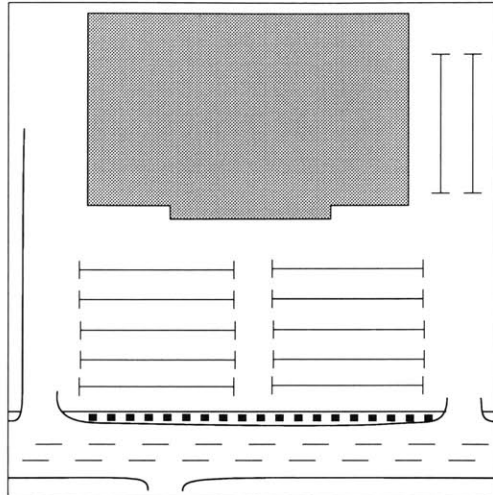
cessing, and mini-marts. Recent trends in the fast food business for smaller stores and stores that share space with competitors, (i.e. the food court and other combined operations), create new opportunities for reorganizing out-parcel businesses.

Parking lot stepping stones are passageways of small businesses and/or open spaces, which are arranged in large parking lots to bring more uses to a site, make connections to the street and neighboring sites, or simply create an oasis in an otherwise hostile environment (see figure 3-11). The number of possible configurations is endless, and adaptable systems of open spaces and pedestrian ways can be created. Parking is still visible from the street, while new and existing stores are easily accessed from parking lots. Spaces between new structures allow people to filter into the pedestrian corridor, while the anchor store is still prominently situated at the end.

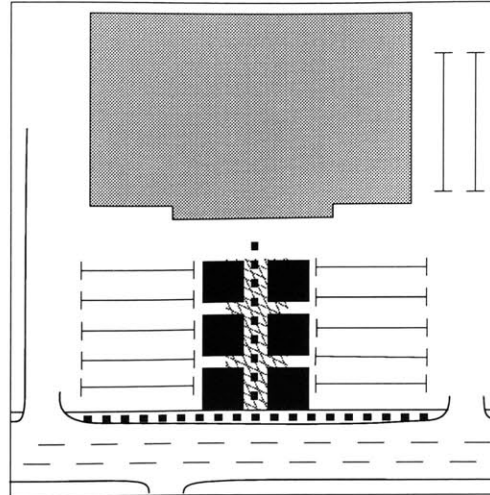
Parking areas on many of these sites is often oversupplied and underutilized; the addition of new uses will help to minimize car trips and unnecessary parking spaces. As use of the site increases and becomes more successful, investment in structured parking will become more attractive.

In addition to connections across parking lots, the addition of other uses on a site could break up blank facades of big box structures and create more interesting pedestrian environments. New stores could be inserted or tacked on to the front of a large store, allowing the existing store to penetrate through to the street or walkway edge (see figure 3-11). Department and grocery stores that have inherently

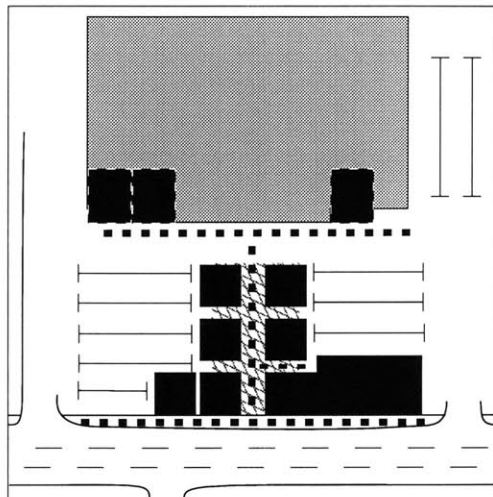
Figure 3-11: Parking Lot Stepping Stones.



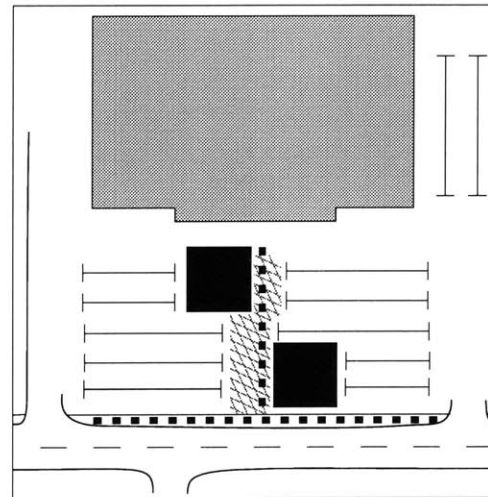
Typical 'big box' store set at back of large parking lot. Sidewalk is thin area between road and parked cars.



Small store, restaurants, photo kiosks can be used to create connection from sidewalk or bus stop to 'anchor' store.



Continued development at sidewalk continues to improve pedestrian experience and improve connections between sites. Large facades can be penetrated with new stores or departments of the existing store.



'Stepping stones' across parking lots do not have to be continuous rows of building but could also be a couple of fast food restaurants sharing an outdoor eating area or park.

different sections, (the deli, bakery, household goods, men's and women's clothes) might build separate shop-scaled entrances that connect into the large structure. An interesting example is the planned experiment by Walmart and Harry's-In-A-Hurry, farmer's market and prepared foods outlets, to share space in four Walmart developments around Atlanta (Wall Street Journal, November 10, 1994).

Walkways lined with stores and restaurants connecting an anchor tenant to the street make sense along strips that cannot develop pedestrian scaled environments at the streets edge. Because of large traffic volumes and the lack of a landscaped or parking buffer in many strip environments, connections to the street are not feasible or important. The concept of parking lot stepping stones can also be used to connect adjacent sites without approaching the road or highway.

Parking Lot Frontage Walkways

The Highway 99 Plan includes provisions for improving pedestrian environments along the street and providing connections between sites. These links will probably be developed as landscaped paths that cut through parking areas and along the sides of buildings. Although these paths will be safe from traffic, there will be little of interest to carry the pedestrian along to the next shopping center.

Performance development standards could play an important role in creating a walkway system that is continually fronted with stores. In the absence

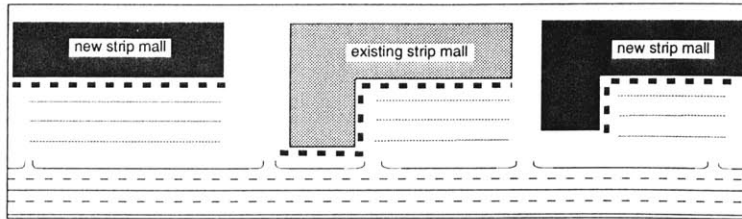
of a street front passageway with active uses, a continual walkway on the other side of the parking lot would benefit businesses and users of the strip.

Along strips, one shopping center usually has no relationship to the ones next to it. Separated by landscaped berms, drainage ditches, and parking areas it is often difficult or impossible to walk from one center to the next. If adjacent centers redevelop at the same time, site plan and design review can be used to combine entrances and ensure pedestrian linkages and continuous walkways. Short of this, performance development standards could be used to achieve a better relationship between strip centers.

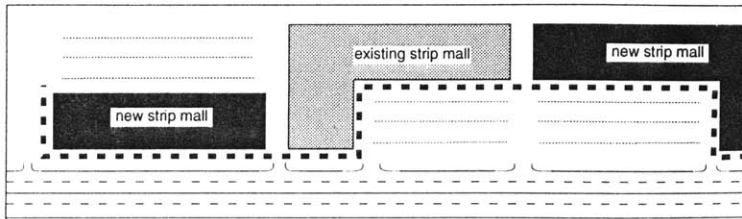
Instead of standards that require setbacks and landscape buffers between adjacent properties, the performance standards would require new development to be within a certain distance and have a prescribed level of connectedness to existing shopping centers (see figure 3-12). Instead of pushing development to the center of the property, these standards would push it to the edges. If the proposed development did not include enough floor area span, the width of the sites could be subdivided or gaps at the center could be used as open space amenities.

Other Parking Options

It is possible to modify standard commercial strip development patterns while still providing for car access, visibility, convenience, and pedestrian access and circulation. Big box stores can be clustered around shared parking (as the Highway 99 Plan pro-



New developments are situated without regard to existing development. Walkways would have to cross parking lots and follow backs of buildings.



New developments are situated in relationship to existing development to create continuous walkways along the facade of the stores.

Figure 3-12: Continuous pedestrian walkways.

poses), public open spaces and/or other uses. Sites on the corner of two strips offer other opportunities. Sites developed with the strip on two sides and parking lot frontage on the other side provide an opportunity to create a self contained block with commercial uses of varying sizes, shapes and intensity.

Parking does not have to occur between the street and the store in order to be accessible. In locations where potential profits are projected to be high, it is feasible to require large supermarkets and department stores to include substantial parking within the footprint of the store. The Safeway Corporation of Canada has built parking under a few of their outlets in suburban locations with tremendous success

(conversation with Ian Veroni, Safeway Corp., Calgary) (see figure 3-13). Parking is easily accessed via an escalator that carries shopping carts, and people do not have to run across large parking areas in inclement weather. Although the concept of driving from the garage in one's house to the garage in a store, shopping and then returning without having to go outside is somewhat disconcerting, parking under large floorplate stores provides opportunities for incorporating these structures into more densely developed and intensely used sites.

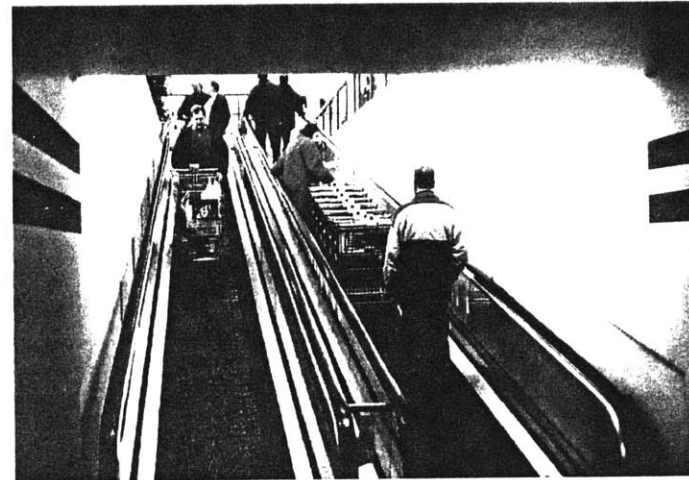


Figure 3-13: Safeway Supermarket, White Rock, B.C. Parking lots under supermarkets and other large floor-plate buildings can limit surface parking and be easily accessed via escalator (1/28/95).

CHAPTER FOUR

URBAN DESIGN APPROACHES TO THE STRIP: TAXONOMY AND SYNTHESIS

Commercial strips are continually evolving places. Due to their location at the entrances to many of our cities and towns, they are a prominent feature in the American landscape and they provide an imageless approach into many communities. The previous examination of strip improvement efforts and conceptual ideas about strip form provides precedents for future efforts and context within which to examine urban design opportunities.

Although every strip and every community is different and will require a different package of urban design tools, there are some common physical approaches that can be used for strip improvement efforts. The following taxonomy has been developed from the ideas and examples discussed previously. It provides a structure for describing the physical approaches and ideas for effecting change on the strip. To develop a taxonomy, each approach is examined separately; in practice, combinations of these approaches would be employed over many years to transform a strip.

Physical approaches can be organized into four broad categories: traffic alternatives, major redevelopment projects, site planning and strip design,

and streetscape improvements.

Traffic Alternatives

The strip is inherently a transportation corridor. Issues such as automobile traffic, pedestrian movement, and public transit potential are all important considerations for strip redesign and redevelopment.

There are two kinds of automobile traffic on the strip: through traffic and traffic with destinations along the strip. In either case, the capacity of the road or roads is the limiting factor for increased development. Improved signaling systems and limited curb cuts are interim solutions that can substantially increase capacity and improve traffic flow but the number of lanes is the limiting factor. Strips that are currently overwhelmed by traffic and will be allowed to develop more intensely will probably need to significantly reorganize the road system. The two basic approaches to increasing capacity are road widening or providing alternative streets. If well done, each of these approaches can also improve the pedestrian environment and increase the potential for transit use.

Road widening is often achieved at the expense of the sidewalk or the buffer between the sidewalk and travel lane. The wider a road becomes, the more important the buffer is to the pedestrian

environment. The best widening solution for both cars and pedestrians is to widen the road enough to create a boulevard. A boulevard with fast moving traffic in the center and separate access roads for slow moving traffic and parking along the edges can provide good automobile and pedestrian environments. If sufficient space is available, the center lanes can include dedicated bus or light rail lanes. Although handsome additions to many urban and suburban areas, a good boulevard requires a lot of space, which is often not available or easily obtained (see figure 4-1).

The other option for increasing capacity is to build additional parallel roads. By-pass roads will divert through traffic while lessening traffic on the strip. From a merchant's point of view, a by-pass road limits opportunities for passers-through to be enticed by local stores and stop. On the other hand, the commuter would welcome a faster road that by-passes a busy commercial district. In terms of improvement to the strip, diverting through traffic might create the possibility of building a traditional commercial street with curbside parking, sidewalks, and store fronts. If a by-pass road is not an option, wide strip corridors could be overlaid with a secondary system of streets. These streets would provide alternative routes to disperse local traffic, and also create more developable frontage. One benefit of a secondary street system is that it could develop incrementally, whereas a bypass road is not effective until it is complete. Unless rights-of-way already exist, implementing a secondary street system would probably require takings or a long term commitment to official mapping, negotiations, and

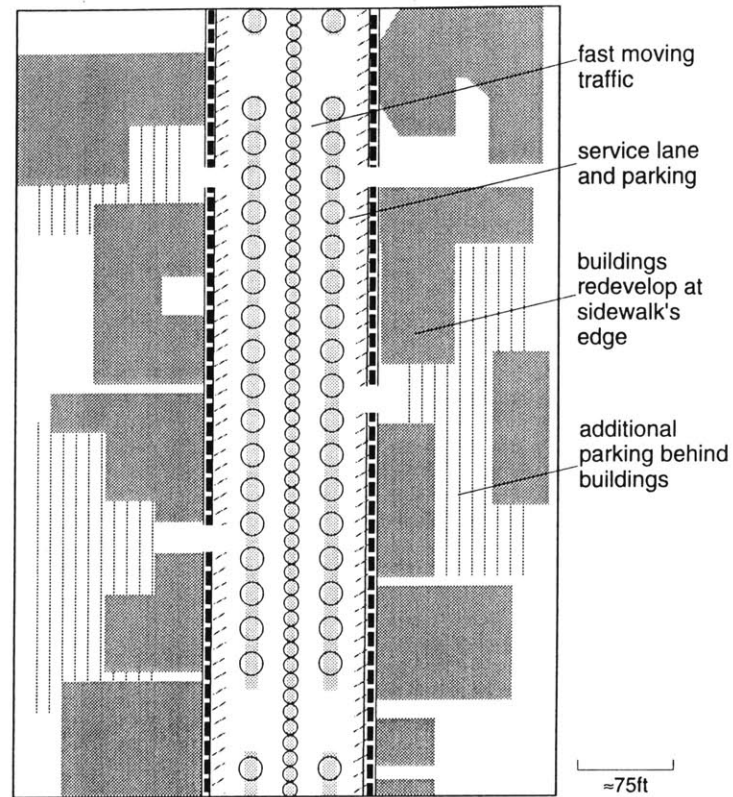


Figure 4-1: The boulevard model applied to the strip. Provides fast moving traffic lanes, service lanes for access to stores, and improved pedestrian environment.

public private partnerships. Public transportation can be improved with either new street scheme. By-pass roads offer the opportunity of both local and express bus service, while a secondary street system improves pedestrian access to the transit or bus line (see figure 4-2).

