

ISTANBUL TECHNICAL UNIVERSITY ★ INSTITUTE OF SCIENCE AND TECHNOLOGY

**TRANSFORMATION OF AMERICAN DREAM
FROM SUBURBIA TO NEW URBANISM**

**M. Sc. Thesis by
Filiz BAŞARAN**

**Department : Faculty of Architecture
Programme: Architectural Design**

SEPTEMBER 2006

**TRANSFORMATION OF AMERICAN DREAM
FROM SUBURBIA TO NEW URBANISM**

**M. Sc. Thesis by
Filiz BAŞARAN
(295Y106)**

Date of Submission:	September 11, 2006
Date of Defense Examination:	September 18, 2006
Supervisor (Chairman):	Assoc. Prof. Dr. Türkan URAZ
Members of Examining Committee:	Prof. Dr. Hülya Turgut YILDIZ Prof. Dr. Handan TÜRKOĞLU

SEPTEMBER 2006

ÖNSÖZ

Yirminci yüzyılda Amerika’da başlayıp “Amerikan Rüyası” ile de özdeşleştirilen, yüzyılın sonunda tüm dünyada ilgi görmeye başlayan, Kent Dışı Yaşam (Suburban Lifestyle) olgusunu ve bileşenlerini inceleyerek başlayan bu çalışma, bu rüyanın ortaya çıkmasının sebepleri ve gelişimi üzerinde durduktan sonra, yüzyılın sonunda gelinen noktayla devam etmektedir. Kent dışı yaşamın topluma, çevreye ve bireylere getirdiği zararlara değinildikten ve bu yaşam olgusunun dünyadaki yayılımı gözlemlendikten sonra, Amerika’da yirminci yüzyılın sonlarında ilgi görmeye başlayan “New Urbanism” (Yeni Şehircilik) kavramına değinilmektedir. Amerika’dan “New Urbanism” örnekleri verilmiş ve bu yeni hareketin dünya üzerindeki yayılımı gözlemlenmiştir.

Konut, konut çevresi ve kullanıcı isteklerinin hiç durmadan değiştiğinin, geliştiğinin ve hatta geri dönüşümler yaşadığının incelendiği bu çalışmada her türlü desteği sağlayan danışmanım Doç. Dr. Türkan Uraz’a, çalışmalarımındaki desteği için Ozer Culhagil’e, bana olan inançlarından dolayı ailem Tülin–Necdet Başaran, Funda–Defne–Garen Berberyan’a teşekkür ederim. Tezde yer alan projeleri kullanmama izin verdiği için Donatelli Development firması ve Brian Rogers’a, birçok kaynak ve bilgi sağlayan Torti Gallas and Partners, Inc. Firması ve Maurice Walters’a, Türkiye ile ilgili kaynak bulmamda yardımcı olan Prof. Dr. Ahsen Özsoy ile Prof. Dr. Hülya Turgut Yıldız’a, ve jürimdeki yapıcı eleştirileri için Prof. Dr. Handan Türkoğlu’na da çok teşekkür ederim.

Son olarak da, bu çalışmanın başlamasında olduğu kadar sonuçlanmasında da yardımını esirgemeyen dostum Eylem Yalcın Celen ile sevgili Tuna Akin’a sonsuz teşekkürler...

Eylül 2006

Filiz BAŞARAN

ACKNOWLEDGEMENT

I would like to express my deepest gratitude to:

My dearest advisor and life coach, Assoc. Prof. Dr. Trkan URAZ for her generous and unchangeable enthusiasm, encouragement and guidance on my academic and personal progress,

The colleagues and friends at Torti Gallas and Partners Inc. for their great expertise and contribution during my study,

My friends zer ulhagil, Eylem Yalın elen, Tuna Akin for their help and my family for their moral and support,

The firm Donatelli Development for the projects included in this study.

September 2006

Filiz BAARAN

TABLE OF CONTENTS

TABLE OF CONTENTS	iii
LIST OF IMAGES	v
ÖZET	viii
SUMMARY	x
1. INTRODUCTION	1
1.1. Purpose of the Study	1
1.2. Scope of the Study	1
1.3. Method of the Study	2
2. HISTORY OF HOUSING IN UNITED STATES	3
2.1. Housing Census from 1940 to 1990	3
2.2. Sociological History of Suburbia in United States	7
2.3. Architectural History of Suburbia in United States	13
2.4. Suburbia and its Applications in other cultures	29
2.5. Summary of Chapter	31
3. SUBURBIA, AMERICAN DREAM AND ITS LIVING ENVIRONMENT	33
3.1. Origin of American Dream	33
3.2. Themes of American Dream	33
3.3. Problems of Suburbia	40
3.4. Redefining the American Dream	45
3.5. Summary of Chapter	46
4. NEW URBANISM AND NEW HOUSING TRENDS IN UNITED STATES	48
4.1. Origin of new Urbanism	48
4.2. Beginning and Growth of New Urbanism in United States	50
4.3. Themes of New Urbanism	51
4.4. Transit Oriented Development (TOD) and Its Principals	54
4.5. Infill Development	57
4.6. Benefits of TOD's, Infill Developments and Case Studies	58
4.6.1. Case Study 1 - Ellington, Washington D.C., US – Transit Oriented Development (TOD)	59
4.6.2. Case Study 2 – Kenyon Square, Washington D.C., US – Transit Oriented An Infill Development	69
4.7. New Urbanism and Its Applications in Other Cultures	78
4.8. Summary of Chapter	87
5. CONCLUSIONS	90

REFERENCES**96****ÖZGEÇMİŞ****100**

LIST OF IMAGES

	<u>Page No</u>
Figure 2.1.1 : Population and Housing Growth: 1940 to 1990.....	4
Figure 2.1.2 : Metropolitan and Nonmetropolitan Distribution of Housing Units: 1940 to 1990.....	4
Figure 2.1.3 : Major Types of Households: 1940 and 1990.....	5
Figure 2.1.4 : Homeownership Rates: 1890 to 1990.....	6
Figure 2.1.5 : Vehicles Available in Occupied Housing Units: 1960 to 1990...	7
Figure 2.2.1 : Poster Addressing Needs of Returning War Veterans.....	10
Figure 2.3.1 : The Flow of Suburban Eras and Types.....	14
Figure 2.3.2 : Example to Farm: European Villa, 1838	15
Figure 2.3.3 : European Villa, 1838 – Floor Plan	15
Figure 2.3.4 : Suburbia Cartoon	18
Figure 2.3.5 : Before aerals showing Island Trees, New York, site of the first Levittown development	19
Figure 2.3.6 : After aerals showing Island Trees, New York, site of the first Levittown development	19
Figure 2.3.7 : Architects rendering of two versions of the 1947 Cape Cod built in Island Trees, New York	20
Figure 2.3.8 : Sales flyer for the Levittowner (Model #1)	21
Figure 2.3.9 : Sales flyer for the Country Clubber (Model #2)	21
Figure 2.3.10 : Sales Flyer for the Rancher (Model #3)	22
Figure 2.3.11 : Sales flyer for the Jubilee (Model #4)	22
Figure 2.3.12 : Flyer for “Levittown in 1957” (Model #5 and #6)	23
Figure 2.3.13 : Interior of the Country Clubber model	23
Figure 2.3.14 : Expandable attic, likely from a Rancher model	24
Figure 2.3.15 : The typical 1930s kitchen	24
Figure 2.3.16 : Levittowner model kitchen	25

Figure 2.3.17	: Plan for the Levittowner, from a 1953 architectural drawing ...	25
Figure 2.3.18	: Landscape plan for a Levittowner house	26
Figure 2.3.19	: Front Perspective of a House in 2000	27
Figure 2.3.20	: First Floor Plan	27
Figure 2.3.21	: Second Floor Plan	28
Figure 2.3.22	: Rear Elevation	28
Figure 2.4.1	: Suburban Housing Development near Markham, Ontario.....	30
Figure 3.2.1	: Suburban Community in Cincinnati Ohio	35
Figure 3.2.2	: Single Family Homes in Martha's Vineyard	36
Figure 3.2.3	: Two-family House in Columbus	36
Figure 3.2.4	: Mirror-image Beach Houses on the New Jersey Shore.....	37
Figure 3.2.5	: Twin Houses in Philadelphia.....	37
Figure 3.2.6	: The World Trade Center (Twin Towers) in New York.....	38
Figure 3.2.7	: Philadelphia Suburb, Blue Bell.....	39
Figure 3.2.8	: Frank Lloyd Wright's Robie House in Chicago, An Example to the Relationship between Garage/Car and the House.....	39
Figure 3.3.1	: Household Composition – 1990.....	44
Figure 4.2.1	: New Urban Projects under Construction by State – 2004.....	50
Figure 4.4.1	: Aerial view of growth patterns in Arlington County, Virginia ..	56
Figure 4.5.1	: Examples to Infill Development	57
Figure 4.6.1.1	: View from Ellington's Roof	60
Figure 4.6.1.2	: Ellington – Section showing the relationship between the buildings and metro tunnels	61
Figure 4.6.1.3	: Ellington – Arial	62
Figure 4.6.1.4	: Ellington at Night.....	62
Figure 4.6.1.5	: Ellington - Lobby.....	63
Figure 4.6.1.6	: Ellington – Club Room	64
Figure 4.6.1.7	: Ellington – Junior One Bedroom Unit (562 sq. ft.)	65
Figure 4.6.1.8	: Ellington – One Bedroom Unit (737 sq. ft.)	66
Figure 4.6.1.9	: Ellington – Deluxe One Bedroom Unit (813 sq. ft.).....	66
Figure 4.6.1.10	: Ellington – One Bedroom with Den Unit (824 sq. ft.).....	67
Figure 4.6.1.11	: Ellington – One Bedroom with Loft Unit, First and Second Floor Plans (804 sq. ft.)	67

Figure 4.6.1.12	: Ellington – Two Bedrooms Unit (925 sq. ft.).....	68
Figure 4.6.1.13	: Ellington – Two Bedrooms with Den Unit (1,095 sq. ft.)	68
Figure 4.6.1.14	: Ellington – Two Bedrooms with Loft Unit, First and Second Floor Plans (1,162 sq. ft.).....	69
Figure 4.6.2.1	: Kenyon Square Typical Floor Plan.....	70
Figure 4.6.2.2	: Kenyon Square – North Site.....	72
Figure 4.6.2.3	: Kenyon Square – One Bedroom Unit Plan (903 sq. ft.).....	74
Figure 4.6.2.4	: Kenyon Square–Two Story Loft Unit Plans (Upper and Lower Floor).....	75
Figure 4.6.2.5	: Kenyon Square Loft Unit – Lower Floor.....	75
Figure 4.6.2.6	: Kenyon Square Loft Unit – Lower Floor.....	76
Figure 4.6.2.7	: Kenyon Square Loft Unit – Upper Floor.....	76
Figure 4.6.2.8	: Kenyon Square Loft Unit – Upper Floor.....	77
Figure 4.6.2.9	: Kenyon Square – Two Bedrooms Unit Plan.....	77
Figure 4.7.1	: Greenwich Millennium Village, England.....	81
Figure 4.7.2	: A typical Vancouver block: A grocery store at the base of towers meets a wide sidewalk	83
Figure 4.7.3	: A Vancouver block with towers, mid-rise buildings and Town homes	84
Figure 5.1	: “Mode Split” Chart	90

AMERİKAN RÜYASININ KENT DIŞI YAŞAMDAN KENT İÇİ YAŞAMA DÖNÜŞÜMÜ

ÖZET

Yirminci yüzyılda Amerika’da başlayıp “Amerikan Rüyası” ile de özdeşleştirilen, yüzyılın sonunda tüm dünyada ilgi görmeye başlayan, Kent Dışı Yaşam (Suburban Lifestyle yada Suburbia) olgusunu ve bileşenlerini inceleyerek başlayan bu çalışma, bu rüyanın ortaya çıkmasının sebepleri ve gelişimi üzerinde durduktan sonra, yüzyılın sonunda geline nokta ile devam etmektedir. Kent dışı yaşamın topluma, çevreye ve bireylere getirdiği zararlara değinildikten ve bu yaşam olgusunun dünyadaki yayılımı gözlemlendikten sonra, Amerika’da yirminci yüzyılın sonlarında ilgi görmeye başlayan “New Urbanism” (Yeni Şehircilik) kavramı incelenmiştir. Çalışmada Amerika’dan “New Urbanism” örnekleri verilmiş ve bu yeni hareketin dünya üzerindeki yayılımı gözlemlenmiştir.