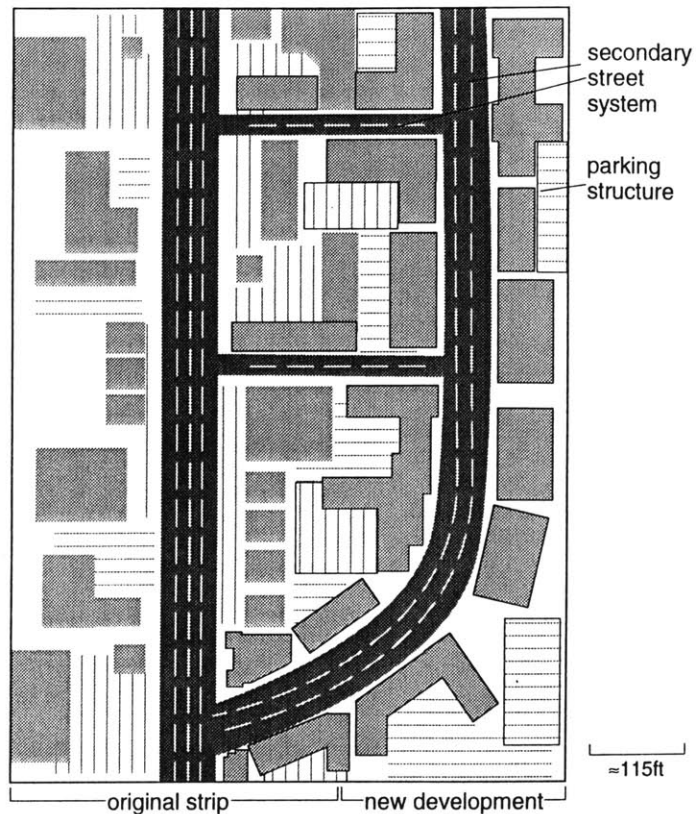


Figure 4-2: A by-pass road can be used to provide an expanded street network for new development within the corridor of the strip.

Large Scale Redevelopment/Mixing of Uses

Large redevelopment projects along the strip, have the potential to: 1) bring more development to underutilized land; 2) fully integrate commercial, entertainment, civic, and residential uses; and 3) set a precedent for future projects on the road. Such projects are essentially a new generation of the shopping mall. Instead of enclosed pedestrian environments bounded by anchor stores at each end and surrounded by parking lots, these projects look like and act as mini-downtown areas. Although many are developed by a single entity, the idea is to create places that have the qualities of a town center or a downtown street. Whereas towns centers evolve in many pieces over many years, these redevelopment projects are created by one or a small group of developers and produce a simulacra of a village or town center.

Mizner Place and Mashpee Commons both replaced suburban malls lacking any civic space, with shopping, entertainment, and residential centers organized around streets, plazas, and open spaces. These examples both treat the existing strip as highway and provide secondary circulation systems. On smaller-scale strips redevelopment projects could be developed on both sides of the strip, with the road becoming an avenue or boulevard at the projects center (see figure 4-3).

In any case, large mixed use redevelopment projects that are not enclosed malls provide new opportunities for the strip. They can attract a critical mass of quality development to areas which are typically used for second rate business. As property val-

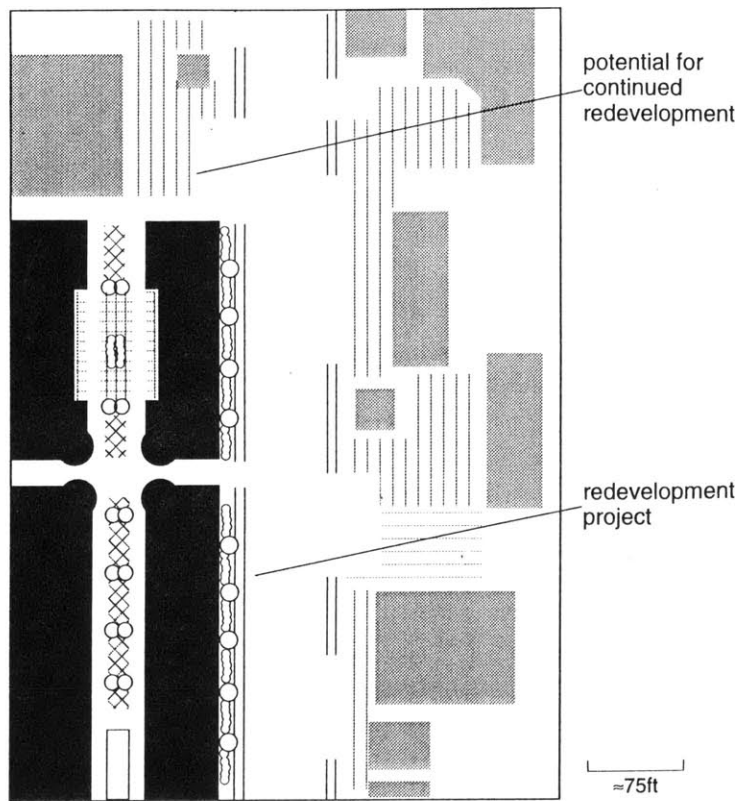


Figure 4-3: Large redevelopment projects can set a new precedent along the strip. Ideally these projects would be configured in a way that allows for expansion.

As uses rise and demand increases, open ended designs provide opportunities for expansion. By forming small urbane enclaves these large redevelopment projects can start to bring residential and civic uses to the area. As was the case in Mizner Park, once the residential units were occupied, the demand for shops and restaurants increased; as the place became more

popular, other sites nearby were redeveloped for residential and office uses.

Large redevelopment projects can change the strip. New mixed use centers with public amenities create more traditional and usable urban environments in areas where there were none. As these areas become a regional draw, the potential for additional redevelopment increases. Depending on the strength of the market and the level of control, additional redevelopment can take different forms. In the best case scenario, urban style development continues from the edge of the first project. In the worst case scenario, discount stores spring up in the area to feed off of the regional draw that the mixed use center created. These are some of the growth management issues that communities must tackle as part of strip improvement efforts that include large increases in density.

Site Planning and Strip Design

Improved site planning is a very important approach of any strip transformation effort. The site planning of a typical commercial strip addresses automobile access only and usually does not produce sites that can be easily adapted or redesigned to effectively accommodate pedestrians. For this reason, site planning approaches are important on two levels, the individual site or property, and on the systems level of the strip as a whole.

At the individual site level, it is important to integrate creatively big box structures, smaller com-

mercial uses, and sufficient parking. Ideas such as big box clustering, parking lot stepping stones and larger parking lot infill projects will add density to underutilized shopping centers and make them more usable and viable. It is important that development and redevelopment occur in a fashion that is consistent with goals for the whole strip or district (see figure 4-4).

Improved planning on an individual site can create an oasis along the road, but it is actually the cumulative effect of many improved sites that will transform the strip. For this reason, it is important to have a framework plan for the whole strip. If the whole strip is viewed as one site with many potential developers, a plan or a set of physical rules is necessary to organize the diverse set of players and pressures. A site plan at this scale identifies basic principles or standards that are required in different areas along the strip. In addition, it should be a vision of strip form that addresses issues such as building orientation, varying intensity of development, relationship to surrounding areas, and overall image (see figure 4-5).

This two tiered approach, improvements to individual sites and to the system of sites along the street, has been used in many of the whole strip plans reviewed above. With differing degrees of detail, the Riviera Beach Master Plan, the Highway 99 Plan, and the Bellevue effort, all include individual site planning standards or guidelines and a larger framework for the street or district. In Riviera Beach, very specific site planning and building form standards were used to create a new system that operates as a main

street. The main street system will be further developed though intensification at some cross streets or a scaling down of intensity at other cross streets. The Highway 99 Plan includes less stringent individual site planning controls, but the Schematic Urban Design Plan overlays the regulations with a framework of

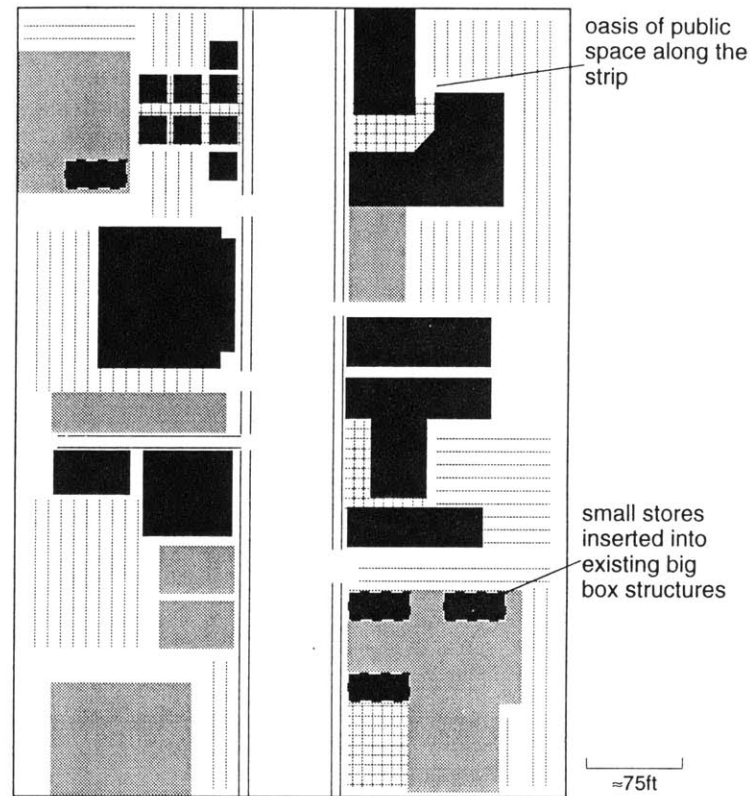


Figure 4-4: Individual sites can be adapted to create oasises along the strip. Parking can be relocated behind buildings and blank facades may be broken by inserting new stores or departments of the existing store.

nodes, districts, and linear areas of differing characters. Connections between sites and different nodes or districts along Highway 99 are not as integrated in the system as those evident in the continuous new main street of Riviera Beach, but some type of connections to neighboring sites will be required. In Bellevue, guidelines and negotiations are used to

shape development at the site level to enhance the downtown system. The goal of building a pedestrian oriented downtown is implemented one site at a time, but each site fits into a framework of desired density and level of pedestrian amenity.

Site planning on both levels is a crucial component to transforming the strip. The cumulative effect of site development without rules to shape its relationship to the street or adjoining sites is a major contributor to chaotic strip conditions. A plan for the overall form of the corridor and rules governing development on individual sites can contribute significantly to efforts to transform the strip. The problem with the implementation of this approach is that national franchises resist changes to typical site layouts, and site specific building design is often viewed by national chains as an unnecessary increased expense. At the system or whole strip design level it is often hard for communities to conceptualize a humane urban environment along a road that was designed to serve automobiles. Photo montage techniques or visual preference surveys are useful tools for helping communities to envision something in place of the strip.

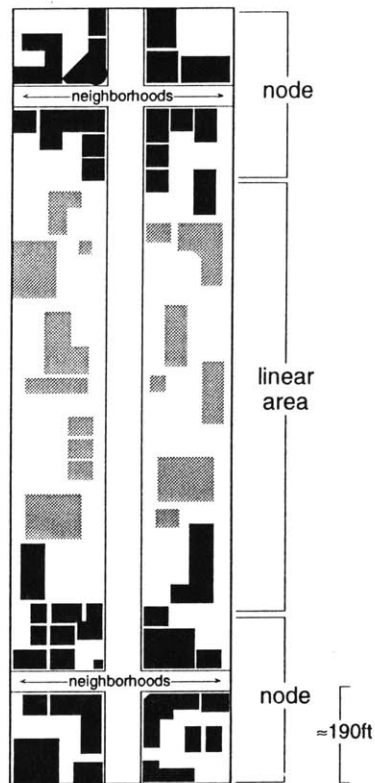


Figure 4-5: Long strips may be broken into areas of varying intensity and character. Nodes of higher density could be more pedestrian oriented while linear areas are primarily accessed by automobile.

Streetscape Improvements

Streetscape improvements include all landscape and “graphic” improvements. Plantings, paving treatments, signage controls, and facade design can all be considered streetscape improvements. Primarily a tool for improving the visual quality of a strip, streetscape elements can effect the view from the road and also enhance pedestrian environments.

Landscaping of a roadway, if done by public investment or by the private sector according to a prescribed set of rules, can integrate many diverse elements in the landscape. It is used to screen parking, to soften the impact of nondescript buildings, and to create a visual rhythm along the street. Trees, shrubs, and green spaces can be used to make memorable environments. A street planted with flowering trees or lit by a series of sculpted lampposts might be remembered for these streetscape elements.

Graphic improvements such as organizing signs in “ladder directories,” reshaping standard franchise designs, and burying utility lines underground can eliminate the visual chaos of the street while improving the visibility of green elements. These improvements can change a strip’s image from a “tacky” strip to a “designer” strip.

Street trees, special pavement, benches, bus shelters, walled edges, and articulated transparent facades, define pedestrian zones and provide an environment where people will walk along the street. If designed carefully, landscaped sidewalk areas can protect pedestrians from traffic and lead them through otherwise hostile environments. Streetscape improve-

ments should also be considered for walkways across parking lots or to connect adjoining sites (see figure 4-6).

Streetscape improvements are a relatively inexpensive means of softening the impact of sprawling development and, if applied in a consistent way,

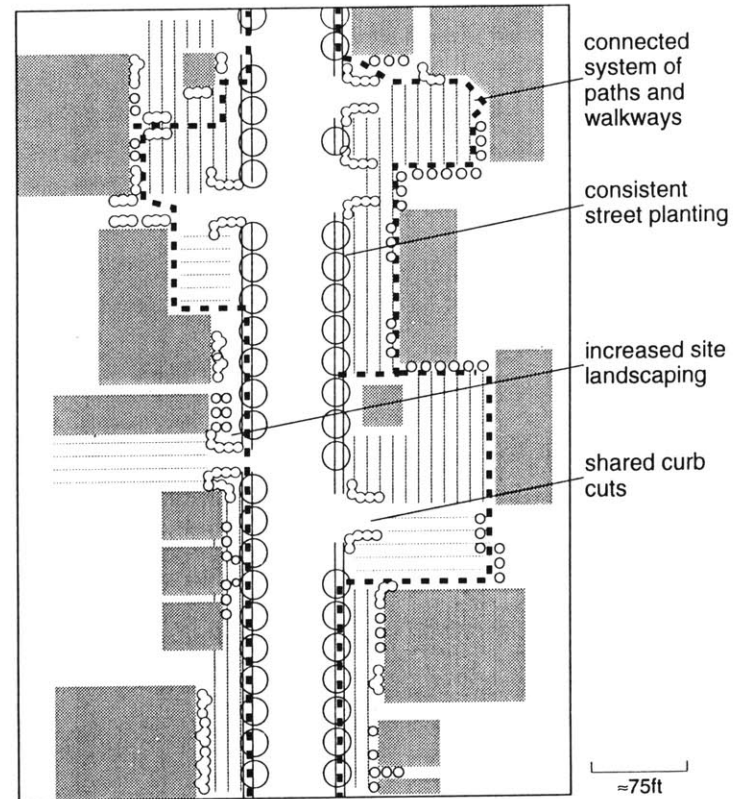


Figure 4-6: Streetscape improvements provide visual relief for passers-by and enhanced pedestrian environments for users of the strip. Coordinated streetscape efforts could produce a connected system of walkways.

can have a dramatic impact on the image of the strip. They are an important component of many plans. In Riviera Beach, graphic improvements required by the architectural guidelines have become the only part of the master plan that is enforced. In Bellevue, interim uses, such as the big box that houses the Good Guys Electronics store, are being linked to the pedestrian way with landscape, pavers, and other pedestrian amenities. The Highway 99 Plan includes increased landscape requirements and facade enhancement guidelines. While a streetscape approach can improve the appearance of a strip, it has little effect on traffic, no impact on diversifying use, and does nothing to bring buildings and people together in more urbane environments.

Integrated Approaches

Opportunities and constraints vary for each strip. Each strip community has different economic resources, different levels of commitment, and different goals. For these reasons, any effort to improve commercial strip environments will be unique, however, most strip improvement efforts will use some combination of the four approaches.

Street widening without careful attention to site planning and streetscape improvements will only produce a wider street, not a better strip. Site planning that aims to front buildings at the sidewalk edge without regard to traffic impacts or landscape will not improve pedestrian access. Streetscape investments in the absence of improved site planning and traffic organizing schemes will succeed only in producing a visually homogenous strip.

The strip improvement efforts of Riviera Beach, the jurisdictions along Highway 99, and Bellevue use combinations of all four components. In Riviera Beach, the master plan called for improved site planning and architectural/landscape controls; recent efforts have also concentrated on initial planning for large scale mixed use redevelopment projects. Highway 99 will try primarily to utilize system-wide and project level site planning and streetscape enhancements, improved transit service, and possible road widening. Bellevue will continue its streetscape efforts, negotiated site planning, and in times of strong economic conditions, large offices and retail centers will be used to frame public spaces. Each of these efforts uses a combination of the various urban

design components to improve the character and function of the strip; whether the chosen combination will be effective remains to be seen.

Vision and time are non-physical factors that play an important role in strip transformation efforts. In each case study, the community has an alternative vision for their strip. In Riviera Beach, the urban design goal is to build a traditional Florida town and "main street" business district. The aim for Highway 99 is a corridor of distinguished character, with a series of activity centers located at important cross streets. The Bellevue vision is a dense, walkable, urbane downtown. The vision can be articulated in the form of plans or renderings that suggests the character of the place, or it can be written and described in the form of goals, objectives, and policies. These visions will be tempered continually in political and economic reality, but they are an important starting point for remaking the strip.

The piecemeal character of many strips suggests that change will come slowly. Organizing property owners for privately funded streetscape enhancement, assembling land for large scale redevelopment, securing rights-of-way or easements for new roads, and shaping site plans at the time of renovation or redevelopment are all long term efforts. The time-frame for Riviera Beach and Highway 99 is unknown because the efforts are relatively young. In Bellevue, ten years of commitment has produced only modest results on the scale of the whole downtown, but signif-

icant improvements have occurred at selected locations.

The time frame for significant improvement is related to implementation devices utilized by the plan. Plans that attempt to harness market driven redevelopment are subject to cycles in the economy and the real estate market. These cycles are evident in Bellevue's experience where the "go-go" 80s brought many new projects with improved streetscape and urban site planning , but the early 1990's was marked by failed large scale projects and interim uses. Plans that depend on public investments are more insulated from cycles in the economy, but are more closely tied to politics and to the allocation of limited funds. The Highway 99 plan includes some discussion about publicly funded road widening and transit service, but these projects are secondary to the overall program or effort. Public-private partnerships such as the one established by the Community Redevelopment Agency in Boca Raton to develop Mizner Place and the one in the works for a convention center in Riviera Beach are a hybrid approach. In both cases, the CRA was or will be used to assemble land through condemnation procedures and assure smooth permitting for major new development projects. In these cases, one large project can be completed quickly, but its effect on the whole strip is limited; spin off projects will take more time to evolve.

Improvements to the strip or other urban environments with diverse physical, institutional, and financial characteristics require long term vision and commitment.

PART II

Needham Street is one of the country's thousands of strip-like environments. Today it has many characteristics of a typical strip, but its development history describes its function as an early by-pass road and an industrial center at the fringe of two village centers. Needham Street is currently under pressure for more retail development, and the city and community groups are trying to improve its character and function.

The condition of this strip, its history, recent planning efforts, and opportunities for its future will be examined here.

CHAPTER FIVE

NEEDHAM STREET TODAY

The Physical Environment

A recent Boston Globe article described Needham Street as having an “identity crisis.” In addition to the “congestion, clutter, and lack of safety” it is characterized by a mix of espresso bars, cafes, upscale boutiques, large discount stores, auto shops and industrial manufactures (Boston Globe, 2/26/95). Because Needham Street offers no public amenities or imageable character, it is very different from the villages that characterize Newton’s other commercial centers.

Needham Street is a state owned road about a mile in length from its intersection with Winchester Street to the city limits at the Charles River. The two lane road, with a shared left hand turning lane, exists within a 60 foot wide right-of-way and carries about 28,000 to 30,000 vehicles per day. Many drivers use Needham Street as a cut through between Route 9 and Route 128, and contribute to a large portion of the traffic. Excess curb cuts and the lack of signaled entrance and exit ways for major traffic generators creates conflicts and extreme delays. During some periods of the day, Needham Street is backed up for almost half its length.

The pedestrian environment along the street is

treacherous at best. Although Needham Street is primarily a car environment, a significant number of pedestrians use the road: mothers with babies in strollers trying to get from one store to another, office workers going to lunch, and occasionally people disembarking from the bus. Some sections of the street have sidewalks while, in other sections, pedestrians traverse curb cuts as wide as the property’s frontage (see figure 5-1). Some newly renovated projects have significant landscaping on the building side of the sidewalk, but on the street side cars and trucks pass within inches of the curb. Crossing the road on foot is almost impossible. A pedestrian’s best chance for crossing is to thread away between cars during periods of bumper to bumper traffic when cars are moving slowly.

No on-street or municipal parking areas are provided along Needham Street. Each property fulfills its own parking needs. Some sites, such as the New England Mobile Book Fair lot, are always packed while others, such as the manufacturing properties, are underutilized. Surface lots are provided on most sites, but some newer developments on small lots have built structured parking to accommodate their parking needs. In total there are over 3,000 spaces in the corridor, which yields one space per 774 square feet of commercial space. Merchants and street users



(a)



(c)



(b)



(d)

Figure 5-1: The pedestrian environment along Needham Street. (a) National Lumber. (b) Between Columbia and Winchester Streets.

(c & d) Between Rockland and Jaconnet Streets.

believe that there is a scarcity of parking, or at least of parking in the right places (Newton Planning Department, 1994).

In addition to the road right-of-way, rail rights-of-way also exist within the study area. The primary rail corridor is the original Charles River Railroad which runs from the Greenline MBTA in the north, across Oak Street near the location of the Upper Falls Depot, and then continues south to Needham. This track is currently only used to the point where it branches and crosses Needham Street (see figures 5-2 and 5-3). On the south side of Needham Street the rail line is occasionally used by H C. Stark, but it no longer crosses the Charles south (or upstream) of the Needham Street Bridge. Whether they are eventually used for roads, greenways, or transit, these



Figure 5-4: Abandoned rail right-of-way between New England Concrete Pipe and the DPW yard.

rights-of-way are major assets that could be used to shape the future of the area (see figure 5-4).

Buildings along Needham Street vary in size, shape, relation to street, level of repair, and monetary value. With the exception of the 19th century mill at the corner of Oak Street, the one consistent attribute is the lack of any aesthetic or architectural value (see figures 5-5). The character of the street is largely due to the fact that many industrial buildings have been reused for retail space. The remaining buildings are inexpensive strip malls or standard franchise prototypes. Most of the buildings in the corridor are only one story, and the average floor-area-ratio (FAR) is approximately .5. The tallest building on the street is the Paragon Tower, three stories of office space set on top of two stories of parking garage. The other tall structure is the WHDH broadcasting tower which can be seen from miles away, although it often goes unnoticed from the street.

Blocks and parcel size do not follow patterns that are useful for understanding the urban form of Needham Street. There is a large difference in block and parcel sizes between the east and west sides and the different ends of the street (see site analysis, figure 5-2). The entire west side of the street can be viewed as one huge block comprised by large parcels; a few of the large properties have been subdivided or small pieces have been carved off for other uses. This is most apparent around Tower Road and in front of the New England Concrete Pipe site. The west side of the street is penetrated by dead end service roads and the railroad right-of-way acts as a bar-



Figure 5-2: Needham Street Site Analysis

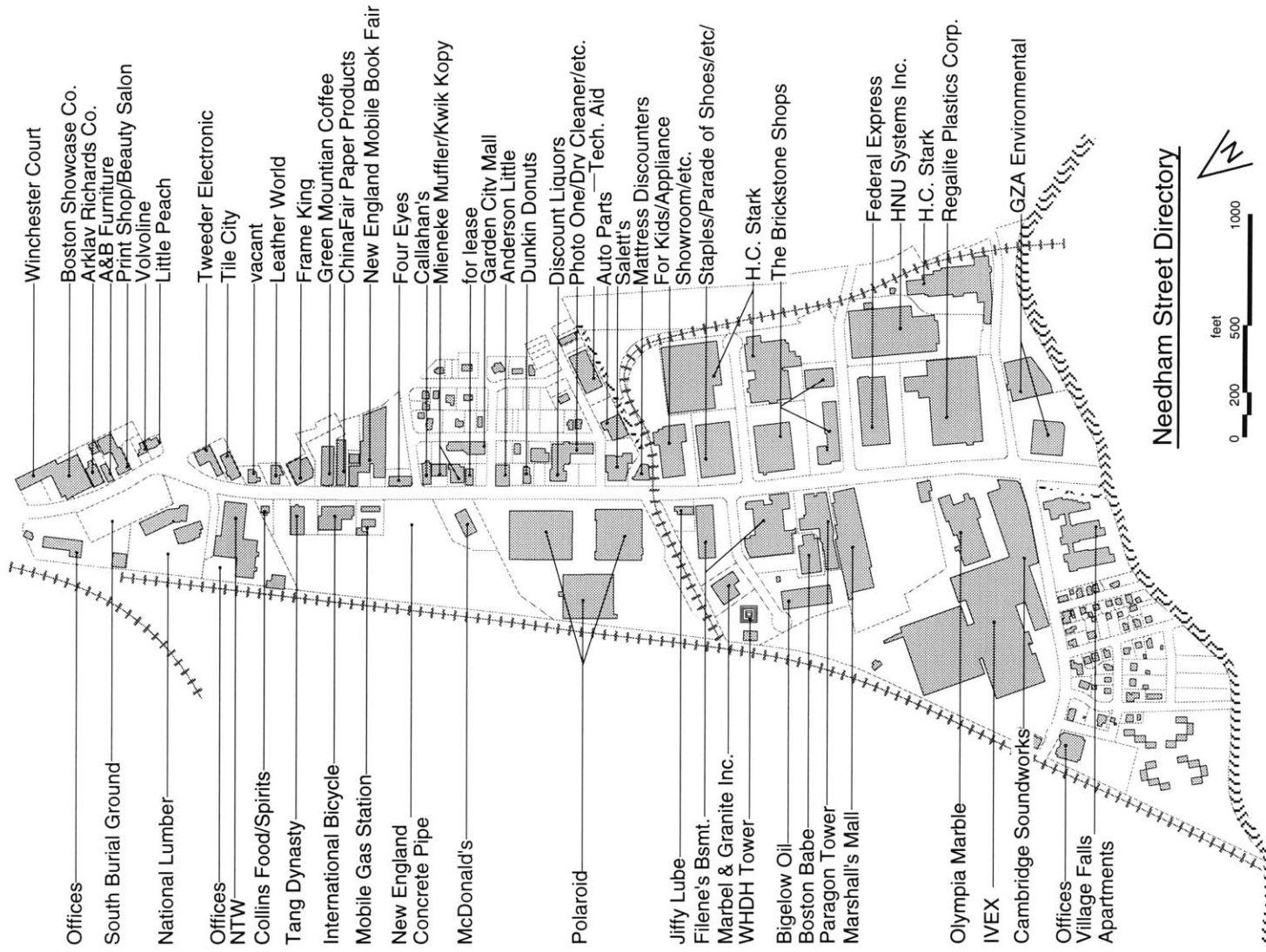


Figure 5-3: Needham Street Directory



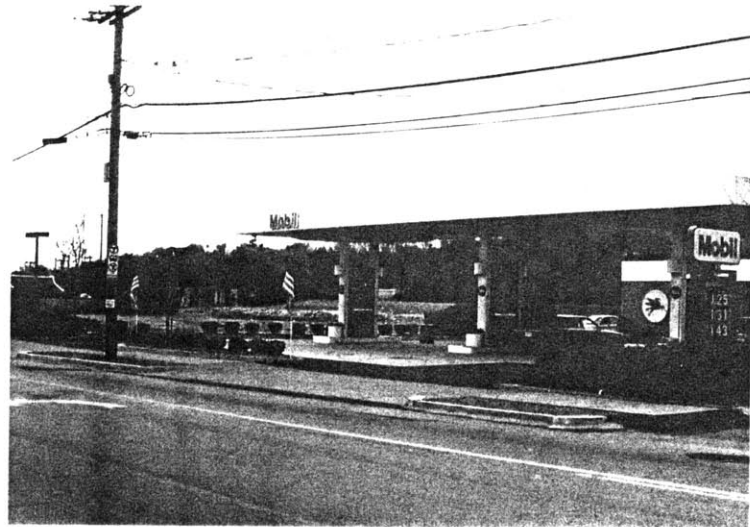
(a)



(b)



(c)



(d)

Figure 5-5: Typical buildings. (a) Strip mall near Jaconnet Street. (b) International Bicycle along the front of the N.E. Concrete Pipe.