Bu çalışmanın amacı Amerika’daki konut ve konut çevresi eğilimlerini incelemek, zaman içerisindeki değişimleri gözlemlemek, bu eğilimlerin dünya üzerindeki benzer örneklerine bakarak kültürler arasındaki etkilenmeyi anlamaya çalışmak ve son olarak da bu gözlemler sonucunda gelecekle ilgili tahminlerde bulunmaktır.

Çalışmanın ikinci bölümünde Amerika’ki konut yerleşimleri istatistik verilerin de yardımıyla incelenmektedir. Bu bölüm aynı zamanda kent dışı yaşam olgusuna, yani Suburbia kavramına da geçiş özelliği taşımaktadır. Kent dışı yaşam yirminci yüzyılda Amerika’da ciddi olarak yayılmış ve yüzyılın sonlarına kadar popüleritesini korumayı başarmıştır.

Üçüncü bölüm Kent Dışı Yaşam (Suburbia), Amerikan Rüyası ve bu rüyanın çevre üzerindeki etkilerinin incelendiği bölümdür. Suburbia’nın anlaşılabilmesi için Amerikan Rüyasının anlaşılması şarttır. Amerikan Rüyası’nın bileşenleri arasında eşitlik, özgürlük, emniyet, yenilenme, hareketlilik ve kimlik vardır. Yıllar boyunca kent dışı yaşam kavramı Amerikan Rüyası ile özdeşleşmiş, belleklerde daha iyi yaşam seçeneği olarak yer etmiştir. Ancak yirminci yüzyılın sonlarına gelindiğinde kent dışı yaşamın dezavantajları da görülmeye başlanmış, kavram sorgulanmaya başlanmış ve alternatif yaşam arayışları başlamıştır. Amerikan halkı Kent Dışı Yaşam olgusunun yüksek bir bedeli olduğunun bilincine varmıştır. Bu bedelin içinde sağlık problemleri, şiddet oranının artması, güvenliğin azalması, doğanın tahrip edilmesi, doğal kaynakların israfı, toplumdan uzaklaşma ve soyutlanma sayılabilir. Toplum bu bilinçlenme ışığında yeni arayışlara girmiş ve çözümlerden biri de şehre dönüş, Yeni Şehircilik (New Urbanism) olarak düşünülmüştür.

Dördüncü bölümde yaşam tarzının, konut ve çevresi tercihlerinin kent dışından kent içine geçişi incelenmiştir. Yeni Şehirciliğin ana özellikleri arasında şehre geri dönüş, kullanım amaçları farklı yapıların bir araya getirilmesi (mixed-use neighborhoods), toplu taşımadan faydalanma, araba kullanımını azaltma, doğayı koruma, doğal kaynakları daha verimli kullanma, sosyal iletişimi artırma, yapılaşma yoğunluğunu

arttırma, farklı gelir gruplarını birbirlerine yaklaştırma ve güvenliği arttırma sayılabilir.

Yeni Şehircilik anlayışında iki tip yaklaşım söz konusudur. Birincisi Toplu Taşıma Esas Alınarak Yapılan Yapılaşma (Transit – Oriented Development – TOD), diğeri ise Mevcut Doku İçerisinde Yapılaşma'dır (Infill Development). TOD'lerin asıl amacı adından da anlaşıldığı üzere toplu taşımayı teşvik üzerinedir. Bu tip yapılar Yeni Şehircilik'in tüm özelliklerini taşımanın yanı sıra bir de bir toplu taşıma ağına çok yakın olarak konumlanırlar. Bu ağ metro, otobüs yada tren olabilir.

Infill Development'lar ise TOD olabilir ya da olmayabilirler, TOD olmaları şart değildir. Bu tip yapılaşmalar da Yeni Şehircilik esaslarına göre yapılırlar. Özellikleri oluşmuş bir doku içerisine eklenmeleri ve bu eklenme sonucunda çevreye katkıda bulunmaları, değer katmalarıdır. Yani çevreden beslenmekten çok çevreyi beslerler. Yapıldıkları bölgenin değerini arttırmırlar. Ki bu da Türkiye'de son yıllarda gözlenen Residence'larla aradaki en büyük farklardan biridir. Residence'lar yüksek gelir düzeyine hizmet sunmak amaçlı, bulunduğu çevreye bir değer katmayıp çevrenin değerinden faydalanan yapılaşmalardır. Gelir grupları tamamen ayrılmıştır. Oysa Yeni Şehircilik kavramının en önemli unsurlarından biri gelir gruplarının kaynaştırılması, insanların bir araya getirilmesidir. Türkiye'de ise durum çok farklıdır. Dördüncü bölümün sonlarında bu hususa değinilmiş, Yeni Şehircilik kavramının Avrupa ve Türkiye'deki benzerlerine bakılmıştır.

Son olarak beşinci bölüm özet ve sonuç bölümüdür. Kent İçi ve Kent Dışı Yaşam bileşenleri bir tablo içerisinde karşılaştırılmış, yaşam tercihlerinin dünü bugünü incelenmiş ve farklar göz önünde bulundurularak bundan sonrası için önerilerde bulunulmuştur. Ki bu öneri sadece esnek olabilmek, konut ve konut çevresi tercihlerinin hiç durmadan değişen, gelişen bir kavram olduğunu anlamak ve biz mimarların bu tercihleri ve değişimleri yakından takip ederek kullanıcı istekleri doğrultusunda hareket etmesidir.

TRANSFORMATION OF AMERICAN DREAM FROM SUBURBIA TO NEW URBANISM

SUMMARY

The intent of this thesis is to analyze the housing and house environment trends in United States as well as in other countries including Turkey in the past several decades.

In the Second Chapter of the thesis, History of Housing in United States including Housing Growth, Demographics, Types and Characteristics will be evaluated. This chapter is also the introductory to Suburbia which had been the most popular lifestyle in 20th Century. Sociological and Architectural History of Suburbia will be discussed in this Chapter.

Chapter Three analyzes Suburbia, American Dream and its Environment. To understand suburbia, American Dream needs to be understood. Themes of American Dream, individuality, equality, safety, privacy, freedom, renewal, mobility and identity will be studied. It was believed for many decades that suburban lifestyle was synonymous with American Dream. In the late 20th Century, disadvantages of suburbia have been realized.

Society started to understand that suburbia came with a high price, which includes but not limited to health problems, pollution, traffic, high housing costs, limited freedom, increasing crime rate and abuse of nature. The lifestyle and housing trends started to shift towards a new, redefined American Dream, New Urbanism.

Chapter 4 will discuss this shift in lifestyle; New Urbanism and New Housing Trends in United States. The philosophy behind New Urbanism is that communities should be built around mixed-use neighborhoods, with housing, jobs, stores and services within walking distance.

Themes of New Urbanism; safety, contact, privacy, diversity and density will be analyzed.

Two new urbanists approaches; Transit – Oriented Development (TOD) and Infill Development will be studied. TOD, is basically development around a major transit center such as metro. The goals are location efficiency, mix of housing types, value capture and more livable communities. Ellington in Washington DC will be included as an example to TOD. Infill Development are located within a developed environment which can be improved by adding the new building. These buildings are usually high – density (multi – level) and help to increase the value of the neighborhood. Kenyon Square in Washington DC is an example to Infill Developments.

At the end of Chapter 4, New Urbanism in other Cultures and Similar Developments in Turkey will be discussed.

Finally, in Chapter 5, comparison of Suburbia and New Urbanism, their themes, living environments and housing trends will be made in a simple table to summarize the discussed subjects in this thesis.

1. INTRODUCTION

1.1. Purpose of the Study

The purpose of this study is to analyze the housing and home environment trends in United States as well as other countries including Turkey in the past several decades, to understand housing and environmental needs of today's society, investigate the transformation of so called "American Dream" from Suburbia to New Urbanism and identify the similarities and differences between these two trends.

1.2. Scope of the Study

Housing trends show similarities all over the world. For instance, suburbia occurs across the globe. There are examples from Europe, Asia, Middle East, England and Turkey that the development patterns resemble those of the United States. It is obviously not a coincidence; those nations who started to develop suburbia, have copied America's development pattern in some ways.

Recently, housing and environmental trends started to change in United States. The nation, who has been the pioneer in suburban life style and moved out of the cities for a better life, is now returning to the cities. They came to realize that while suburbia has many advantages, it also has disadvantages. The migration from the city to suburbs in early 20th century is now reversed and United States is now copying from Europe. America is studying European cities, their working and not working components and rebuilding "learnt from Europe and improved" American cities.

The suggestion for Turkey would be to study United States to understand both advantages and disadvantages of suburbia and suburban lifestyle which has become a popular trend in the past decade. It is believed that New Urbanist approach would be a suitable and more realistic approach for Istanbul, Turkey given the fact that the city is developed but could use some improvements and benefit from new

developments which would add value to the neighborhood and help to bring the city to a better, safer level.

1.3. Method of the Study

This thesis starts with the writer's knowledge on Suburbia from personal and professional experience in the US, as well as study of existing literature on this subject. It continues with New Urbanism, again with the help of a deep study and professional experience on this subject. Most of the information used in the study is from the literature at Torti Gallas and Partner's library. Some of the literature was also found at University of Maryland's library. Internet was also a helpful resource, especially to extend the research across the globe.

To these resources, architects and developer's expertise that have been leaders in New Urbanist movement have been added. There have been interviews between the writer and developers, as well as other architects, code officials and finally with users.