(c) the Paragon Tower office building, the WHDH tower, and the Marshalls mall. (d) Mobile Station, recently redeveloped.

rier that is only crossed by Oak Street. The 92 commercial/industrial parcels along the street range in size from a quarter acre to 16.6 acres.

Two prevalent block and parcel patterns can be found on the east side of Needham Street: 1) on the upper part of Needham Street land that was originally subdivided for residential uses still reflects small parcels and a block system with connected streets, 2) on lower Needham Street large square lots developed for light industrial uses in the 1950s still prevail. Christina Street, Rockland Street and Columbia Avenue connect Needham Street to Winchester Street and the surrounding neighborhoods. Rockland Street is almost impassable by car because of its steep slope and broken pavement; Charllmont Street is connected for pedestrian use through a parking lot and stairs; and Jaconnet Street appears to have been connected at one time but is currently overgrown with trees and wetlands (see figure 5-6).

Planning and design opportunities along Needham Street are expanded because a number of large properties along the street are likely to redevelop in the near future. Three properties that were determined “likely to be redeveloped” as part of recent planning efforts, are the Regalite Plastics Corporation site (4.7 acres), the New England Concrete Pipe site (7.8 acres) which is currently vacant but Stop and Shop has options to buy, and the IVEX site at the corner of Oak and Needham Street (16.6 acres). In addition, there has been “renewed interest” in the Federal Express property, the HNU Systems site is on the market, Polaroid would like to



Figure 5-6: Stairway to residential neighborhood at the end of Charllmont Street.

expand but is limited by the size of their site, and H. C. Stark would be interested in selling at the right price (see site analysis, figure 5-2). The Needham Street Consensus Group concluded that at least a third of the land on the street would be redeveloped in the near future. Some people believe that as much as 40% to 60% of the street will redevelop within 20 years. In addition to the properties mentioned above, the Newton Department of Public Works facility adjacent to the railroad right-of-way across from the New England Concrete Pipe site and accessed via Elliot Street could support a different use. This site is currently in use by the DPW, but it could be consolidated into a smaller area or moved to another location in the city.

Predominately residential areas surround the

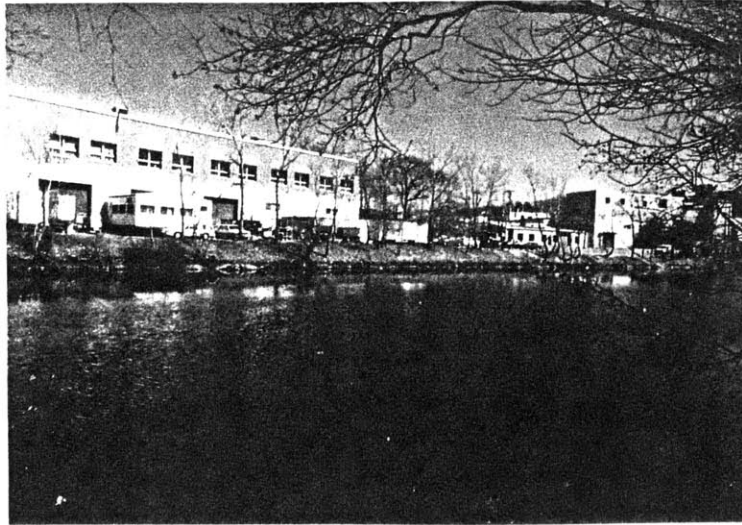
study area. Newton Upper Falls to the northwest, the city's only historic district, is mostly residential in use with a few small nodes of mixed retail, office and residential. To the north lies the village of Newton Highlands, and a commercialized portion of Route 9. The Newton Highlands and the Elliot Street stops on the Riverside Branch of the Greenline are a short distance away. To the east are residential portions of Newton Highlands and the Oak Hill area. To the south on the Newton side of the river is the Jewish Community Center, some park land along the Charles, a golf course and a small office park.

Across the river, Needham Street becomes Highland Avenue and continues as a mix of strip commercial office space until the intersection with Route 128. The Needham Industrial Park (a.k.a. New England Industrial Center) that was developed in the 1950s, is located off the east side of Highland Avenue across the river from Needham Street. Today this area is a mix of light industry, offices and a large hotel. It is expected to undergo major redevelopment, and has been the subject of a Harvard Graduate School of Design studio, and in the early 1990s was studied by the Metropolitan Area Planning Council for its potential as a "sub-regional center." On the north side of Highland Avenue, a small district of warehouses, offices, and second-rate retail is wedged between the railroad right-of-way, Route 128, and Highland Ave. The sliver of Needham between Route 128 and the town limits at the Charles river is often forgotten and neglected, at least aesthetically, by the town.

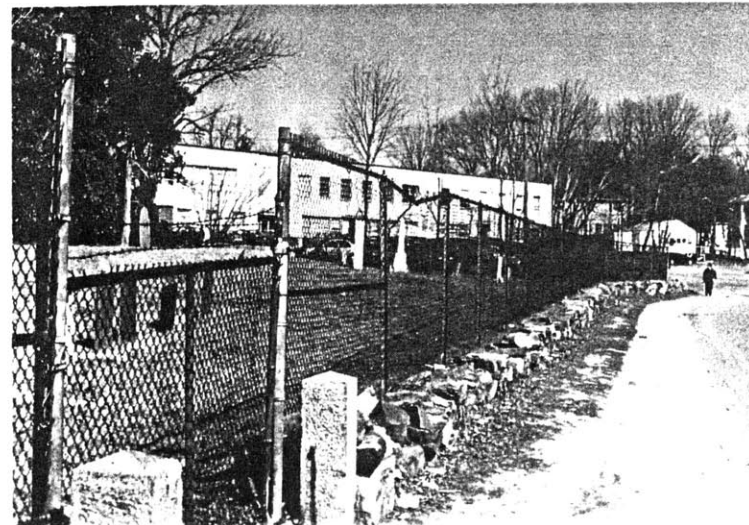
Natural areas and open space in the study

area are limited and underutilized. The river, which is Needham Street's largest asset, is completely inaccessible and often unnoticed. The only property that takes advantage of the river is the Village Falls apartment complex, but it is completely fenced off from public access. Other properties along the Charles use its edge as a place to park cars and store equipment. The other water course in the area is the South Meadow Brook, which runs almost completely in culverts under roads and buildings. In a few places it is open, but appears to be nothing more than a drainage ditch. A city owned wetland, where the Brook spreads out before continuing east towards Oak Hill, lies at the end of Industrial Place. This wetland area is quite peaceful, but also inaccessible, underutilized and unknown (see site analysis, figure 5-2).

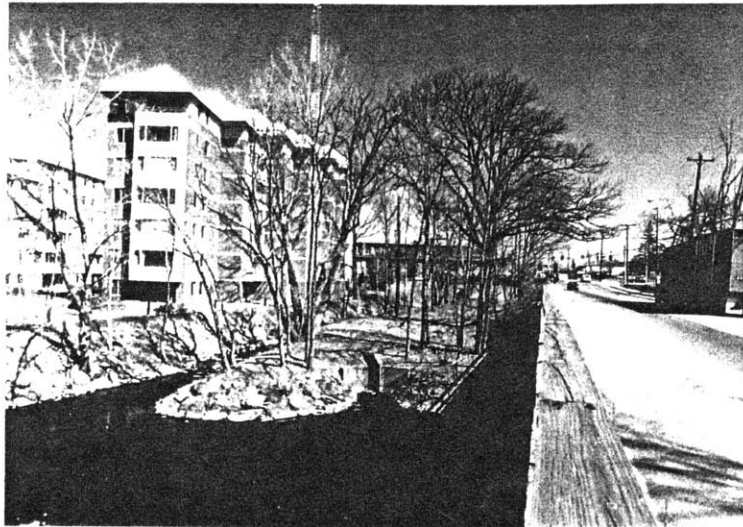
Two other open spaces in the immediate area are the South Burial Ground and Whitmore park. The cemetery is fenced, locked, and forgotten, but could be opened and used as a sitting area or park. The park and playing fields are well used by the neighborhood but are barely visible from the corridor. In addition to the green open spaces, a few of restaurants have outdoor seating areas along the street (see figure 5-7).



(a)



(c)



(b)



(d)

Figure 5-7: Natural areas and open spaces within the Needham Street Corridor. (a) Properties along the river do not take advantage of it. (b) Village Falls apartment complex

and open space. (c) The burial ground is completely inaccessible. (d) The cafe at the Brickstone Shops has a small sitting area – it is one of four along the street.

Land Use and Tax Data

Since the 1950s, Needham Street has been an economic engine in Newton. In the early years, it was called the Miracle Mile because of its agglomeration of suburban industry. Today it is a "retail hot spot," where chain stores and national retailers want to locate. Companies responding to their changing needs moved out of the area leaving behind buildings that were often refitted for retail uses. What started as a few discount stores in a manufacturing district, has grown into a discount retail center with a few remaining industrial uses.

There are approximately 300 businesses in the Needham Street corridor, which occupy 2.32 million square feet of commercial space. In total the corridor has more commercial space than all of the city's 13 village centers combined, excluding the malls in Chestnut Hill (Graphic 11/4/1993). Between 1984 and 1994 building square footage along Needham Street increased by 13%. During this same period retail and service sector uses increased 65%. By 1994 the break down of building square footage along the Street was as follows:

	square feet	percent
Retail/Service	262,544	11%
Manufacturing/R&D	591,616	25%
Warehouse	842,751	36%
Office	511,773	22%
Automotive	55,834	2%
Restaurant	37,136	2%
Other	20,051	1%
Total	2,321,705	100%

Reflected in these numbers are the underdeveloped sites mentioned above and some properties that were

vacant at the time of the survey. The 11% retail and services square footage is misleading because, compared to manufacturing or warehouse space requirements, retail space requirements are small. In any case, the character of Needham Street has become primarily retail if not by building square footage, or land area, then by visual presence and traffic that contributes eight times as much as offices of equal size.

In 1993, Needham Street contributed 13% of the citywide commercial tax revenue. One of the fiscal goals of the city is that new development must add to the tax base. In recent years, large discount stores and supermarkets such as BJ's and Super Stop & Shop have been interested in the vacant New England Concrete Pipe site. Developments such as these will add to the tax base but will stress existing infrastructure and will not contribute as much to city coffers as higher caliber retail or office development.

Needham Street is constantly changing. Today's picture is a snapshot in time. In the past 50 years Needham Street has remade itself, and will do so again in the next 50 years with or without a planned future. Until recently, changes within the corridor could occur without intervention on the public's behalf. Today Needham Street is at the point where its success has started to overwhelm it. Unless the future is guided, its condition and character will worsen.

Before discussing the future of Needham Street, it is useful to look back and understand its past.

CHAPTER SIX

HISTORY OF THE NEEDHAM STREET AREA

Examining Needham Street's development history sheds light on its current state. This chapter is intended to provide a general background to Needham Street and the historical forces that shaped the area. This history will demonstrate that the combination of economic opportunities, physical constraints and activities at the periphery of the area have produced the Needham Street of today.

The Early Years

The present day Needham Street area can be located on old maps by finding the confluence of the Charles River and South Meadow Brook. Just downstream from this location, the Charles River drops at what became known as Newton Upper Falls. It was this settlement, and the manufacturing that occurred there that first shaped the Needham Street area.

The Needham Street study area, defined by Elliot Street on the west and Winchester Street on the east, is shown on maps dating back to 1700, the approximate year those bounding roads were built. By the late 1630s, over 1,000 acres north of the Charles along South Meadow Brook and extending to present

day Newton Center were owned by the Haynes family. Parts of this vast tract of land were sold to other settlers; later maps depict other owners and farms in the area.

The first structure built within the study area appears to be Stephen Winchester's house near the location where Winchester Street crossed South Meadow Brook. A few years later as Upper Falls was growing, another house was also built along the Charles River between South Meadow Brook and Elliot Street.

In the late 1680s, entrepreneurs first dammed the Charles River at Upper Falls to power saw mills to produce wood for fast growing Cambridge. Present day Elliot Street was part of the early paths for transporting this finished wood to Cambridge. Shortly after the saw mill opened new industries located at Upper Falls. A "grist and fulling" mill which mechanically finished woolen cloth was the second mill in the area (see figure 6-1).

Shortly after the revolution, development at Upper Falls increased. Early uses of the power generated by the dam were replaced with a snuff mill, a screw factory, wire mill and a blacksmith shop. These businesses operated until 1823 when they were purchased and redeveloped as a cotton factory called the Elliot Manufacturing Co., which produced "plain

weave” cloth. The Ellis Brothers opened a rolling mill to manufacture scythes, a nail factory, and a cotton spinning mill just downstream from Elliot Manufacturing. The area became know as the “Newton Factories.”



Figure 6-1: Early mills located along the river. The last of these can still be seen from Echo bridge in Newton Upper Falls. Needham Street is marked by the radio tower in the background (5/4/95).

The first use of land along current day Needham Street, other than farming, was the existing but forgotten, burial ground on Winchester Street at its intersection with Needham Street . Built long before Needham Street in 1803, the 28 residents of the Upper Falls who designated the site probably chose the small knoll because it overlooked the marshes and farmland between the Charles River and Oak Hill and was separated from the activity of the village. As the years passed, the cemetery became the burying ground for many veterans of the American Revolution and their families. Later, six Civil War soldiers were laid to rest at the South Burial Ground or Evergreen Cemetery. Today, the cemetery is locked behind a chain link fence and surrounded by traffic and commercial activity. In 1986 it was reported that the city’s caretaker had not had a request to open it to visitors for over 11 years (Boston Globe 1/12/86) (see figure 6-2).

Shortly after the cemetery was built, construction of the Worcester Turnpike was completed only a few hundred yards away. Accessed via Elliot Street the Turnpike opened in 1809 and provided easy transport to Boston and settlements to the west.

The year 1831 marks a turning point in the development of the Needham Street study area. It was that year that the first industry developed between Elliot and Winchester Streets. On the site approximately marked today by the WHDH tower, Otis Pettee, superintendent at the Elliot mills, opened the Pettee Machine Works to manufacture cotton processing machinery. Located along the South Meadow

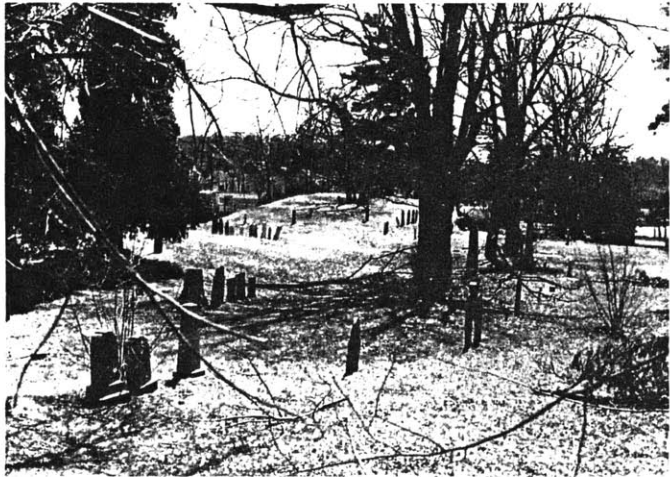


Figure 6-2: The South Burial ground was the first use of land along present day Needham Street. The street was not built until 72 years later.