This thesis can be considered as the summary of many research methods and experience on this field.

2. HISTORY OF HOUSING IN UNITED STATES

In 1940, the United States was already an urban Nation when the first housing census counted 37 million housing units. The majority of housing units inside metropolitan areas were located in their central cities.

Serious deficiencies in housing quality were identified in the 1940 Census of Housing. Eighteen percent of housing units needed major repairs. Plumbing facilities were inadequate or missing from large numbers of units, including 31 percent with no running water, 44 percent with no bathtub or shower, and 35 percent with no flush toilet.

Renters outnumbered homeowners. Married couples were 76 percent of all householders. During the subsequent 50 years, housing outpaced population growth by 173 to 88 percent. As growth spread beyond urban limits, suburbs would emerge with the major share of housing in all regions of the country (Devaney, J. F., 1994).

2.1. Housing Census from 1940 to 1990

The 1940 Census of Housing counted 37 million units. 50 years later, the 1990 census counted more than 102 million housing units, a gain of 173 percent. Housing growth was stimulated by the population increase from 132 million to 249 million during the 1940-1990 periods, a gain of 88 percent (Figure 2.1.1).

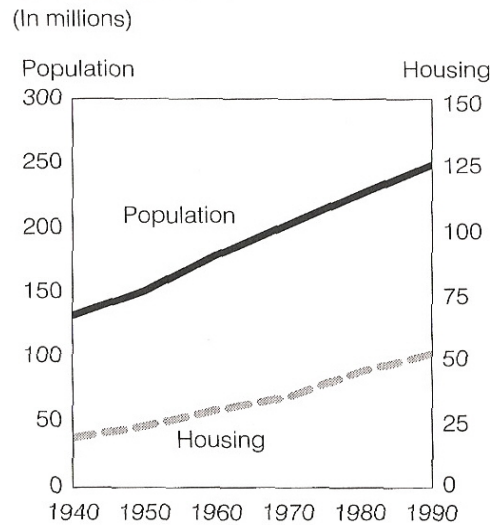


Figure 2.1.1: Population and Housing Growth: 1940 to 1990 (Tracking The American Dream, 1994)

The majority of housing growth since 1940 has taken place in the suburbs of metropolitan areas. Called “metropolitan districts” in 1940, the 140 clusters of cities and suburbs contained 18.2 million housing units, representing 49 percent of the Nation’s housing. Central cities grew by only 157 percent, however, while housing in suburban areas increased by 519 percent (Figure 2.1.2) (Devaney, J. F., 1994).

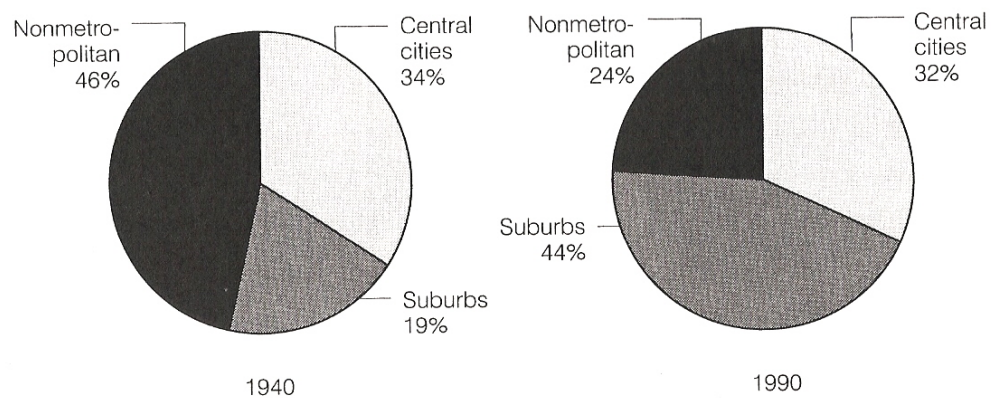


Figure 2.1.2: Metropolitan and Nonmetropolitan Distribution of Housing Units: 1940 to 1990 (Tracking The American Dream, 1994)

Housing Demographics:

Housing units have increased almost twice as fast as population since 1940. The large percentage increases in housing units and households reflect smaller average size of households, changing life styles and living arrangements, and increases in second homes for seasonal, recreational, and occasional use (Figure 2.1.3) (Devaney, J. F., 1994).

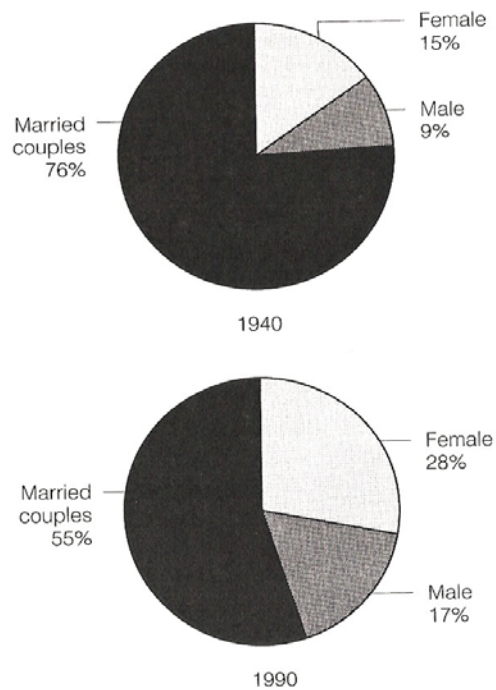


Figure 2.1.3: Major Types of Households: 1940 and 1990 (Tracking The American Dream, 1994)

Owners and Renters:

The housing census of 1940 was the last in the 20th century in which renters outnumbered homeowners. During the 40 years from 1940 to 1980, the ownership climbed with each census. After increasing to 55 percent in 1950, the rate rose to 61.9 percent in 1960, 62.9 percent in 1970, and 64.4 percent in 1980. Then, in 1980's, the cycle of ownership growth was broken, as the 1990 census recorded an ownership rate of 64.2 percent (Figure 2.1.4) (Devaney, J. F., 1994).

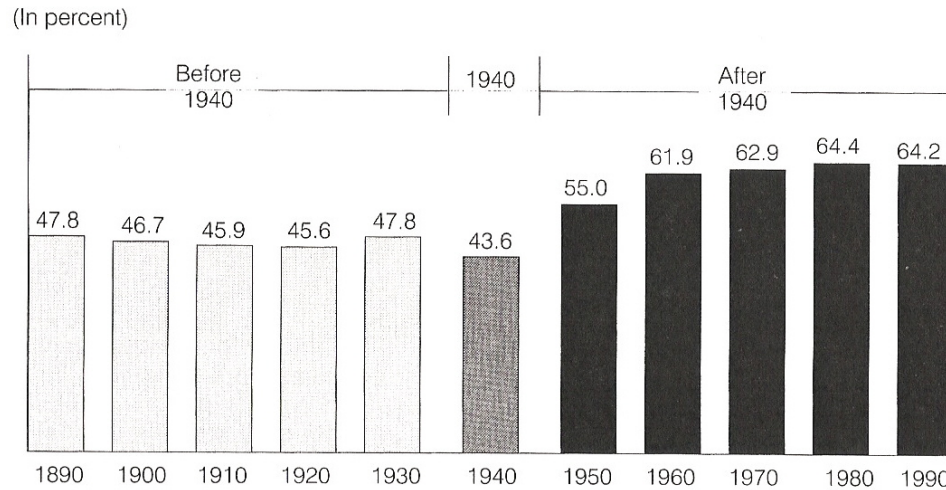


Figure 2.1.4: Homeownership Rates: 1890 to 1990 (Tracking The American Dream, 1994)

Housing Types and Characteristics:

Most Americans live in single-family homes. Throughout the period from 1940 to 1990 the proportion of households living in these homes has been about 65 to 69 percent. 1990 data indicate that single-family homes totaled 64 percent of all housing units. The gain from 1940 to 1990 was 164 percent, slightly less than the 174 percent increase for all housing units (Stein, S.R., 1993).

Housing units in structures with two to four units are now less prevalent than in 1940 and 1950. The proportion dropped from 22 percent in those years to about 13 percent in 1960 and 1970, to 11 percent in 1980, and to 10 percent in 1990 (Figure 2.1.4.1).

Housing units in structures with five or more units have increased substantially since 1940, from 3.9 million units to 18.1 million in 1990, a gain of 361 percent. About 90 percent of these units were rental apartments in 1990.

Condominium is a type of ownership that enables a person to own an apartment or house in a development of similarly owned units and to hold a common or joint ownership in some or all of the common areas and facilities such as land, roof, hallways, entrances, elevators, swimming pool, etc. Condominiums, also known as “condos”, may be single-family houses as well as units in apartment buildings. Condominiums increased rapidly in the 1970’s and 1980’s. The 4.8 million

condominiums in 1990 were more than double the 2.3 million units in 1980 (Devaney, J. F., 1994).

Mobility:

Reflecting the emerging dominance of the automobile in American lifestyle, the number of automobiles available in households was first enumerated in 1960. In that census, 57 percent of homes already had one automobile available, 22 percent had two or more, and 22 percent had none. Vans and pickup trucks were still insignificant in usage as household vehicles. In 1970, when the enumeration of automobiles was expanded to differentiate households with three or more, 6 percent of households had that many, and the proportion of homes with none dropped to 17 percent.

As vans and pickups proliferated, the 1980 census enumerated these vehicles as well as automobiles. In that year, the census found 18 percent of homes with three or more vehicles. The proportion with three or more was still in a range of 17 and 18 percent in 1990. During the years from 1960 to 1990, the proportion of homes with only one vehicle dropped from 57 to 34 percent (Figure 2.1.5) (Devaney, J. F., 1994).

(In percent)

Number of vehicles	1960	1970	1980	1990
None	22	17	13	12
1 vehicle	57	48	36	34
2 vehicles	22 ¹	29	34	37
3 or more vehicles	(NA)	6	18	17

NA Not available. ¹2 or more in 1960.

Note: Automobiles only in 1960 and 1970; automobiles, pickup trucks, and vans in 1980 and 1990.

Figure 2.1.5: Vehicles Available in Occupied Housing Units: 1960 to 1990 (Tracking The American Dream, 1994)

2.2. Sociological History of Suburbia in United States

Suburbs, also called Suburbia, are inhabited districts located either inside a town or city's outer rim or just outside its official limits. In suburbs, the density of habitation is usually lower than in inner city area (Albee, E., 2006. Wikipedia).

Many sociologists see suburbs as a post-urban area which develops in response to worsening conditions within a city with a communication and transport system which allows citizens to live outside the city while doing business inside. The growth of suburbs was initially facilitated by the development of zoning laws and more effective and accessible means of transport. In the older cities of the northeast U.S., suburbs originally developed along train or trolley lines that could shuttle workers into and out of city centers where the jobs were located. This practice gave rise to the term bedroom community, meaning that most daytime business activity took place in the city, with the working population leaving the city at night for the purpose of going home to sleep.

Zoning laws also contributed to the location of residential areas outside of the city center by creating wide areas or "zones" where only residential buildings were permitted. These suburban residences are built on larger lots of land than in the urban city.

While suburbs had originated far earlier, the suburban population in North America exploded after World War II. Returning veterans wishing to start a settled life moved to the suburbs. Between 1950 and 1956 the resident population of all United States suburbs increased by 46%. 1970 was the first year that more people lived in suburbs than elsewhere. The development of the skyscraper and the sharp inflation of downtown real estate prices also led to downtowns being more fully dedicated to businesses, thus pushing residents outside the city center.

The Beginnings:

When North America was first being settled, the single-family house was by far the most practical of living arrangements. The first settlers from Europe brought with them the images of what a home should be like. They then adapted their image to the individual climate and developed a variety of housing forms.

The Industrial Revolution spans the century from 1815 to 1915, and its effect upon living conditions in Europe and America has been profound. The increases in industrial production gave great impetus to the development of the suburbs by creating such undesirable living conditions within the city that country life became popularly idealized and sought after. With the improvements in transportation and

communication systems, dependence upon proximity to the city's center for business transactions and social interaction lessened. These effects coupled with the general rise in prosperity for much of the population allowed a large proportion of city residents to move out of the congestion into the idyllic setting of the suburbs. The city became equated with what was bad for human living while the country became romantically idealized (Sitte, C., 1965).

Frederick Law Olmsted was one of the first of these landscape architects who considered the suburbs potential for development. He believed that no great town could long exist without great suburbs. Long before zoning existed, he and other planners did much to establish building standards and design controls (rules determining lot size, building placement, communal architectural styles and property rights).

In 1868 Olmsted was commissioned by a group of eastern developers to plan a suburban community at Riverside, Illinois. This is one of the first suburban communities in United States.

Pre-World and Post-World War Suburbs:

It was the railroad, which made such early American satellite communities as Llewellyn Park and Riverside possible. With the introduction of the car in 1907, the age of the automobile arrived which further altered American culture and architecture. After 1970 every large city in the United States possessed its own landscaped suburbs.

During this period there was also a new concern for better standards. The suburbs of this early phase, although well planted and spaciouly laid out, usually followed the standard grid established by the "parent city".

The First World War did much to force the United States to face the demands of an increasingly industrial and technological society. As the growing workforce focused on the production of wartime supplies and as the shipping industry grew, a dramatic increase in the need for housing and well planned industrial towns occurred. When the United States entered the War in 1917, architects and planners turned their attention and efforts to the new housing need and to the formation of housing boards

to insure standards. In 1918 the U.S. Housing Corporation was established, and the number of housing units built increased by 20%.

During the ten years following the War there was a further increase in the production of housing. Most of this growth occurred in the suburbs. During these years the great “flight to the countryside” began with the wealthy and then spread to the middle classes.

World War II caused another rush to provide industrial housing in America. The suburbs were continuing to expand randomly. As cities grew outward, they became vast, unplanned megalopolis with an ever-increasing automobile population. The housing finance industry was supported by the government, and this made it possible for almost every family to own their single family dwelling unit.



Figure 2.2.1: Poster Addressing Needs of Returning War Veterans (The State Museum of Pennsylvania, 2003)

Typically, many post-World War II American suburbs have been characterized by (Albee, E., 2006):

- Lower densities than central cities, with single-family homes predominating.
- Zoning patterns that separate residential and commercial development as well as different intensities and densities of development.

- Shopping malls and strip shopping centers instead of a downtown shopping district.
- Streets lined by off-street car parking or vegetation instead of buildings.
- A predominantly white or middle- or upper-class population, with notable exceptions in various older cities (e.g., Ford Heights, Illinois, a suburb of Chicago and a municipality with one of the lowest per capita incomes in the U.S).
- A street network designed to conform to a hierarchy, including residential streets that curve and often end in cul-de-sacs, in place of the grid pattern common to most central cities and pre-World War II suburbs.
- Ready access to freeways.
- Limited access to public transit, often requiring a long walk, several transfers, and generally poor and infrequent service.
- The importance of public space reduced in favor of private property.
- Low crime-rate.
- Low traffic-rate & low pollution

Developments after 1960's:

During the 1960's changes occurred within the American economy and social structure, which caused the emphasis in housing to shift from the single-family house to higher density housing types. Housing economist Roger Montgomery states that between 1963 and 1972 twenty million new dwelling units were built, the majority of which were higher density, low rise types (town houses, row houses, patio houses, walk ups, garden apartments, etc.) (Scully, V., 1969).

- Townhouse: Historically in the United Kingdom, Ireland and in some other countries, a townhouse (or a “house in town”) was a residence of a peer or member of the aristocracy in the capital or major city. In North America and Australia, the term “townhouse” is used exclusively to refer to terrace housing. Townhouse is a single-family dwelling unit constructed in groups of three or more attached units in which each unit extends from foundation to roof and with open space on at least two sides.

- Row House: Single – family dwelling units attached to one another by common walls, generally with a common façade. In architecture and city planning, row house is a style of housing in use since the late 17th century, where a row of identical or mirror – image houses share side walls.
- Walk – up Apartment: An apartment house or office building with no elevator.
- Garden Apartment: A housing complex whereby some or all Tenants have access to a lawn area.
- Patio House: A patio home is a single – family detached dwelling shifted to one side of the lot, i.e., placed on the lot so that one side setback is larger than if both side setbacks were approximately equal.

Throughout the post World War II era, out migration from urban to suburban areas and into the countryside has constituted a significant trend throughout much of the United States. In response to this phenomenon, planners, developers, and elected officials have created a number of tools designed to balance growth with the preservation of community environmental and financial assets. One tool that has received an increasing amount of attention in the 1990s is cluster development.

- Cluster Development: A development pattern - for residential, commercial, industrial, institutional, or combination of uses, in which the uses are grouped or "clustered", through a density transfer, rather than spread evenly throughout the parcel as in conventional lot-by-lot development. ...

Buildings concentrated together in specific areas to minimize infrastructure and development costs while achieving the allowable density. Allows the preservation of natural open space for recreation, common open space, and preservation of environmentally sensitive features.

A cluster subdivision generally sites houses on smaller parcels of land, while the additional land that would have been allocated to individual lots is converted to common shared open space for the subdivision residents. Typically, road frontage, lot size, setbacks, and other traditional subdivision regulations are redefined to permit the developer to preserve ecologically sensitive areas, historical sites, or other unique characteristics of the land being subdivided.

In spite of the increased involvement of architects and landscape architects in housing development planning and in spite of the current vogue of the cluster concept, there still remain an abundance of suburban planning problems.

Cluster planning does remedy some of the ills of suburbia: housing is more affordable; community infrastructure is more efficient; a greater amount of parkland can be preserved for the benefit of all. But, as stated, it does not solve all of the problems.

2.3. Architectural History of Suburbia in United States

The Metropolitan Institute at Virginia Tech (MI) is doing so much historical work on the suburbs that its staff constructed a timeline to show the flow of suburban eras and types (Figure 2.3.1).

This timeline is not meant to be definitive. There are no clean breaks in history. Thus the timeline is depicted as a meandering river to indicate the continuous flow of events. The dates show stops along the way where the river course shifts. This implies a directional change in history. MI divides the suburban historical flow into six eras. We are now in the fifth era and soon to enter a sixth one. The timeline also indicates some exemplar suburbs of each period and touches on key political changes and technological innovations (Moore. C., 1977).

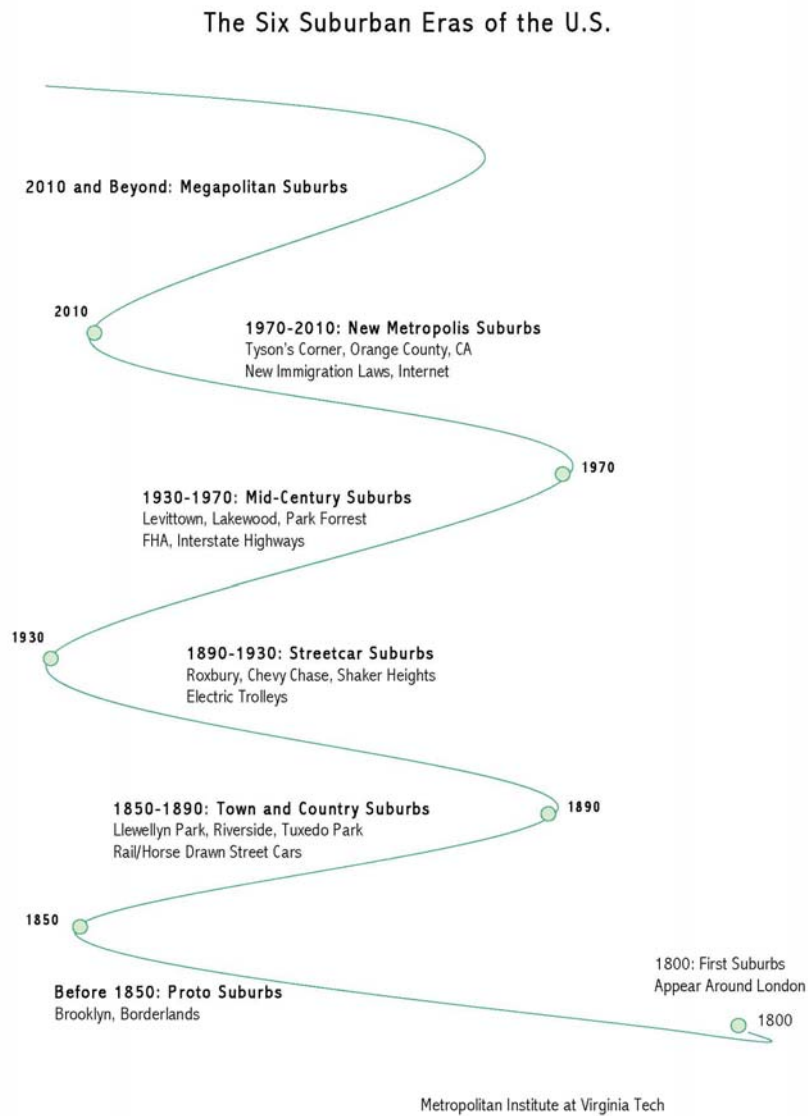


Figure 2.3.1: The Flow of Suburban Eras and Types (Metropolitan Institute of Virginia Tech, 2005)

The timeline reflects current thinking on the suburbs and incorporates the work of many historians including Robert Fishman, Delores Hayden, Kenneth Jackson, Chester Liebs, Richard Longstreth, and Sam Bass Warner, Jr. The understanding of the three later eras is mostly driven by the current work of researchers at MI and the Brookings Institution Metropolitan Policy Program. The labels attached to these eras

were developed by MI and reflect its conceptualization of how the suburbs have evolved since the mid-20th century.