Brook, the machine manufacturer built cotton processing machines for the growing industry in the United States and Mexico. When the original factory burned, Pettee quickly rebuilt and bought out his former employer at the Elliot Manufacturing Company. The combined operation was later renamed the Elliot Mills, which for a short time was the largest producer of Calico cloth in New England (see figure 6-3)

The Railroad Years

This period in the history of greater Boston includes the opening of the area's first railroads. In 1834, the Boston and Worcester Railroad opened its first segment from Boston to West Newton (about 3 miles north-west of Upper Falls). Some goods from Upper Falls continued to be transported by wagon

trains to Boston while others traveled north and were transferred to the train. In 1844, the B&W proposed the construction of a branch from the main line at West Newton up the Charles River valley to serve Upper Falls. Otis Pettee, a leading rail advocate in Upper Falls, rejected the proposal as a "roundabout fifteen-mile route to Boston" (Smith p. 427). In the late 1840s Otis Pettee and his colleague Mr. Bushnell proposed a more direct connection to the new B&W line which terminated in Brookline Village. Seeking advice and approval of the Brookline agriculturalist, they learned that the townspeople were not in favor of it because they were concerned that "their gardens



Figure 6-3: Otis Pettee 1795-1853 (Newton Historical Society)

would be disturbed, and many strangers introduced into the place” (Smith p427).

Eventually, people as far south as Woonsocket supported the proposal to develop a direct connection to Boston and added steam to the idea. In 1849, the Charles River Branch Railroad was chartered to build a rail line from the B&W terminus in Brookline Village to Dover. On November 1, 1852 trains first ran on the Charles River Branch to Newton Upper Falls and 8 months later track as far south as Needham Plains (Needham Center) was in operation. Otis Pettee, father of the movement to connect Upper Falls with Boston by rail, died a few months after it opened (see figure 6-4).

The railroad right-of-way bisected the study area between Elliot and Winchester Street and is still a prominent feature of the area. The Charles River Branch later became the Charles River Railroad which planned the extension from Needham to Dover and on to Medway and Bellingham. A lack of funds prevented its construction past Needham. The Charles River Railroad merged with the New York & Boston Railroad in 1855 and by 1863 trains were running from Woonsocket to Boston via Upper Falls (Humphry, p44).

The railroad transformed Upper Falls into a thriving village with a school, post office, stores, and a hotel. It provided a direct connection to Boston for the transport of raw materials, finished goods, and passengers. In 1859, the line was leased by Norman Munson who took a contract to provide gravel for the filling of Back Bay. From 1859 to 1869 40-car trains

transporting gravel ran every 45 minutes from the terminus in Needham to Back Bay. During this time there were only a few commuter trains to Boston, and passengers often complained of being held up by the gravel transport.

The first development at the Newton Highlands end of the Needham Street study area resulted from the construction of the Worcester Turnpike. There was a toll both near present day Highlands Village where a wheelwright’s shop, a blacksmith, and two taverns opened in the first two decades of the 1800s. When the railroad was built in 1852 a station called Oak Hill (also the name of the village at that time) was built on the site of the present day Newton Highlands MBTA station, but was hardly used because of the industrial traffic from Upper Falls and the gravel transport from Needham.



Figure 6-4: Railroad tracks and Upper Falls depot (5/4/95).

The Street

It was not until the filling of the Back Bay was completed that the Highlands area started to grow. Between 1871 and 1874 most of the residential areas around Newton Highlands and the northern end of the study area were subdivided by speculative developers (see figure 6-5). Twenty four acres at the north end of Needham Street was owned by Highland Land Associates, but they were not able to sell individual plots in the vicinity of the railroad tracks so larger parcels were assembled and later sold off for industrial development. Heavy rail traffic in previous years may have created an undesirable image of the area and impeded the sale of housing lots at this end of the study area.

As Newton Highlands grew and the Town of Newton prepared to become a city, the need for road connections to Needham Center increased. The only route from Newton Highlands across the river to Needham was via Elliot Street and Upper Falls. By building a street through the open land and marshes of the South Meadow Brook area, townspeople probably sought a more direct connection from Highlands to Needham Center. As the 1874 map demonstrates, plans for the construction of Needham Street existed a few years before the incorporation of the city in 1875.

In November of 1875 the stone bridge over the Charles was finished and “formally accepted by the selectmen of Needham and the highway committee of Newton.” (Newton Republican 11/20/1875). The new connection, “Needham Road,” was to be finished over

the winter for “deep cuts and heavy fills give better opportunity for winter work than ordinary road work” (Newton Republican 11/6/1875). The Needham side connection, Highland Ave, was finished a few months before the Newton connection (see figure 6-6).

As soon as the bridge was finished the new city embarked on another public works project in the area. A water pumping station, on the east side of Needham Street next to the new bridge, was constructed to provide the city’s new Municipal Water Service. The Charles River Valley upstream from the pumping station was designated as a reservation in order to protect Newton’s water source. Aside from these public works projects, little development occurred in this area of the corridor; lands along the Charles upstream from the bridge continued to be farmed until the turn of the century (see figure 6-7).

In the 1880s, the cotton industry moved to the industrial cities of Lowell, Fall River, and New Bedford where huge new factories and large corporations had been built. As the cotton industry moved out, it was replaced by silk manufacturing operations, paper mills, and other factories that produced nails, brooms, fireworks, and fire alarms. During this time, Pettee Machine Works was bought out by Saco Lowell of Maine.

As Newton Highlands grew, the railroad service provided by the New York and New England Railroad (formerly the Charles River Railroad) became inadequate. In 1883 the Boston & Albany Railroad bought this branch of the NY & NE Railroad. They improved the track between Brookline and Newton Highlands

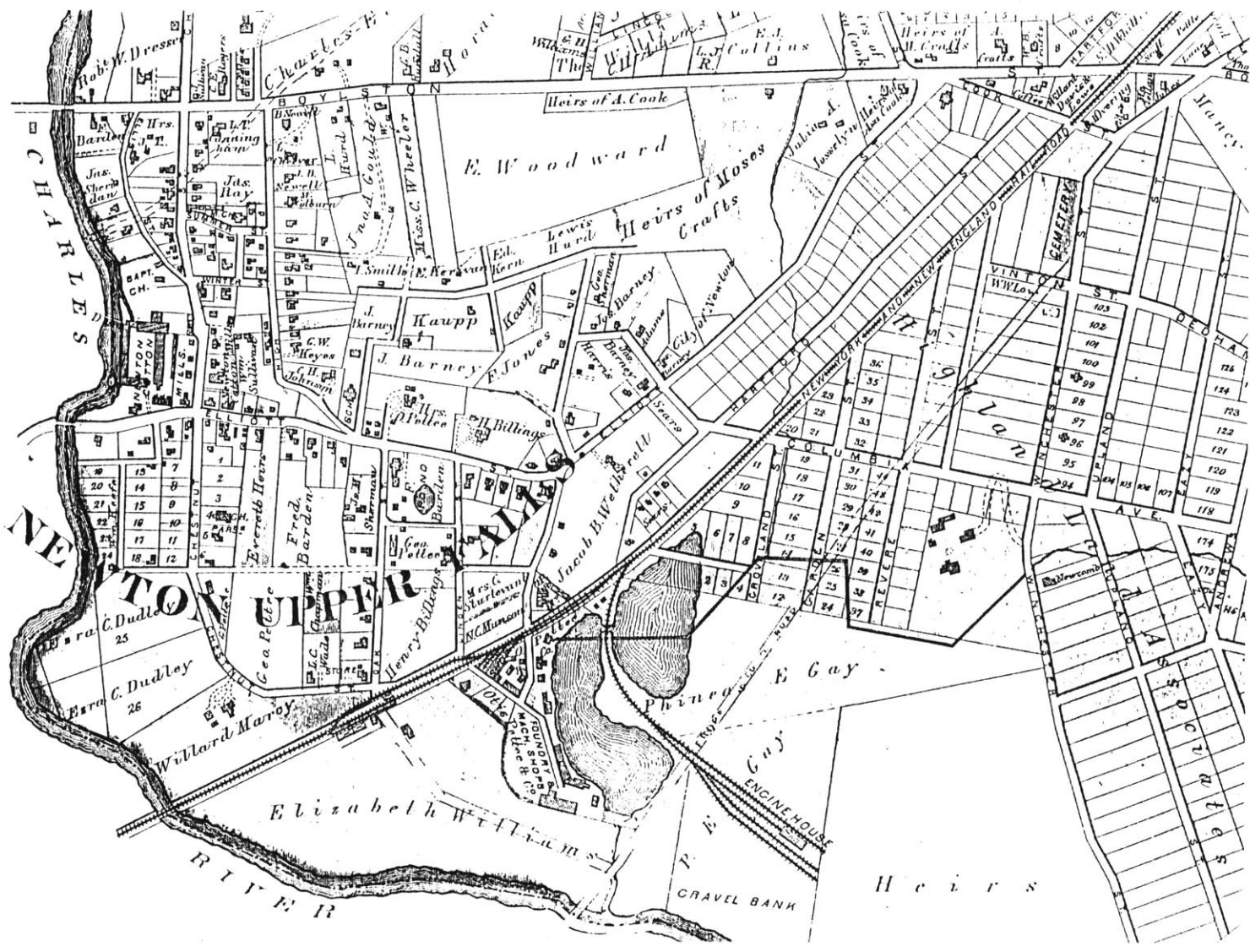


Figure 6-5: Newton Upper Falls 1874. The land south of the railroad tracks (present day Needham Street) is subdivided for residential use.

Proposed Needham Street can be seen crossing the subdivision (Newton Historical Society).

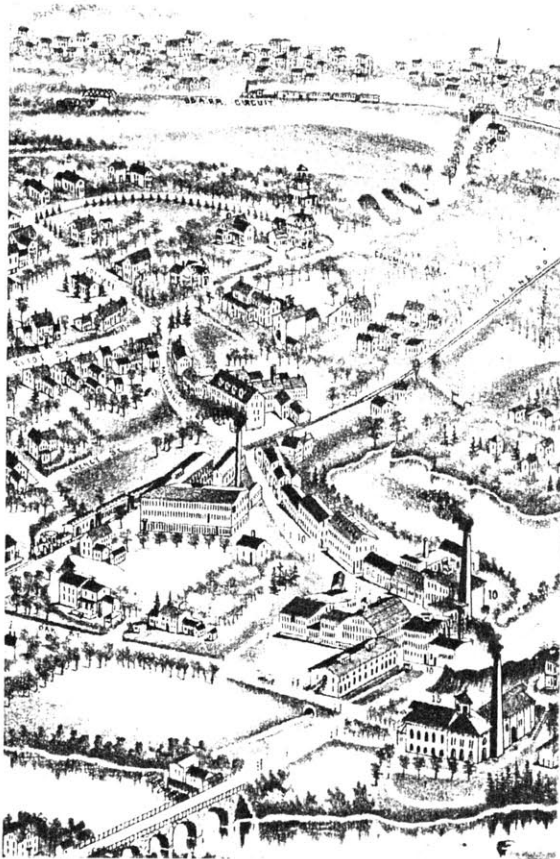


Figure 6-6: The industrial area outside of Upper Falls shortly after the bridge and road were opened. The bridge and the river can be seen in the lower part of the drawing (Ken Newcomb Collection).

and built the Highland branch extending from Newton Highlands to the present day Riverside station primarily to serve commuters traveling from Newton to Boston. During the 1880s, H. H. Richardson designed the train stations along the new Highland Branch from Riverside to Chestnut Hill.

Commuter trains from Needham continued to

run via Upper Falls and Newton Highlands until 1906 when a double track connection was built from

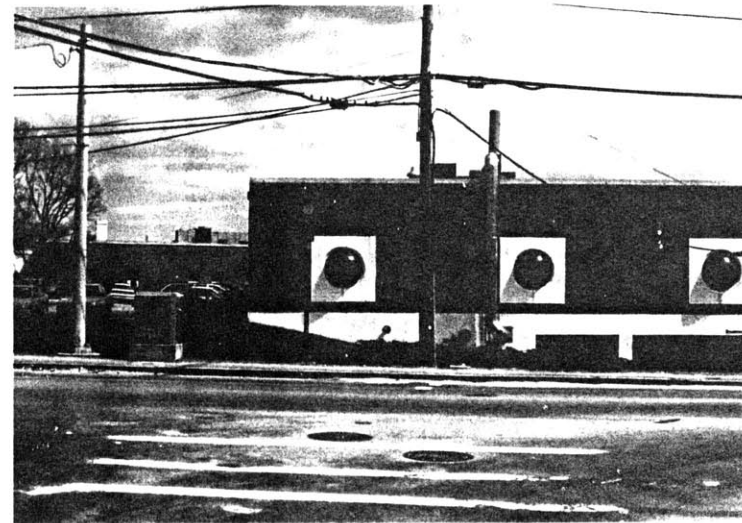
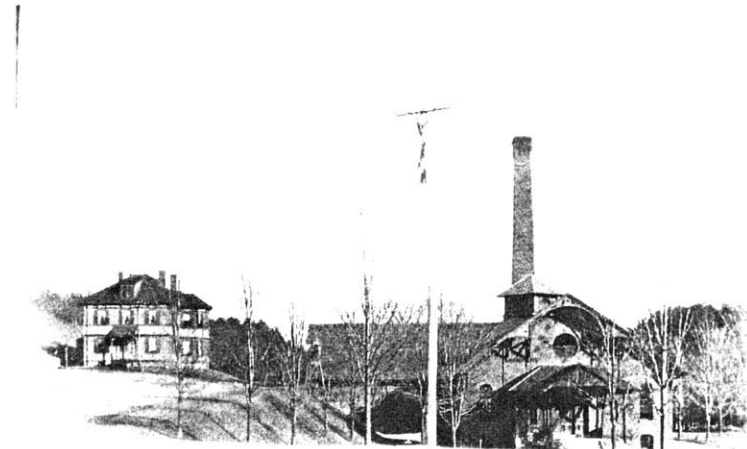


Figure 6-7: The water pumping station at Needham and Christina Streets. The site is now occupied by GZA Environmental Services in a building of a different era (Ken Newcomb Collection) (5/4/95).

Needham Junction to the West Roxbury Branch. For a few years after the new connection was built the New Haven Railroad ran a circuit route. On this route trains left Boston and traveled to Needham via Forest Hill and West Roxbury and then returned to Boston by way of Upper Falls, Newton Highlands and Brookline. By 1914 the circuit service had been discontinued and the old Charles River Branch was used mainly for cargo and industries remaining around Upper Falls. In the late 1950s the Highland Branch from Riverside to Downtown Boston was converted to trolley service (present day "D" branch of the Greenline), severing the Charles River Branch from its direct connection to Boston.

Written history of the Needham Street area is thin between the turn of the century and the 1950s. This is due in part to the depression that ended Upper Falls' history as an industrial center, and due to physical constraints. Before the widespread use of automobiles, Needham Street was separated from the commercial areas of Upper Falls and from the residential area of Elliot Street by the railroad and old factories. At the northern end of the street, it was also separated from Newton Highlands by the Worcester Turnpike although some houses were built near the South Burial Ground.

In the late 1910s, earlier subdivisions at the Highlands end of the street were only scarcely developed. Maps from this period are the earliest maps that depict the set of streets bounded by Jaconnet Street and Columbia Street, which still exist today. In 1910, this subdivision, had only one house on

Kenneth Street (see figure 6-8). The west side of Needham Street, across from these vacant lots, consisted of one large undeveloped lot owned by the Holtzer Cabot Electric Company.

In 1929 the New England Concrete Pipe Company bought eight acres of land (half of the Holtzer site) with 700 feet of railroad frontage



Figure 6-8: Possibly the original house from the 1910s. Still standing on Kenneth Street with Dunkin' Donuts in the back yard (5/4/95).

between Needham Street and the rail right-of-way. Maps from this time show a proposal for Columbia Ave crossing Needham Street, the NE Pipe site, and the railroad tracks to connect the Winchester Street area to the Upper Falls and Elliot Street area. Although the proposed connection is depicted on a few maps, and a small piece of road called Columbia Avenue does exist on the other side of the tracks, the

whole road is never shown as existing. South of NE Concrete Pipe, the buildings of the American Fireworks Company occupied the site of the original Pettee Factory and the current site of the WHDH tower. The Saco-Lowell company still occupied the site at the corner of Oak and Needham Street.

The "Combined Annual Reports of the Planning Board for the Years 1919, 1920 and 1921" show Needham Street as one of a few proposed locations for a new school and park. The area along the river and Christina Street is mentioned as an area for potential "parkway" development. All other areas of the corridor, except the small subdivision around and between Columbia Street and Jaconnet Street, are zoned as commercial districts which permitted "industries and light manufacturing not detrimental to surrounding neighborhoods" (City of Newton, 1921). Zoning maps from the late 1930s depict much of the Needham Street area as "unrestricted." It is the only area of the city zoned in this way.

Twentieth Century Industry and the Birth of Present Day Needham Street

The post World War II era brought unprecedented commercial growth to the city as a whole and to Needham Street in particular. Modern warehouses and assembly plants moved into vacant parcels on the east side of the street and near the river.

In 1948, Needham Street, still part of the original route 128, became the site of one of the country's first "industrial parks." The Newton Industrial Center was developed by Cabot, Cabot, and Forbes on some of the large parcels close to the river. Later, after the construction of the 128 circumferential "highway," Cabot, Cabot, and Forbes developed a larger site across the river in Needham. The Needham site became known as "Needham at 128" and the Newton site "Newton at 128." It was for these early industrial parks that the area was described as "... a storybook illustration of 'Suburban Living for Business'..." (Newton Graphic 8/14/1952) and Needham Street became known as Newton's "Miracle Mile." At this time, these developments were considered the model for industrial development of the future.

The Newton Graphic described the phenomenon occurring on Needham Street as a "preview of the future..." It went on to explain that:

"... the trend represents one that is sweeping the country, a trend for business, large and small, to move away from congested city centers, from the superannuated loft buildings in dingy industrial slums between the freight yard and the gashouse, to a bright new environment of modern daylight buildings, shade trees, front lawns, trim hedges, low taxes

and parking all around....” (Newton Graphic 8/14/1952).

These new developments were required to be set back from the road by forty feet, all loading docks were to be located on the side or back of the building, and the front ‘yard’ was to be landscaped. The remarkable contrast between the site planning of these 1950s factories on the east side of Needham Street and the mills along Oak Street is still visible today (see figure 6-9).

Through the 1950s, 1960s and into the early 1970s many businesses from Boston and surrounding towns moved to the Miracle Mile. It was during the early part of this period that many of the older manufacturing operations were razed and new offices, warehouses and manufacturing plants were built. A milk processing company purchased the old fireworks factory site to build a modern plant. Well known companies such as General Motors, Liberty Mutual Insurance, and Honeywell Incorporated all maintained operations along the street. By 1968 the city zoning map depicted the whole area as a manufacturing zone.

The end of the 1970s marked the next transition period for Needham Street. As assembly plants expanded they moved to large sites along routes 128 and 495, the Needham Street buildings were renovated as office space or left in disrepair. It was during this time that Needham Street got its first taste of retail development. Early uses included small discount clothing stores and a McDonald’s. In 1979, the Marshalls mall, for which Needham Street owes its



Figure 6-9: Industry of the 19th century was built at the street's edge while 20th century industry, across the street, is set behind a front yard (5/4/95).

most widespread fame, was built. The opening of this mall marks the beginning of Needham Street's transition from an industrial and manufacturing center to its current image as a commercial strip.

From the beginning of its built history, Needham Street has always been a crucible for new business – manufacturing, light industrial, retail, food services, and others. It has also always been an area at the periphery of more imageable parts of the city. Bisected by the railroad, and bound by the river, Needham Street is today a wedge of rapidly changing industrial land strung out between two villages. Early subdivision plans and proposed road crossings would have tied the street into the fabric of the city, but probably would have limited the area's potential as an economic engine.

The river, the railroad, state highway programs, and the suburbanization of American industry were the early forces that shaped Needham Street. These forces foreshadow both the economic and physical opportunities and constraints that Needham Street has experienced in recent years. Still an important economic force, Needham Street is currently being overwhelmed by retail strip development and traffic. The capacity of the street, its limited connections to adjacent areas, and disorganized development have created intolerable traffic and an unusable environment. As retail and office uses bring more people to the area for longer periods of time environmental enhancements become essential. What will the future of Needham Street hold?

Planning Efforts To Date

Since the first rezoning proposals in the early 1980s, planning efforts for the Needham Street Corridor have been limited. In recent years, the community has been more involved in the planning of the area, but Needham Street still lacks a vision for the future.

The Central Transportation Planning Staff (CTPS) first studied the Needham Street/Highland Avenue corridor in 1980 and encouraged both Needham and Newton to take a more proactive approach to managing traffic through land use controls. In 1983-1984, the Newton Planning Department tried to severely limit retail development and preserve Needham Street as a manufacturing, industrial, office district. By this time a small number of successful retail establishments had already opened on the street and property owners and the business community did not want their future limited to industrial and office park development. Opposition from these groups forced the city to rethink its proposal.

A significant planning study of the street emerged from this failed attempt to rezone the corridor. In 1984, Lozano, White & Associates published a study called "The Needham Street Corridor: Proposal for the Future." Although the report did not develop full proposals for future development, it did make recommendations concerning traffic, zoning, and development standards. The traffic improvement proposals included widening the street, reducing curb cuts, and building "service loops" behind existing buildings; none of these traffic recommendations have been

realized in the ten years since the study was published. The city did adopt some of the zoning and development controls three years later when they rezoned the street.

The 1987 rezoning created two mixed use districts. The most prominent zone, mixed-use-1 (MU-1), accounts for 89% of the land in the corridor and allows for office and R&D uses as-of-right, and retail or industrial uses by special permit. MU-2 makes up the other 11% of the corridor and is the same as MU-1 except retail is allowed without a special permit. These two districts include basic development standards such as setbacks, height limits, and FAR controls, but nothing further. The planning department has "internal design guidelines" (Newton Planning Department, 12/6/1994) for building landscaping, signs, and parking lot location. These guidelines are not published, but are negotiated as part of the special permit review process.

The mixed-use zoning was intended to discourage retail development but not stop it altogether. New controls that were intended to increase office and R&D uses were adopted just as new office construction came to a halt in the late 1980s. In the years since the 1987 rezoning, retail has grown significantly for three reasons: 1) some large properties such as Filene's had approved redevelopment plans before the zoning change took place; 2) the Board of Alderman has granted many special permits; and, 3) many small scale and retail start-up businesses have located in the MU-2 zone and contributed to the traffic on the whole street. Zoning that relies on special per-

mits makes it difficult for the Board of Alderman to turn down a proposal for which a precedent for a similar use has already been set. Also, as Glenn Morris of the Newton-Needham Chamber of Commerce pointed out, "it is difficult for developers to play by the rules if the rules aren't clear.... Cut and dry development standards and design guidelines take the uncertainty out of the equation. Developers are willing to conform, but they say, 'just tell me what the rules are'" (Graphic, 11/4/93).

Throughout the 1980s the city sought roadway improvements from the state. Traffic signals were eventually installed at the intersection with Winchester Street and at the Needham Street intersection of Oak/Christina. The road was also restriped to create a continuous left turn lane. One of the over arching planning and implementation problems for roadway improvements is that the road and the adjacent land are controlled by two separate jurisdictions. The state, which owns the road, was unwilling to make more costly improvements until the city started to control development along it more effectively. The other problem was, and still is, limited funds.

As the street continued to develop a retail character, Mayor Mann decided it was necessary to form a business organization representing Needham Street's interests. In the summer of 1992 he organized the Needham Street Task Force. This group of business owners, merchants, and residents is described by its president, Ken Wexler, as the "first neighborhood group to speak for the street, and a way to get input back to the city" (Graphic, 3/18.1993). The Task Force

has three subcommittees: 1) the Pedestrian and Traffic Control Committee which is primarily concerned with getting the State to install a pedestrian crosswalk and signal; 2) a Business Promotion Committee devoted to developing advertising supplements for the newspaper and enhancing the Street's image as a shopping district; and 3) the Future Development Committee that has produced master plan concepts and zoning revisions for the corridor.

The Future Development Committee wrote a rezoning proposal and started to develop a master plan. When they presented their changes to the existing code to the rest of the Task Force and the Newton Planning Department, city planners and property owners whose land would be rezoned would not support it. This created a deadlock, and upset many people in the city and along the street. In response to the impasse, the Economic Development Committee established the Needham Street Consensus Group (NSCG) in the spring of 1993. The mission of the NSCG was to further the efforts started by the Future Development Committee and to smooth relations between Task Force members, residents, and city planners.

The NSCG was a 22 member committee representing the Board of Aldermen, the surrounding neighborhoods, the Task Force, the Newton-Needham Chamber of Commerce, the Planning Department, and the Economic Development Committee. They were charged with formulating land use goals and policy recommendations within six months.

The result of this effort was a list of "land use concepts intended to support and encourage forward movement in the planning process" (Needham Street Consensus Group, p9). The primarily short term recommendations included: discouraging uses such as gas and lube stations; reducing curb cuts by 50%; establishing pedestrian priority zones to aid in crossing the street; connecting parking lots between parcels; developing a park on some of the land owned by the DPW; coordinating development and density between parcels to balance traffic; encouraging private investment in landscaping and streetscape; and using the railroad rights-of-way for linking neighborhoods to the Charles River. In addition to these short term recommendations, the final report also included some long term ideas such as relocating the MBTA station to the curve in the Greenline right-of-way and developing the air rights over the tracks.

The Consensus Group effort brought people together to think about the corridor, but this forum did not take advantage of this opportunity to create a vision for Needham Street. They started to develop some interesting ways to manage growth through performance standards that were based on vehicle per day allowances, but they never addressed the more fundamental urban design issues of what type of place they want Needham Street to become. Much of the discussion within the NSCG, and the response to their recommendations by the Planning Department, revolves around controlling uses and reconstructing the road. There has been little to no long term planning on the scale of the efforts examined in Riviera

Beach, Bellevue, or on Highway 99. Each of these places has, or is in the process of developing, a vision of what kind of place they want their corridors or districts to become and then developing implementation schemes. After more than a decade of discussion Needham Street still lacks a vision for the future and a strategy for getting there.

CHAPTER SEVEN

OPPORTUNITIES FOR NEEDHAM STREET

Urban design opportunities for Needham Street can be examined using the taxonomy of physical approaches that was developed in Chapter Four. These components can be discussed separately, but because Needham Street is a real place it will quickly become apparent that combinations of different approaches and a commitment to a vision is necessary to effect change.

Traffic and Road Configuration Opportunities

The most obvious and immediate problem on Needham Street is traffic. The road is operating at a low level-of-service and the center lane is unsafe and is often called "suicide alley." If the road is not improved, significant new retail development will completely choke the road. The current Super Stop & Shop proposal for the New England Concrete Pipe Site is expected to include funding for the design of a computerized traffic signal system and a reconfiguration that will include four lanes of traffic within the existing right-of-way. Road reconstruction and signalization is expected to improve traffic flow by 25% and thereby increase road capacity for the development. This case by case approach to the traffic issue does

not provide any long term ideas about future development. Optimizing the traffic flow on the road will solve the immediate problem of new traffic generated from Stop & Shop but it will not provide for the redevelopment of other parcels or take into account any image or useability improvements beyond automobile access.

Other widening options are limited. The Lozano, White and Associates study of 1984 determined that a five lane road would require many takings and would only add capacity beyond a four lane road if curb cuts were not limited under a four lane scheme. In order to create a real boulevard with service roads and planted medians, a right-of-way twice as wide as the existing right-of-way, and an extraordinary effort would be required; land would have to be taken, buildings demolished, and the corridor completely reconstructed. The city will not support any road reconstruction outside of the 60 foot right-of-way.

The rail rights-of-way are the area's largest asset in terms of circulation and a framework for ordering future redevelopment. The rights-of-way could be utilized within the Needham Street Study area or in cooperation with the town of Needham for a more extensive road system to serve Route 128, the Needham Industrial Park and Needham Street. One of the major bottlenecks between Route 128 and

Needham Street is the bridge over the Charles. This bridge, which is only two lanes wide, is the only Charles River crossing that has never been widened. It is listed on the historic register, and many widening schemes may be inappropriate. The state and the city are currently looking into the feasibility of building cantilevered sidewalks over the edges to provide additional lane width for traffic. Although this would be an immediate improvement for traffic, all cars would continue to be funneled along one major street while many of the area's businesses are accessed off of adjacent dead ends. Using the right-of-way to connect streets within portions of the area would provide a clear circulation system and capacity for new development (see figure 7-1).

The State is currently planning to build high occupancy vehicle (HOV) lanes along Route 128. These limited access lanes will have access to Needham Street/Highland Avenue. The rail rights-of-way could be used to provide access to the HOV system while also providing increased access to the Needham Industrial Park and interior properties along Needham Street. Short of connecting to 128 directly, the rights-of-way could be use to provide more capacity across the river and develop a more connected block pattern in the lower part of the Needham Street Corridor. If cooperation with Needham is not possible, and rail lines are not used to cross the river, lower Needham Street could still take advantage of the rights-of-way to provide access to the large parcels that are likely to redevelop in the near future.