Before 1850: Proto Suburbs:

Prior to 1850, US suburbs were mostly extensions of cities. They featured street plans and housing that closely resembled the urban core. In this era, the urban fringe featured dense row houses that abruptly give way to open fields and farms (Figure 2.3.2 and 2.3.3).



Figure 2.3.2: Example to Farm: European Villa, 1838 (www.housemouse.net)

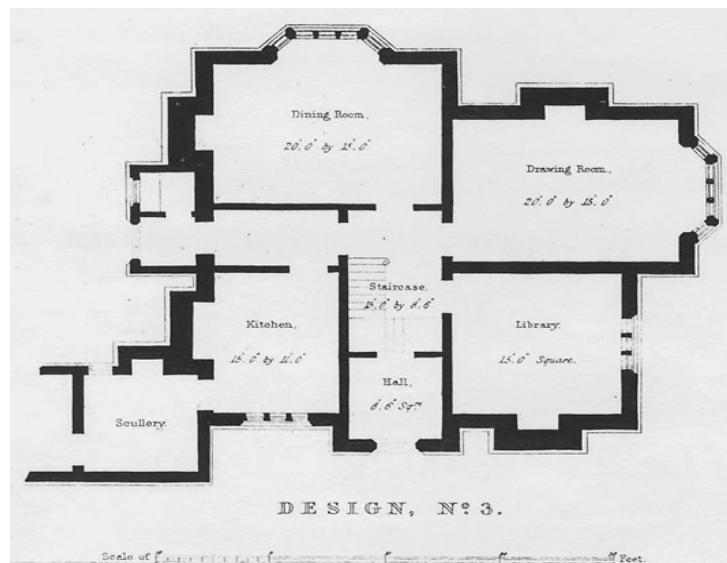


Figure 2.3.3: European Villa, 1838 – Floor Plan (www.housemouse.net)

However, some historians have documented the fact that the residents of early US suburbs such as Brooklyn already had a different demographic character than the central city. At first these borderlands were poorer than the core. But with the introduction of ferry service around New York harbor, neighborhoods such as Brooklyn Heights emerged which catered to middle-income commuters. The earliest distinctly non-urban looking suburbs began in the United Kingdom in the early 19th century. They appeared first in London (Clapham Common 1800) and later Manchester (Victoria Park 1830s). These same kinds of “picturesque” suburbs did not emerge in the US until the second half of the 19th century (Stern, R., 1986).

1850 to 1890: Town and Country Suburbs:

The notion of suburbs as distinct physical places from cities became evident in the US by the 1850s. The earliest documented English-style American Suburb was Llewellyn Park, NJ in 1857 designed by Frederick Law Olmstead.

Llewellyn Park was founded in 1853 by Llewellyn Solomon Haskell, a New York businessman. Llewellyn Park is thought to be the country's first planned gated residential community. The landscaping is in the 19th century romantic style of New York's Central Park, and includes winding paths, and rare ornamental trees, shrubs, and flowers.

Llewellyn Park is listed in the National and State Historic Registers as both the first romantically landscaped and one of the first planned luxury estate communities in America.

It is 14 miles west of New York City with easy access to the Lincoln and Holland Tunnels and commuter lines. Llewellyn Park is a mecca for people looking to move to a neighborhood that provides privacy and security, and yet is close to fine dining, upscale shopping, sports and the arts.

Period gas lamps line the streets adding historical charm and a warm glow.

Residences are accessible only through a 24-hour manned gatehouse.

Residents' professions and occupations range widely and include business persons, professionals, academics, and artists.

In mid 19th century, horse-drawn street cars were introduced to the society. These street cars were a big improvement because they were faster and carried more load. They helped change the course of urban development in places such as New York, where suburbs now spread north on Manhattan Island instead of only crossing the East River to Brooklyn.

The horse-drawn street car suburbs were much denser and more traditionally urban but they were also now distinct from the urban core. The architecture began to shift in the 1850s from the tight row houses such as those found on Beacon Hill to a looser configuration with side alleys. In many cases the houses were fully detached, but remained on small narrow lots.

This does not seem as that important a distinction, but it signaled a much larger change. Also note that many of the “town” suburbs had been annexed by the central city and appear for all purposes to be “urban neighborhoods.” Yet in the context of the mid-to-late 19th century American metropolis, these places were suburbs. The best example of a neighborhood built in this style was Gross Park in Chicago dating from the 1880s (Fishman, R., 2005).

1890 to 1930: Street Car Suburbs:

By the late 1880s, the first electric street cars—or trolleys—were in use. The trolleys were a turbo version of the horse-drawn street cars. They were much bigger and faster and helped spread development for miles past the old urban core. Many of the trends that began in the horse-drawn era were greatly accentuated and extended by trolleys—the suburban houses spread out more (especially in places such as Los Angeles) and differences between the look and feel of the edge and the core grew. Suburban retail and commercial districts also began to radically change in the street car suburbs. The old, dense form of Main Street now took on an elongated appearance. Store fronts stretched to reflect the fact that people might now window shop from a fast-moving trolley. Many of these places exist today threading through the edges of central cities and older suburbs and are to the modern eye “traditional looking.” But in their era, these strips represented a sharp break with commercial districts in the urban core.

Automobiles were invented around the same time as trolleys but had much less immediate impact on urban development in the early years of the 20th century (Fishman, R., 2005).

1930 to 1970: Mid-Century Suburbs and Levittown:

By the 1930s, cars were poised to significantly remake the American metropolis, but first a depression and then war greatly slowed the pace of urban change. Yet in the few places that still grew during the depression and war, such as the Los Angeles and Washington, DC regions, the car made its mark. These places contain many examples of 1930s auto suburbs.

The modest suburban shopping centers of the early 20th century exploded into massive malls, which beginning in 1956 were mostly enclosed and climate controlled.

Key developments during this era include the creation of Federal Housing Administration (FHA) loans in the 1930s, which greatly improved middle-income access to suburban housing, and the beginning of the Interstate Highways in 1956. Suburban architecture grew even more distinct from both traditional urban and even earlier suburbs. The dominant housing type was the one-story ranch-style home that had a minimally classic exterior and a modern open floor plan. The scale of development expanded, especially after World War II in projects such as Levittown and Lakewood (Fishman, R., 2005).

Between 1950 and 1960, 20 million people were drawn to mass housing developments on the outskirts of America's cities.

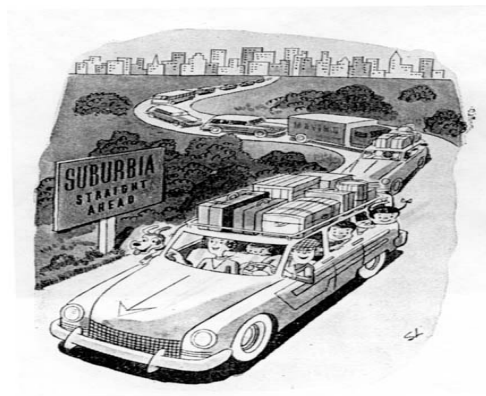


Figure 2.3.4: Suburbia Cartoon (The State Museum of Pennsylvania, 2003)

The new suburbs combined country comforts with city conveniences. With the help of modern production and financing methods, builders like Levitt and Sons made the American dream of homeownership affordable to millions.

Started in 1929 Levitt and Sons quickly became one of the nation's largest home builders.



Figure 2.3.5: Before aerals showing Island Trees, New York, site of the first Levittown development (www.llewellynpark.org)



Figure 2.3.6: After aerals showing Island Trees, New York, site of the first Levittown development (www.llewellynpark.org)

The first Levittown sprang to life in 1947 on 1200 acres of potato fields on Long Island (Figure 2.3.6).

To speed production and cut costs, Levitt offered just two basic house types (Figure 2.3.7).

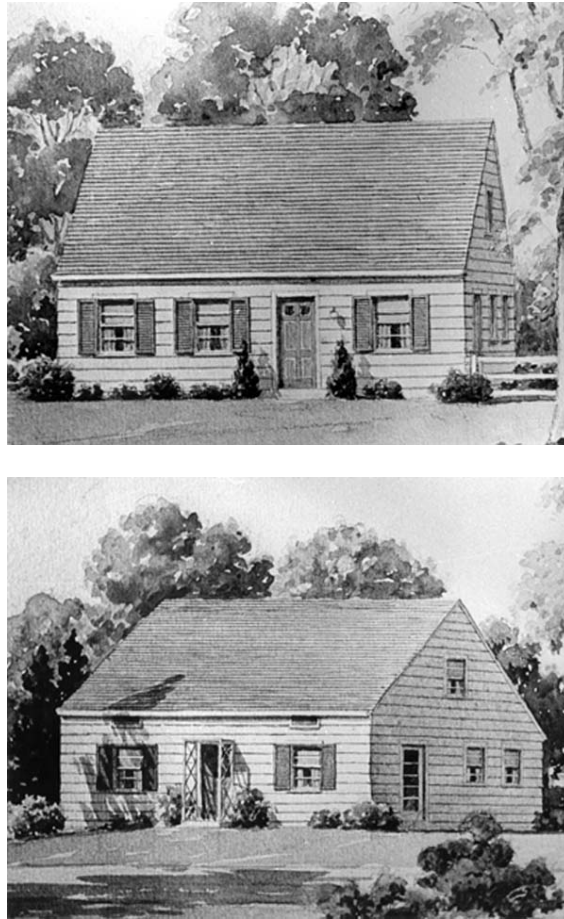


Figure 2.3.7: Architects rendering of two versions of the 1947 Cape Cod built in Island Trees, New York (www.llewellynpark.org)

Unlike other builders who merely constructed houses, Levitt built entire communities. Pennsylvania's Levittown was one of three "package" suburbs developed between 1947 and 1959. The third Levittown, located just across the Delaware River in New Jersey, changed its name back to Willingboro in 1963.

The heart of Levittown was the mass-produced, single-family house. Levitt sacrificed individuality and custom design for low-cost efficiency. Still, his Pennsylvania development featured six house models, each in several different styles and model years.

The Levittowner: Introduced in 1952, the sleek, ranch-style Levittowner was the best selling model during Levittown's first few years. Its contemporary, California-inspired design appealed to young professionals and complemented their taste in mid-century modern furniture. Its initial price tag—a modest \$9990—appealed to just about everyone.



Figure 2.3.8: Sales flyer for the Levittowner (Model #1) (www.llewellynpark.org)

The Country Clubber: In 1954, Levitt resumed production with a new and improved model offering nearly twice as much room as the Levittowner at nearly twice the price Country Clubbers.

The Rancher: Introduced in 1953, the Rancher sold for \$1,000 less than the Levittowner and included a second floor that could be finished into an extra bedroom. It proved especially popular with couples planning large families.