There are two possible solutions to the prob-

lem of creating new roads along the rights-of-way that are adjacent to the back side of residential neighborhoods: 1) the outer roads could have a "parkway" character where landscaping and topography creates a buffer between the housing and the new road, 2) right-of-way land could be exchanged for land or easements to build a parallel road, while the original right-of-way could be used for new residential development or small scale commercial uses. The second of these alternatives is a better urban design solution, but would be more difficult to implement. In either case new roads parallel to Needham Street could be built as a one-way pair which would limit cut-through traffic while still providing increased access to lower Needham Street.

Redevelopment Possibilities

There are great opportunities for using large redevelopment projects to set a new precedent for quality urban development on Needham Street. Primarily at the lower end of the street, where there are a number of large properties that are ripe for redevelopment, proactive planning, partnerships and deal making between investors and the city of Newton could produce significant results.

In early phases of the Consensus Group Process there were some ideas for the IVEX site, which included redevelopment projects that would reorient the property towards the Upper Falls Village and include a large residential component. As a conceptual idea for redeveloping the lower end of the

Figure 7-1: Opportunities for a connected street system



Existing rail rights-of-way in the Needham Street study area and the Needham Industrial Park.

There are multiple options for reusing rights-of-way in order to create a new road system. New infrastructure could provide access for new development and increased density.

street, the Consensus Group did not carry the design any further.

Relating Needham Street to the adjacent neighborhoods is an important objective of any major redevelopment at this end of the street. For over a century the land along Needham Street has literally been “the other side of the tracks” where manufacturing, warehousing and auto-oriented retail was located. The right development or developments on the properties at the corner of Needham and Oak/Christina Streets could start to integrate the existing neighborhoods and new commercial activity. The Village Falls apartment complex demonstrates that people are willing to live within the corridor and the existing mill buildings provide an architectural and historic context with which to work.

The lower end of the street could be developed as a mixed use center that includes, retail, office, residential, and entertainment functions while providing an attractive gateway to the city. The development could be oriented around existing streets or new internal streets could be used to break up large sites and connect them to the surrounding neighborhoods (see figure 7-2). At this stage the city does not need designs for the development of each large parcel, but ideas and visions for the kind of places they would like it to become, beyond a simple use designation, are crucial. Urban design policies that describe the desired level of amenity, its relationship to adjacent villages and properties, and its overall character should be clearly stated and possibly sketched. Policies and visions such as these provide a more

proactive tool for shaping development. Simply zoning out certain types or sizes of retail use severely limits opportunities, while setting criteria and actively seeking cooperative developers could produce high quality redevelopment.

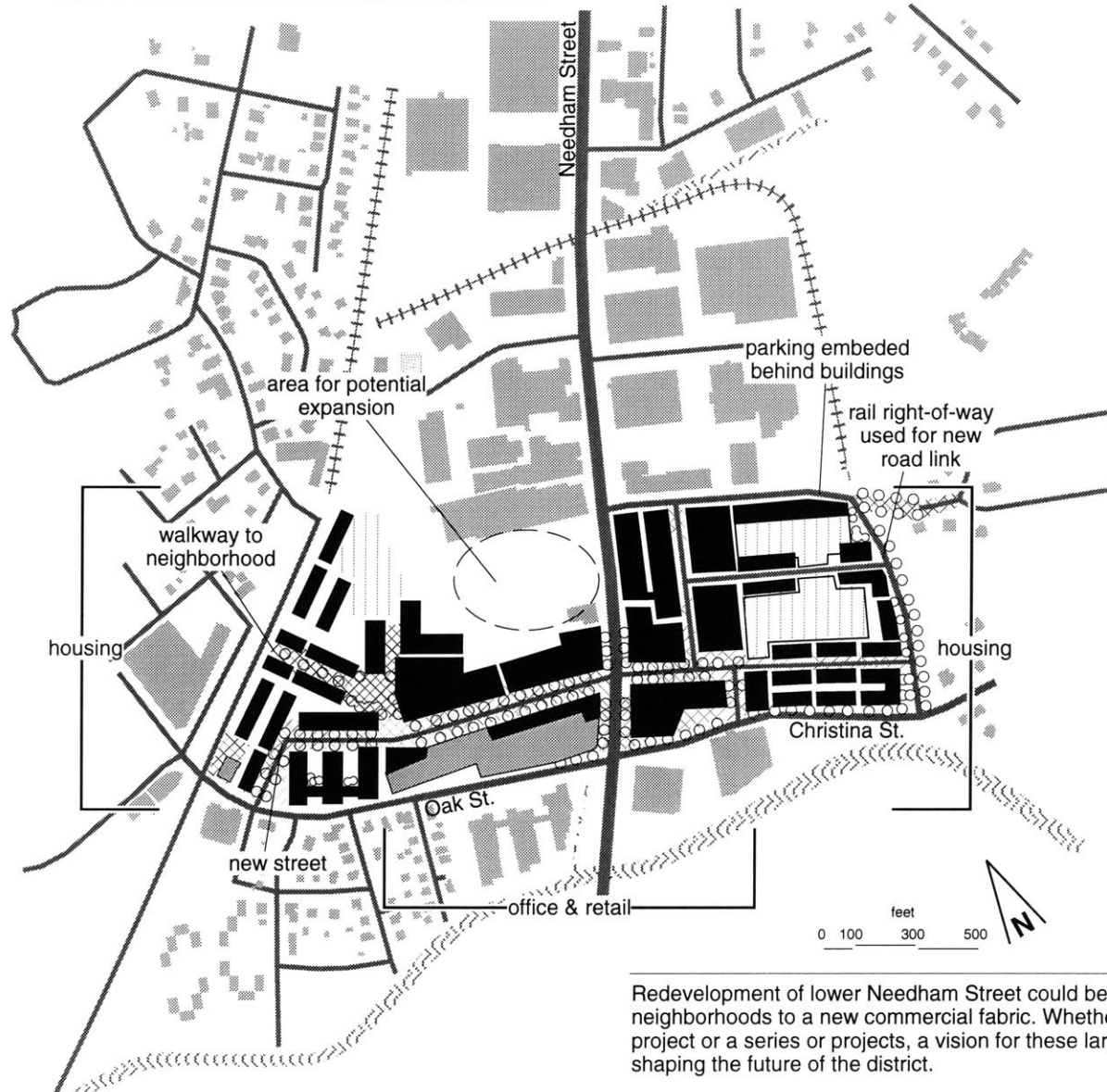
Site Planning Opportunities

Needham Street, like other commercial strips, can be improved by site planning at two levels. At the individual site level, there are opportunities to improve existing developments and proposed site plans that would better serve long term development and help decrease the street’s image as a strip. At the system level, areas of the street could be enhanced to create a unique identity and/or be reoriented to better serve the surrounding areas.

The Marshalls mall is the largest and most notorious strip mall on Needham Street. The row of stores facing an oversized parking lot is a classic example of cheap suburban strip development. Built in the late 1970s, when there was little retail on the street, this development was probably a catalyst for much of the area’s current retail development. Once other retail projects, such as Filene’s Basement and the Brickstone Shops opened nearby, the Marshalls mall became somewhat isolated because it is only oriented to its parking lot.

New development in part of the parking area could transform the shopping center, and provide increased retail space for the property owners. A simple L-shaped row of stores along Needham Street

Figure 7-2: Redevelopment Possibility.



Redevelopment of lower Needham Street could be used to link adjacent neighborhoods to a new commercial fabric. Whether it is developed as one project or a series of projects, a vision for these large parcels is crucial to shaping the future of the district.

and down the existing driveway of Marshalls could create a livelier center and make use of underutilized land. Depending on the mix of new uses, parking could be shared or a one story deck could be built. The new street created in place of the existing driveway could be connected to the rail right-of-way or used to provide access to the parking area (see figure 7-3). The redevelopment of this site could also be integrated into the larger redevelopment of the IVEX site. With a future vision for the street, individual properties could be shaped as they redevelop to serve the urban design goals of the corridor. Needham Street could become a place that is greater than the sum of its parts.

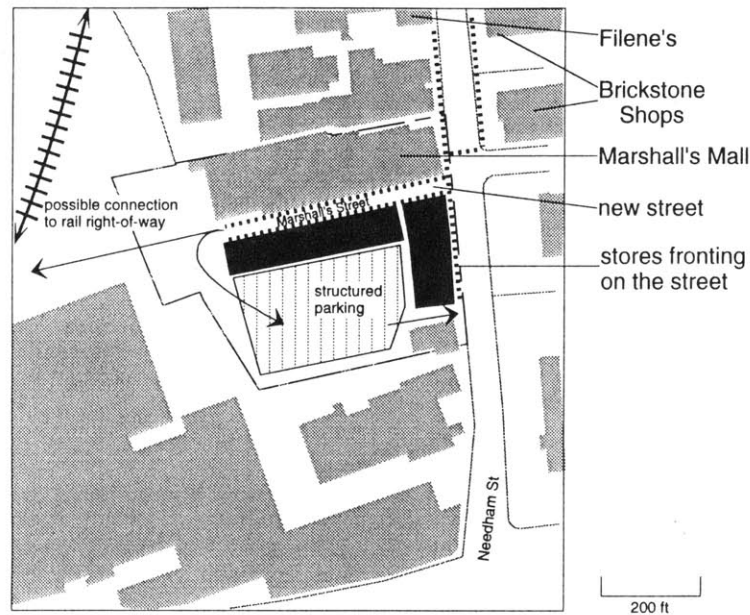


Figure 7-3: Conceptual infill development of the Marshalls mall.

The current proposal for Super Stop and Shop also provides an example of how creative site planning could benefit the street rather than contribute to its chaotic character. The draft proposal for a 70,000 square foot store set at the back of the property behind the parking lot is a typical supermarket prototype. Visually, it provides nothing for the street except a view of parked cars. It would have no relationship to the buildings around it and would be set back farther than most other properties along Needham Street.

Although the site is an odd shape, it is deep enough to create a secondary road in back and orient the supermarket, or other big box use away from Needham Street. The store could be positioned back-to-back with existing businesses fronting on Needham Street and a city block that connected to Needham Street could be created (see figure 7-4). At first, parking would still be visible from the street but as the frontage along Needham Street redeveloped it would be shielded from view. Ideally, structured parking would be used to save space and allow for more development on the site. If properly planned, the access road could be the first link in a secondary road system that accessed the backs of all the large lots on the west side of the street. The best solution would be to use the rail right-of-way for this purpose, but a secondary road system could be built incrementally as the properties redevelop.

On the scale of the whole corridor, there is no consistent "language" for the way buildings relate to the street, how they are accessed and how far they are set back from the road. This is partially due to the

fact that many of the existing structures have been retrofitted for retail uses, and partially due to typical strip mall prototypes that exist along the road. A vision for the future character of the street would provide a framework within which standard elements of building relationships could be required at the time of redevelopment or major renovations.

The current zoning regulations for Needham Street is the only tool that exists to shape the future of the corridor. This blunt tool is not sufficient to give shape and character to the street; it only allows or disallows uses. The Needham Street Task Force's proposed zoning revisions were a step towards a more comprehensive corridor-wide approach to the future. The regulations envisioned creating mixed-use zones with "live-work" opportunities at both ends of the street and a manufacturing/R&D district at the center (Needham Street Task Force, 4/29/93). It also provided different development standards for the different districts along the street. Concept plans, such as this one, provide a framework within which the corridor could be shaped into identifiable districts. Another option for breaking the corridor into distinct districts is to create a dense area of regional serving retail, office, and manufacturing space at the lower end of the street, while integrating the upper end of the street into the surrounding neighborhoods and encouraging the development of smaller locally serving business. Lower Needham Street has large potential for increased access, while the upper portion of the street is constrained by small lots and many property owners (see figure 7-5).

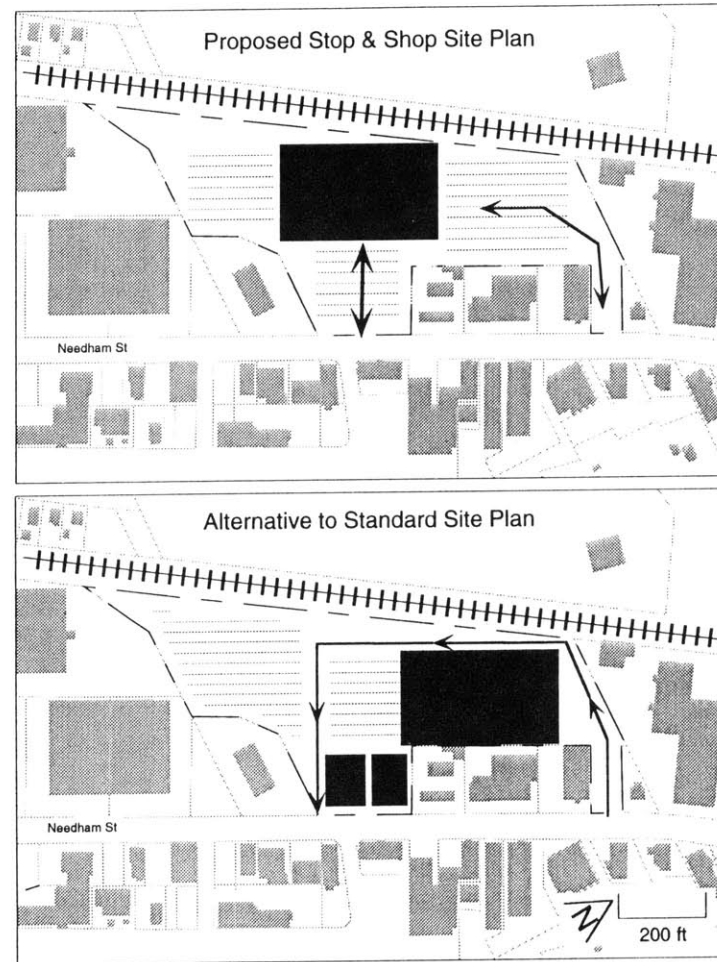


Figure 7-4: Proposed Stop & Shop site plan and a possible alternative.

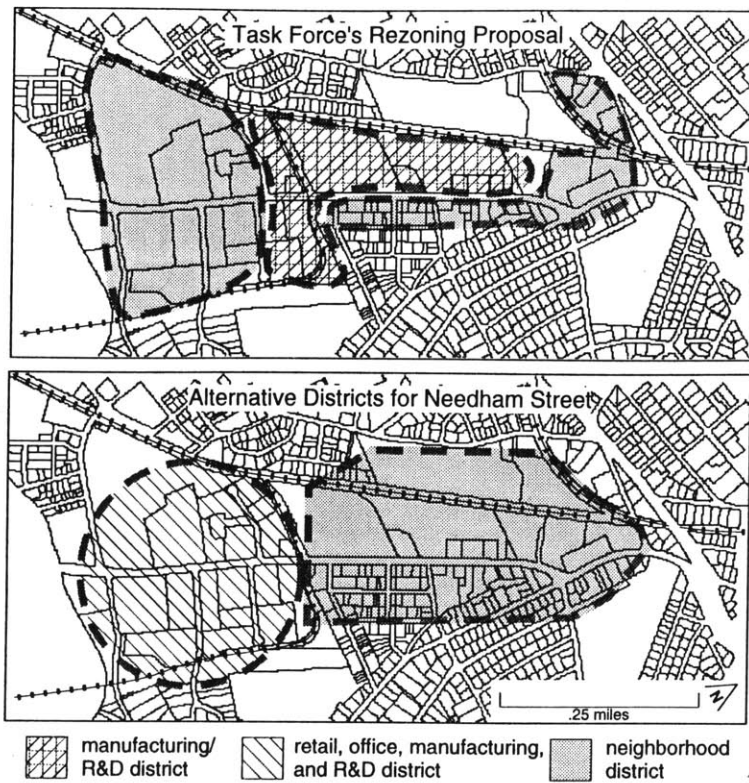


Figure 7-5: Possibilities for breaking the corridor into distinct districts.