Figure 2.3.9: Sales flyer for the Country Clubber (Model #2) (www.llewellynpark.org)

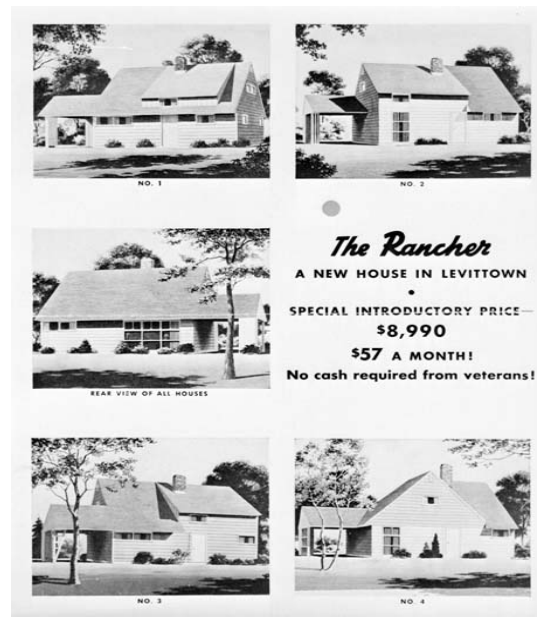


Figure 2.3.10: Sales Flyer for the Rancher (Model #3) (www.llewellynpark.org)

The Jubilee: The Jubilee debuted in 1954 to mark Levitt and Sons 25th anniversary and proved an instant hit with consumers. The anniversary model included an enclosed garage and an expandable second floor. A later version, the Jubilee Jr., was identical to its predecessor except for the unfinished second floor.



Figure 2.3.11: Sales flyer for the Jubilee (Model #4) (www.llewellynpark.org)

The Pennsylvanian & The Colonial: Introduced during the last few years of construction, the Pennsylvanian and the Colonial were built in much smaller numbers.



Figure 2.3.12: Flyer for “Levittown in 1957” (Model #5 and #6) (www.llewellynpark.org)

All Levittown models featured name-brand materials, built-in features, and a modern, efficient design intended to appeal to young consumers.

Levitt was among the first builders to embrace the "open plan," a design marked by a minimum of interior walls. By eliminating traditional, box-like room partitions, the open plan made the most of limited space. In early models, a fireplace served as the focal point—an idea borrowed from Frank Lloyd Wright (Figure 2.3.13).



Figure 2.3.13: Interior of the Country Clubber model (www.llewellynpark.org)

Consistent with mid-century architectural design, Levitt incorporated windows and natural light wherever possible. Carports and, in most later models, expandable attics, were promoted as ideal "rumpus rooms" for children that could be finished at the leisure—and expense—of individual homeowners (Figure 2.3.14).



Figure 2.3.14: Expandable attic, likely from a Rancher model (www.llewellynpark.org)

The typical 1930s kitchen was antiseptic white, relied on stand-alone cabinets, and featured few if any electrical appliances (Figure 2.3.15).

After World War II, the American kitchen underwent a dramatic revolution in both form and function.



Figure 2.3.15: The typical 1930s kitchen (www.llewellynpark.org)

All Levitt houses featured modern kitchens complete with electric range, refrigerator and other built-in accessories designed to take the labor out of housekeeping (Figure 2.3.16).



Figure 2.3.16: Levittowner model kitchen (www.llewellynpark.org)

Most models featured large, sliding glass doors that opened on to an outdoor terrace which could be finished into a livable patio space (Roth, L. M., 1979).

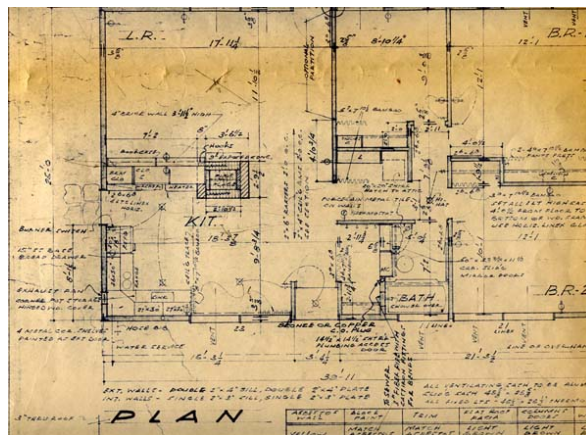


Figure 2.3.17: Plan for the Levittowner, from a 1953 architectural drawing (www.llewellynpark.org)

As with everything else, landscaping was standardized so that each lot received the same allotment of shade trees, fruit trees, evergreens and perennials and flowering

shrubs. The final plan called for more than 400,000 plantings at a cost of \$8,000,000.

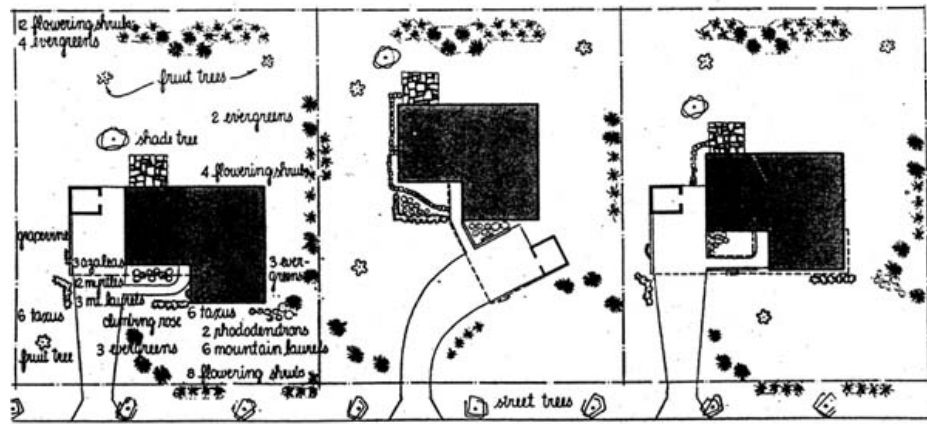


Figure 2.3.18: landscape plan for a Levittowner house (www.llewellynpark.org)

1970 to 2010: New Metropolis Suburbs:

The Interstate beltways, constructed mostly in the 1960s, paved the way for a boom in suburban commercial development by the 1970s. Suburbs now typically had the region's balance of people, shopping, and business yet they maintained a distinct non-urban look. They became cities in function, but not in form. The suburbs also grew diverse. The cities no longer had a monopoly on attracting immigrants. By the first decade of the 21st century, the suburbs surpassed cities as immigrant magnets. The suburbs also attracted growing numbers of "non-traditional," households, including single and even gay residents.

The suburban split between upscale and more modest development. Many older suburbs from the street car, and even mid-century period, were in decline (most town and country era suburbs have been annexed by central cities). The amount of suburban poverty dramatically increased in places that fall outside the "favored quarter." Places in the favored quarter boom. The average house size in new construction doubles since 1970 (Wissink, G. A., 1993).



Figure 2.3.19: Front Perspective of a House in 2000 (www.dreamhomes.com)

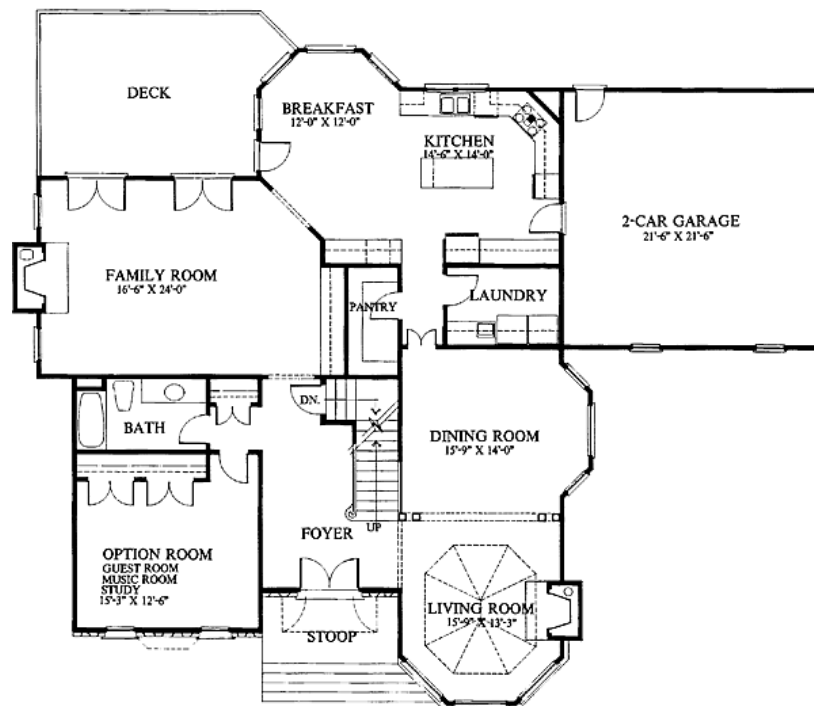


Figure 2.3.20: First Floor Plan (www.dreamhomes.com)

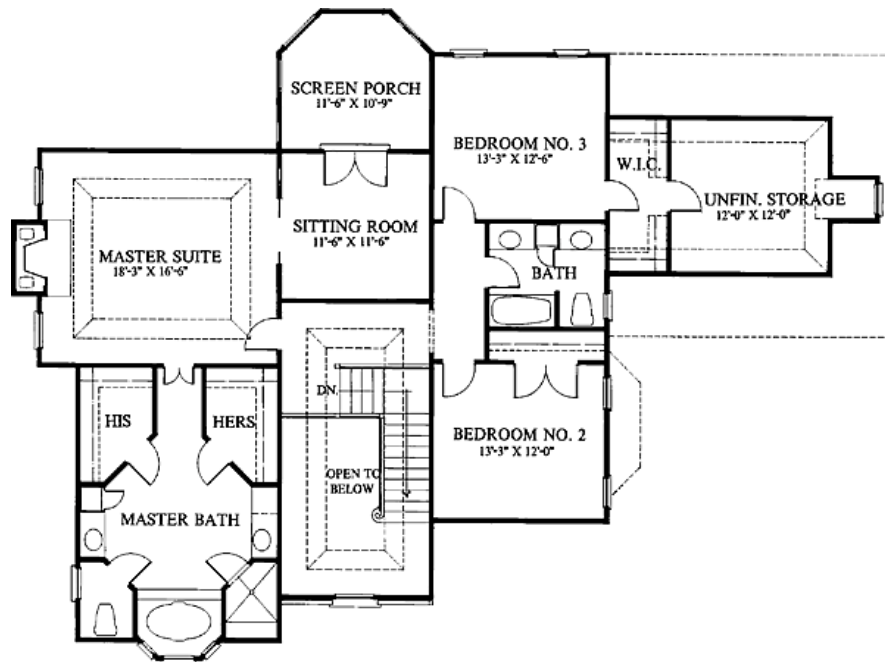


Figure 2.3.21: Second Floor Plan (www.dreamhomes.com)



Figure 2.3.22: Rear Elevation (www.dreamhomes.com)

2010 and Beyond: Megapolitan Suburbs:

Metropolitan Institute at Virginia Tech predicts that a new suburban era will emerge after 2010. It will be characterized by an enlarging exurban belt that stretches so far

from the original urban core that its residents may have a choice of directions in which to commute. The commuter sheds in the “Megapolitan Suburbs” will link up vast networks of cities.

A wave of suburban gentrification will occur post 2010. Many of the new developments will intensify the urban look and feel of many suburbs. A new urbanity will sweep the suburbs—they will still not look like traditional cities, but may incorporate more urban elements. They will be more mixed use and pedestrian-oriented than the current form of suburban development (Fishman, R., 2005).

2.4. Suburbia and Its Applications in Other Cultures

In many parts of the globe, however, suburbs are economically poor areas, inhabited by people sometimes in real misery, keeping them at the limit of the city borders for economic or social reasons like the impossibility of affording the (usually higher) costs of life in the town.

Urban development in Canada has largely paralleled development in the United States. After World War II, large bedroom communities of single-family homes and shopping centers sprouted on the outskirts of Canadian cities.

However, Canada has far fewer suburban municipalities than the U.S. does. Many large cities, such as Winnipeg, Calgary and Ottawa, extend all the way to the countryside. Canadian provincial governments often take the question of municipal boundaries into their own hands and impose city-suburb mergers. The Toronto, Montreal and Vancouver areas still have suburban municipalities, although their suburban areas are generally grouped into fewer cities than is typical in the U.S. Ontario created a "metropolitan" government for the Toronto area in 1954, but the urbanized area has since grown well beyond it. Today, Toronto has some of the largest suburban municipalities in North America, with close to three quarters of a million people living in Mississauga alone (Albee, E., 2006) (Figure 2.4.1).

Critics love to point out that suburb and sprawls are not limited to the United States or North America; it occurs across the globe. The implication is that all the world. One of the reasons development patterns in other countries resemble those of the United States is that many of those nations have copied America's ill-thought-out

zoning codes. Rows of detached houses in the Brazilian rain forest arranged just like those in postwar Levittown. A suburb in Vietnam that looks imported from the American Sunbelt. Monotonously repeated blocks of houses in Trinidad and Tobago. A private community in Shenzhen, China was developed based on US planning and design standards. These and other cases convey an important message: If other nations are sprawling, it's not necessarily because individual consumers and families longed for that result.



Figure 2.4.1: Suburban Housing Development near Markham, Ontario (Wikipedia)

In Beijing, China, 20 miles out of the center of town and there is a series of cookie – cutter tract homes. Manicured lawns and clubhouses dot the landscape. There is the occasional golf course. Neighborhoods are gated and carry names like Le Leman Lake, Capital Paradise, Yosemite and River Garden. During the past several years, numerous gated subdivisions have sprung up outside mainland China's two largest cities, Beijing and Shanghai; and the trend is spreading to other cities, such as Tianjin and Shenzhen. What is most remarkable is that most of them, visually and

architecturally, look as if they belong in San Jose or Orange County. They are directly modeled on the tract homes that have defined American suburban growth in the past 30 years (Thorns, D. C., 1972).

2.5. Summary of Chapter

In the beginning of this chapter, history of housing in United States including Housing Growth, Demographics, Types and Characteristics have been analyzed. The comparison study between 1940 and 1990 shows clearly that a migration from the cities to the suburbs occurred during these years. The records also show that housing units have increased almost twice as fast as population in the same time period. This increase in housing units reflect smaller size of household, changing life styles and living arrangements. While the size of household size dropped, the ownership climbed with each decade since 1940. 1940 was the last in the 20th century in which renters outnumbered homeowners. There is also a noticeable change in housing types and characteristics between 1940 and 1990. Most Americans still live in single – family homes, homeowner the gain from 1940 to 1990 was 164 percent, slightly less than the 174 percent increase for all housing units. The major increase was in condominiums, mostly multi – story buildings. The most dramatic change was in mobility. The increased number of automobiles per household enabled people to move further out of the city and public transportation. Increased mobility became one of the most important component of new lifestyle, suburbs.

While analyzing the sociological history of suburbia, it has been highlighted that the first suburbs were developed as early as 19th century but it still wasn't very common due to the lack of transportation.

In the early to mid 20th century, suburbs started to become more popular due to the increased railroad and introduction of cars. During the ten years following World War I there was an increase in the production of housing, mostly in the suburbs. Migration to suburbs started with the wealthy and then spread to the middle class.

After World War II, suburbs continued to expand randomly. During the 1960's changes occurred within the American society and social structure, which caused the

emphasis in housing to shift from the single – family house to higher density housing types.

Architectural history of suburbia has been analyzed under six eras defined by Metropolitan Institute at Virginia Tech. In the earlier eras, suburban homes were small in size with distinct styles but were located on large lots.

Mid century suburban homes were bigger than earlier eras but they had started to lose their characters due to the mass production. Suburban houses were booming in this era.

In the most recent eras, from 1970 to today, the housing characteristics have changed again. The census had shown that size of household decreased, yet the house sizes increased dramatically. The average house size doubled since 1970. Mid – century's 2-3 bedroom, 1 bathroom and open living space concept changed to 3-4 bedrooms, 2-3 bathrooms, formal dining room, formal living room, family room, breakfast room, recreation room and attached garages.

This unnecessary increase of housing size as well as unplanned spread of suburbs brought new problems to American life which will be discussed in the next chapter.

3. SUBURBIA, AMERICAN DREAM AND ITS LIVING ENVIRONMENT

3.1. Origin of American Dream

The American Dream is the faith held by many in the United States of America that through hard work, courage, and determination one can achieve a better life for oneself, usually through financial prosperity. These were values held by many early European settlers, and have been passed on to subsequent generations. What the American Dream has become is a question under constant discussion, and some believe that it has led to an emphasis on material wealth as a measure of success and/or happiness. The American dream is a dream of having children and living in a perfect house with financial security (Albee, E., 2006).

America was founded on a belief in freedom, equality, individuality, identity, privacy, safety, mobility and the opportunity for renewal which are summarized as American Dream. Underpinning this dream was a belief that physical mobility makes it possible. These ideas, this dream infused American culture and, therefore, their buildings. To understand the culture and architecture, we need to understand American Dream and its themes (Whitaker, C., 1998).

3.2. Themes of American Dream

Definitions of American Dream's components as spelled out in encyclopedia (Wikipedia):

- Individuality is a term used to describe a moral, political, or social outlook, which stresses human independence and the importance of individual self-reliance and liberty. Individualists promote the unrestricted exercise of individual goals and desires. They oppose any external interference with an individual's choices - whether by society, the state, or any other group or

institution. Individualism is therefore opposed to collectivism, which stresses community and societal goals over individual goals.

- Equality is a social state of affairs in which certain different people have the same status in a certain respect, at the very least in voting rights, freedom of speech and assembly, and the extent of property rights.

- Safety is the state of being safe, the condition of being protected against physical, social, spiritual, financial, political, emotional, occupational, psychological or other types or consequences of failure, damage, error, accidents, harm or any other event which could be considered dangerous. Protection is from both the cause and from exposure to something that is not safe.

- Privacy is the ability of an individual or group to keep their lives and personal affairs out of public view, or to control the flow of information about them.

- Freedom refers, in a very general sense, to the state of being free. Complex philosophical concept referring to an individual or group's ability, right, or possibility of self – determination or political independence. Often associated to the concept of human free will, our individual capacity to choose our own destiny rather than follow the dictates of others, nature, or even supernatural forces. The concept of Freedom has been defined in very different ways depending on the school of thought, philosophical branch, or discipline that attempts to define it.

- Renewal is the act of renewing or the state of having been renewed.

- Mobility is the ability and willingness to move or change.

- Identity is the set of behavioral or personal characteristics by which an individual is recognizable as a member of a group. Identity is the distinct personality of an individual regarded as a persisting entity; individuality.

Individuality and Equality:

Americans believe in the fundamental right to choose and thereby to express individuality. They also believe in equality; they put great faith in the tenet that although each of them is unique, they are all created equal.

America has welcomed new people with new concepts throughout the history. Starting with Pierre Charles L'Enfant who in 1791 produced the plan for Washington DC, the country has welcomed foreign architects and their ideas. Walter Gropius, Mies van der Rohe, Richard Schindler, Richard Beutram Narcek Breuer, I.M.Pei, and Eliel Saarinen all came from abroad to live and practice architecture in America (Whitaker, C., 1998).

This is one of the reasons that there are many forms and ideas from Europe that are being adopted in America. These many styles clearly reflect the freedom to choose and to express individuality. As many styles celebrate uniqueness, common setbacks celebrate equality. Equally spaced buildings and common setbacks also connote equality. (Dupuy, K., 1979) (Figure 3.2.1).



Figure 3.2.1: Suburban Community in Cincinnati Ohio (Wikipedia)

The appeal of three adjacent houses on Martha's Vineyard emanates from the same values. Turrets, different roof pitches, different architectural treatment of each house

signify individuality, while the shingles, similar spacing, and common setbacks connote equality (Figure 3.2.2).

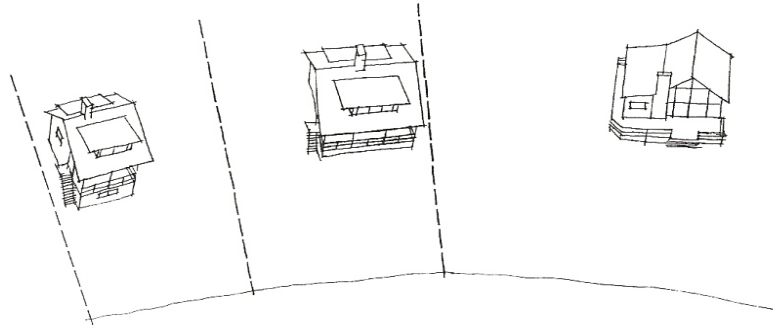


Figure 3.2.2: Single Family Homes in Martha's Vineyard (Architecture and American Dream, 1998)

Another way of expressing equality is with “twin” approach. Two of anything connotes balance. Two similar objects also connote equality, and in an American context this evokes a democratic ideal (Whitaker, C., 1998). Paired buildings exist everywhere in the country. A two-family house in Columbus (Figure 3.2.3), mirror-image beach houses on the New Jersey shore (Figure 3.2.4), and twin houses in Philadelphia (Figure 3.2.5) are such common formulations of equality.

The World Trade Center in New York also used to be one example to equality (Figure 3.2.6).



Figure 3.2.3: Two-family House in Columbus (Architecture and American Dream, 1998)



Figure 3.2.4: Mirror-image Beach Houses on the New Jersey Shore (Architecture and American Dream, 1998)



Figure 3.2.5: Twin Houses in Philadelphia (Architecture and American Dream, 1998)



Figure 3.2.6: The World Trade Center (Twin Towers) in New York (Internet)

Safety and Privacy:

Privacy is the quality or condition of being secluded from the presence or view of others (Pickett, J. P., 2000).

Americans always valued their privacy and wanted to keep their distance from one another. It is very common in American suburbs to see freestanding houses on large lots and great distances between buildings which are believed to prove privacy.