Streetscape Improvements

The public section of the corridor, the road right-of-way, contributes to the sprawling character of the street. Overhead utility lines, broken sidewalks, and the lack of street trees, create a visually chaotic public realm (see figure 7-6). In addition to the publicly owned sections of the street, the quality and functionality of each building's landscaping varies tremendously (see figures 7-7). Sign graphics and facade treatments also vary in quality, but are typically better than a full fledged highway strip such as Highway 99 in Washington State.

Streetscape improvement opportunities exist in both the public and private portions of the street. A major step towards improving the streetscape is to submerge the utility lines when the road is reconstructed. In addition tree plantings or other continuous landscape elements could be used to frame the street and provide identity to the corridor for motorists passing through. Simply attaching colorful banners to light posts along the street would be an inexpensive start.

Improvement at the pedestrian level such as, reconstructed sidewalks with a buffer space between sidewalk edge and travel lanes, will delineate pedestrian zones along the street. Because street reconstruction will incorporate four travel lanes, it is likely that sidewalk and buffer space will be limited. In this event, an alternative pedestrian circulation system could be developed. Some properties, such as Staples, already have the beginnings of a secondary pedestrian system. The building that Staples and Parade of Shoes occupy was originally built for indus-

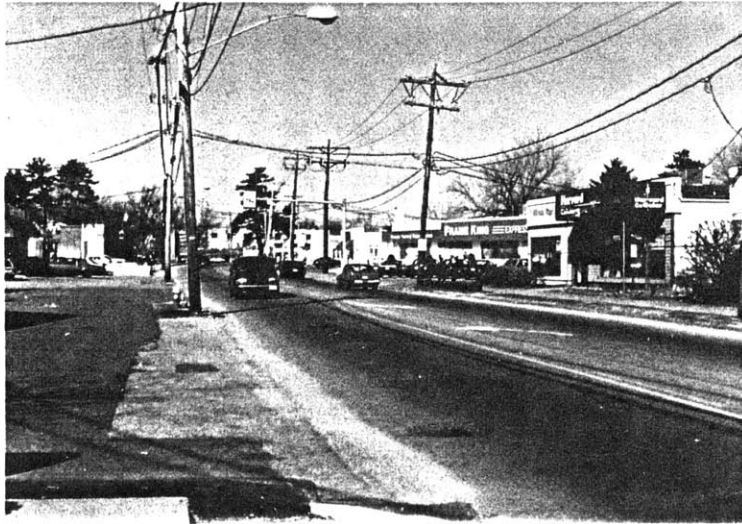


Figure 7-6: The publicly owned portion of the street contributes to its sprawling character (3/27/95).

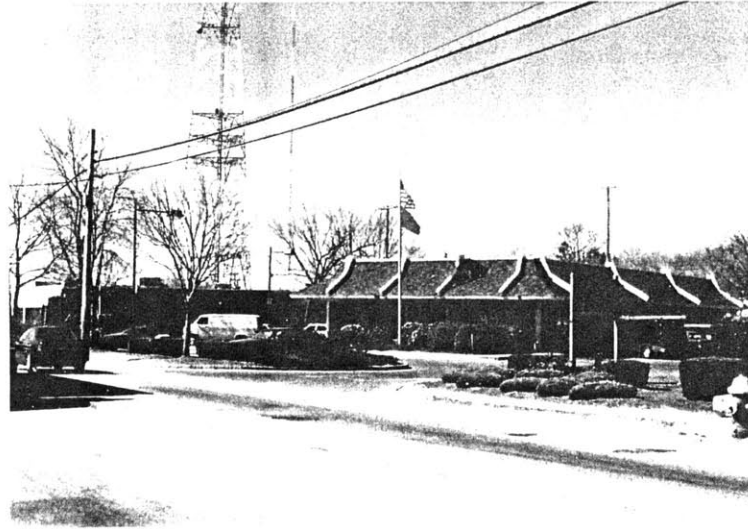
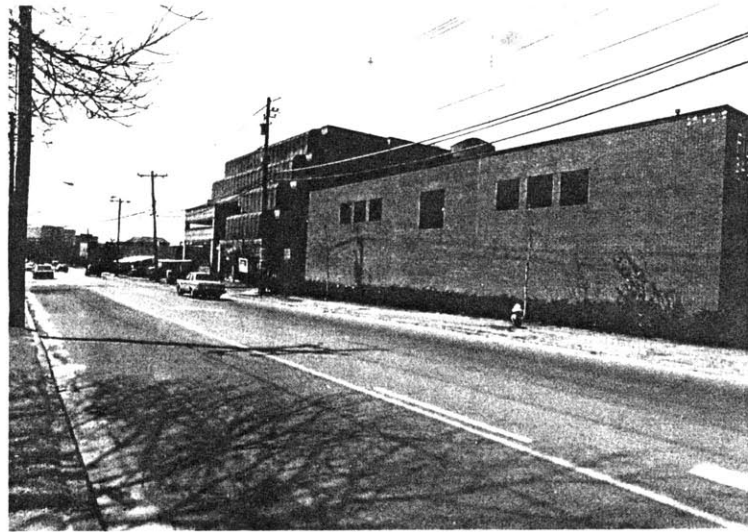
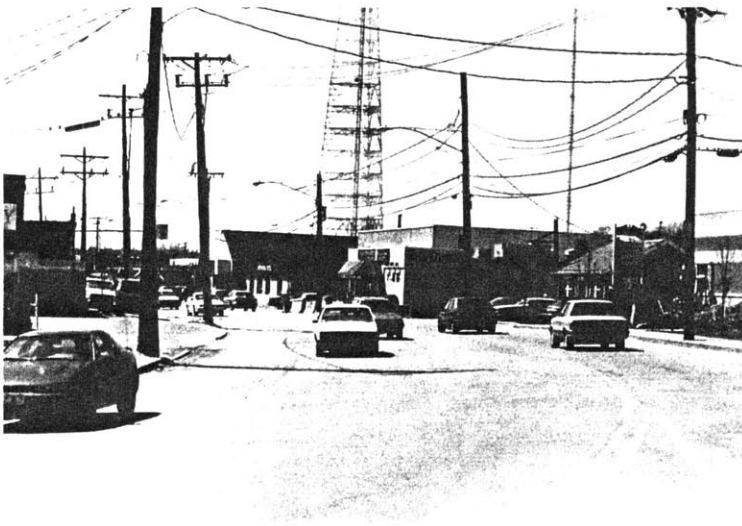


Figure 7-7: Landscaping around buildings varies tremendously (3/27/95).



trial uses; they are set back from street further than many other retail establishments. To access shops along the front of the building, a second sidewalk was built parallel to the street-edge sidewalk (see figure 7-8). A pathway, such as this, that follows the active building frontages and extends to the edges of the property could be required as properties are renovated or redeveloped. With some coordination and design guidelines, a sidewalk system that weaves in and out to serve all businesses could be developed eliminating the need for a sidewalk within the public right-of-way.

The Brickstone Shops and the NTW store at the upper end of the street are cited in the Consensus Group Report as evidence of recent efforts of the city



Figure 7-8: Staples has two sidewalks. The building edge sidewalk does not continue to other properties and the street edge sidewalk is inches from moving traffic (5/4/95).

to enforce landscaping, graphics, and setback requirements (Needham Street Consensus Group, p4). Although these efforts have produced more landscaping than exists on any other property along the street, the landscape is used to hide the buildings rather than enhance the pedestrian experience or to contribute to the overall streetscape.

The sign graphics on the NTW building are not ideal, but at least windows run along the front and parking is in the rear. A rudimentary secondary sidewalk that leads to parking and service areas was built along the front of the buildings in addition to an improved sidewalk at the street's edge. These sidewalks seem redundant. If there was a streetscape plan to connect properties via landscaped walkways on private property, resources invested in the street edge sidewalk could have been used to build one high quality pathway instead of two basic paths.

At the Brickstone Shops, landscaping along the front is decent, but in the parking lot, along the sides and back, where most store entrances are located, it is barren. Because the stores form a court around a small parking lot, the area that people experience most is this parking lot. With additional landscaping, pathways, and sitting areas the parking lot could be transformed into a plaza and parking court with a park-like character (see figure 7-9).

Designing and funding streetscape improvements can be expensive. One option for implementing these types of improvements that have been successful in many other cities, is to establish a Business Improvement District. BIDs, as they are known, are



(a)



(c)



(b)



(d)

Figure 7-9: (a) The NTW building will be hidden once trees are in bloom. (b) NTW has two sidewalks, one at the street edge and one at the building edge.

(c) The front of the Brickstone Shops includes subdued sign graphics and took advantage of existing trees. (d) The parking lot, where all the stores are accessed from, is barren (3/27/95).

landowner and tenant organizations that pay extra property taxes in order to finance improvements that the city cannot provide and that have the potential to increase property values. These organizations are most often managed by a board of trustees of a non-profit organization. The board is composed of district property owners and representatives from the city. With assessment power and the power to decide how the funds are used, BIDs are an effective “grassroots, strike back revitalization tool” that puts the district’s future in the hands of people who can make things happen (Thompson in Gray, p2.).

Needham Street would be an excellent location for a Business Improvement District because it has an active Task Force of property and business owners, and is seeking identity and improvements at the grassroots level. Enabling legislation for BIDs in Massachusetts is currently making its way through the legislature and should be passed soon.

The Need for Needham Street Vision

Opportunities for improving Needham Street extend far beyond the improved traffic flow that road reconstruction and signalization will provide. There is a network of rights-of-way that can provide increased access to the corridor and a framework for new development. A number of large industrial properties adjacent to each other and to surrounding neighborhoods are likely to redevelop in the near future. Changes on these sites create opportunities for new mixed use developments that are related to nearby neighborhoods and set a new precedent for the quality of

development on the street. Underutilized land, the retail vitality of the street, and the tradition of retrofitting industrial structures for use as retail stores provide increased potential for creative site planning. As pressure from large supermarket chains and big box warehouse stores continues, creative adaptation of standard site plans will save Needham Street from further strip-style development. The business community’s interest in improving the image of the street will be instrumental in implementing streetscape improvements and shaping the future.

None of these opportunities will be harnessed effectively without a comprehensive vision of the future. From a new building’s placement on an individual site to potential roadway networks, a framework or urban design plan is necessary to shape the corridor. A continued reliance solely on special permits granted on a case-by-case basis without a commitment to larger objectives concerning what Needham Street should become in 50 years will not create a cohesive place. A vision should not be a master plan drawn to precision for a particular year, but rather, a set of urban design policies and visual depictions of the quality of place that is desired. Planning efforts have to move from merely rezoning to proactively shaping the corridor. Community based efforts such as the Needham Street Task Force and the Needham Street Consensus Group are promising, but should focus on producing a clear vision, including goals, objectives, and the character of place that is desired. Such a vision will be an invaluable tool for shaping future development.

AFTERWARD

The strip is inhospitable to pedestrians, it has a disorganized urban structure, and is a reservoir of underutilized land. If regional growth management efforts and local dissatisfaction with these chaotic environments coalesce, these marginally developed commercial corridors could become something other than chaotic "motor slums." Many forces will shape the future of the strip, and from a planning and urban design perspective it is our job to harness those forces to improve the physical environment.

Ideas for how to improve the strip come from a variety of sources: People have written about it, communities are attempting it, and precedents can be extracted from existing projects, but without a goal and vision for the future, ideas for the strip are useless. The physical approaches to improving the strip are only the pieces of a larger effort. To yield a whole greater than the sum of its parts, the physical approaches to improving the strip must be woven into a larger framework or vision.

Shaping and transforming a strip takes time and commitment. The scores of landowners, diverse interests and changing political and economic conditions make for a challenging planning environment. The timeframe for change in these environments is long. None of the whole strip efforts examined here had a target date for completion, but each had a long

term commitment to shaping and reforming the strip. In Bellevue, where efforts have been underway for fifteen years, only modest results are visible. During that time Bellevue has educated the community, harnessed private investment for public good and made selected public investments in order to make headway towards their goal of a dense urbane downtown. Young efforts such as Riviera Beach and Highway 99 might learn from Bellevue's experience.

What is more important than the length of time it might take, is how to encourage other communities to start thinking about what their strips could become. The case studies examined in this document are only three of thousands nationwide – What is the future of these other strips? Are other communities dissatisfied with the strip environments? Is continued strip development a result of inertia and a lack of creativity and care for the roadside environment? Can the strip be hybridized to meet the demands of the automobile, the pedestrian and still meet the economic return goals required of retail, office, and manufacturing industries?

One strip with great potential for improvement is Needham Street. Traffic congestion and development pressure have brought the business, residential, and planning communities together. Its history as an

industrial district has left it with an underutilized infrastructure and large parcels of land ripe for redevelopment. And retail growth in recent years has made it a desirable location for more development. The ingredients are present but little has happened.

For fifteen years, efforts by planners at the city and state have concentrated on improving traffic. Small improvements have been made only to be overwhelmed again once more retail development occurred. After fifteen years it should be clear that unless development is severely restricted the road and its traffic will continue to be a problem. The long term future of Needham Street does not lie in traffic mitigation. Needham Street has the potential to grow into a functional, pleasant, imageable district of the city, but without a vision supported by the community it will continue to be stuck in traffic.

What kind of place might Needham Street be today had they set goals like Bellevue fifteen years ago?

Are Newton planners, Task Force members, and Consensus Group constituents willing to expand their thinking from level-of-service ratings on the street and two dimensional land-use designation to three dimensional visions of a place that could be adapted and reused through time?

Why is there no vision? Are planners and citizens only concerned with short term results? Do long term plans not maintain constituents' attention long enough to be solidified? Is Needham Street still too amorphous to be thought of as a "place"? If other

communities can develop visions and plans for the strip, why not Needham Street?

Why has no one, or group, stepped back and asked: What kind of place do we want Needham Street to be in forty, fifty or a hundred years?

A vision for the strip is as important as vision for shaping and transforming any urban environment.

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Base Map Data

Building Footprints Courtesy of Boston Edison. All other map data Courtesy of the City of Newton and Michael Turner.