One of the best examples to this is Philadelphia Suburb Blue Bell (Figure 3.2.7). Blue Bell was ranked 14th on the list of the "100 Best Places to Live in the United States".



Figure 3.2.7: Philadelphia Suburb, Blue Bell (Wikipedia)

Freedom, Renewal and Mobility:

Americans also believe in freedom and renewal. These values affect their built environment. For America's first settlers, freedom meant moving to the New World. In 20th Century, freedom meant the right to renew oneself by getting on the road again. In this century, mobility became the key factor for freedom and renewal. Automobiles, which symbolize freedom, helped with the shape of American suburbs and architecture.

Architects such as Frank Lloyd Wright understood the importance of vehicle for American families and made the car and its garage part of the house. It is clear that the closer the car can come to the front door, the better Americans like it (Whitaker, C., 1998) (Figure 3.2.8).



Figure 3.2.8: Frank Lloyd Wright's Robie House in Chicago, An Example to the Relationship between Garage/Car and the House (website)

3.3. Problems of Suburbia

Suburbs became popular as an opportunity for families to seek an alternative to crowding of central cities. Few families could attain the ideal known as the "American Dream," frequently associated with homeownership, if all metropolitan residents were confined to central-city boundaries. Development activity outside central cities was enabled by innovations in transportation as well as public subsidies that bore the cost of infrastructure such as roads, water, and electricity. The trend toward deconcentrated urban form was further advanced by the advent of automobile culture.

But the trend toward suburban living is not without a large group of detractors. In recent years, suburban "sprawl", a term for poorly planned suburban growth, has become an increasingly hot-button issue in American politics.

Critics of suburbanization say suburban growth will:

- Lead to the decay of central cities and their downtowns, which are left without a base of nearby middle-class residents.
- Quickly destroy cropland, displace nature, and consume attractive countryside.
- Increases traffic at the central area.
- Cause a decline in the public's health, since buildings in suburbs are often so far apart that driving is the only way to get from one place to another.
- Costly, due to the new infrastructure required for development, paid by the existing urban area.
- Provide a limited set of housing choices.
- Building more soulless places with no distinct identity or feeling of community (Albee, E., 2006).

The American Dream is an evolving image and the American Metropolis is its ever-changing reflection. The 20th century's suburban dream is increasingly out of sync with today's culture. The household makeup has changed dramatically, the work place and work force have been transformed, average family wealth is shrinking,

and serious environmental concerns have surfaced. But United States continues to build post-World War II suburbs as if families were large and had only one breadwinner, as if the jobs were all downtown, as if land and energy were endless, and as if another lane on the freeway would end traffic congestion.

Americans initially moved to the suburbs for safety, freedom, privacy, mobility, and home ownership. What they now have is isolation, congestion, rising crime, pollution and overwhelming costs. This sprawling pattern of growth now produces conditions which frustrate rather than enhance daily life. Meanwhile, the city centers have deteriorated because much of their economic vitality has decanted to the suburbs.

In “The Geography of Nowhere”, James Howard Kunstler (1994) discusses the problems of suburbia in great depth. Kunstler says, “The argument that people like driving around in their Sport Utility Vehicles (SUV), big trucks and living in suburbs is really beside the point”. He adds, “People also like shooting heroin. People also like drinking too much. People like eating more fatty food that is not good for them. There are a lot of things that people like that the world does not necessarily reward them for”. Kunstler predicts that the suburbs are going to become the slums of tomorrow. Some of them will be the ruins of tomorrow. Kunstler sees suburban sprawl as a threat to America’s very soul (Kunstler, J. H., 1994).

Limits Freedom:

It was believed that Suburbia would bring freedom. In 21st century, it is now understood that it is the opposite. Suburbs actually limit freedom by trapping people. True mobility is reduced because the only transportation choice is the car. It is one thing to enjoy the freedom of car – another to be forced to use it for every trip. In the suburbs, it is unclear who is the master – car or driver. Those who can’t drive – the very young, very old, very poor, and many disabled people – are stuck or dependent on other drivers. Those who can drive frequently spend more time than they would like to behind the wheel – running errands, chauffeuring children, and commuting (Steuteville, R., 2004).

Health Problems:

The past couple of years have produced a series of reports linking obesity to obesity and suggesting that Americans would be healthier if they lived in more walkable communities. A study funded by the Robert Wood Johnson Foundation finds that “people who live in sprawling metropolitan areas are more likely to have high blood pressure, arthritis, headaches, and breathing difficulties than residents of more compact cities” the Associated Press reported. The reason is simple – people drive more, walk less, and experience more stress in sprawl (Steuteville, R., 2004).

People who live in spread – out suburbs are on average 6 pounds heavier than urban dwellers and are more likely to suffer from high blood pressure, hypertension, and other ills, according to the authors of the first national study and accompanying reports being published in the American Journal of Health Promotion and the American Journal of Public Health.

In spread – out suburban areas where residential and commercial areas are separated by long distances, people must drive everywhere, and do not easily have opportunities for physical activity, even if they seek it. The study found that people in urban settings such as New York, Boston, or Philadelphia tend to walk and bike more as part of daily life, resulting in slimmer waistlines and fewer health problems (Flint, A., 2003).

Pollution and Traffic Congestion:

Over the last twenty years these patterns of growth have become more and more dysfunctional. Finally they have come to produce environments that often frustrate rather than enhance everyday life. Suburban sprawl increases pollution, saps inner-city development, and generates enormous costs – costs that ultimately must be paid by taxpayers, consumers, businesses and the environment. The problems are not to be solved by limiting the scope, program, or location of development – they must be resolved by rethinking the nature and quality of growth itself, in every context.

Settlement patterns are the physical foundation of America’s society and, like the society they are becoming more and more fractured. The developments and local zoning laws segregate age groups, income groups, and ethnic groups, as well as family types. Increasingly they isolate people and activities in an inefficient network

of congestion and pollution – rather than joining them in diverse and human scaled communities.

Results from regional air monitoring stations provide the reality: a real surprise: air monitoring stations in the Philadelphia suburbs frequently report higher pollution levels than stations in the City of Philadelphia. The results are not different in other cities (Mikuliak, J., 2005).

Automobile crashes are the leading cause of death among people from one year to twenty-four years old, cause about 3.4 million nonfatal injuries each year, and cost an estimated \$200 billion annually. According to the best available analysis, “Automobile commuting is more stressful, for more people, than the train and bus commuting”. An investigation of road rage found that “an individual encased in an automobile seems to have a lower threshold for hostility”. A German study of patients with coronary artery disease discovered that “approximately half the patients showed pathological EKG changes while driving”(Frumkin, H., Frank, L., Jackson, R., 2004).

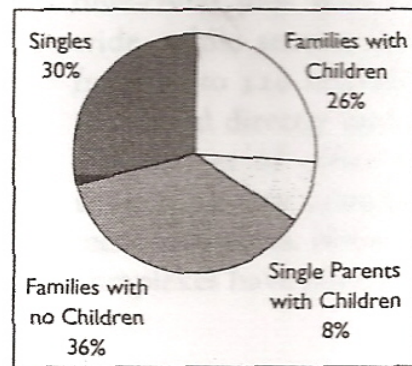
Change in Family Structure and Role of Women in the Society:

Suburbs are designed around a stereotypical household that is no longer predominant. The size of the households has been shrinking, from an average of three twenty years ago to two and a half today. The percentage of singles and single-parent families is increasing, from 29 percent twenty years ago to 38 percent today (Figure 3.3.1).

And the economics of the household has changed. Working mothers are becoming the norm which double-income households now representing 54 percent of all families. Women are certainly less available to support a suburban family lifestyle that requires a chauffeur for every child’s trip. Add to this the escalating cost of housing and the needs of working women, and the possibility of realizing the old American Dream in existing development patterns becomes increasingly unlikely.

Beneath the statistics is a more profound change in the structure of family and the role of women in the society. Many have argued that the role of women in the suburbs of the fifties and sixties was oppressive. The model of isolated homemaker, on-call chauffeur, and sole daycare provider may have helped germinate the feminist

movement that followed. Whether liberation, necessity, or ambition, the entry of women into the workforce changed the cultural landscape dramatically. And of course it transformed the needs of home, neighborhood, and community. Many now understand that without a full-time caretaker the suburban dream cannot function.



HOUSEHOLD COMPOSITION: 1990

Figure 3.3.1: Household Composition – 1990 (The Next American Metropolis, 1993)

Change in Location of Workplace:

The nature and location of the workplace has also changed. As the computer has allowed new jobs to shift from blue-collar to white and gray, employment centers have decentralized into low-rise office parks on cheap and often remote sites. Traffic congestion in the suburbs is a signal of this deep shift in the structure of our economic culture. Suburb-to-suburb traffic patterns now produce greater commute distances and driving time. Over 40 percent of all commute trips are from suburb to suburb. The problems of suburbia feed back to our city centers.

Impact of Federal Policies:

The impact of federal policies that invest more in suburbs than in cities cannot be overlooked. The inner city will continue to suffer from disinvestment. There is a vicious cycle at work in the inner cities. The more development and tax base decants to the suburbs, the less attractive the inner city becomes to investors, business or homeowners. In the Washington DC metropolitan region for example, it has been estimated that 210 million square feet of new commercial and residential development are needed to pay off the existing municipal bonds, including the \$10 billion METRO transit system. Although there is space for three quarters of this

development around existing suburban transit stations and within the city, little of it is locating there. The tax revenues that would have come with development are leaking away. Because development and tax base is escaping pressing urban problems, such as housing, crime, and AIDS are underfunded, leading to an urban environment unattractive to investment of any type. The inner city will not get the development investment or tax dollars its urban citizens need partly because the region is allowed to sprawl. Two complementary strategies are needed. A tough regional plan which limits sprawl and channels development back to the city or around suburban transit stations; and a matching greenbelt strategy to preserve open space at the edge of the region.

The net result is that America needs to start creating neighborhoods rather than subdivisions; urban quarters rather than isolated projects; and diverse communities rather than segregated master plans. Quite simply, they need towns rather than sprawl.

3.4. Redefining the American Dream

America is at a point of transformation once again and the two, city and dream, are changing together. World War II created a distinct model for the family in the suburban landscape. That model and its physical expression are now stressed beyond retention. The family has grown more complex and diverse, while the suburban form has grown more demanding and less accessible. The need for change is blatant, with sprawl reaching its limits, communities fracturing into enclaves, and families seeking more inclusive identities. Clearly United States needs a new paradigm of development; a new vision of the American Metropolis and a new image for the American Dream. (Calthorpe, P., 1993)

Fixing this problem does not mean forcing people to live in ways that they don't want to live. Quite the contrary – studies show that a sizable portion of the population would love to live in compact, mixed-use, walkable neighborhoods. Building human-scale neighborhoods would enhance personal choice and freedom.

American Dream has been redefined to make it more accessible to the diverse population: singles, the working poor, the elderly, and the pressed middle-class

families. Certain traditional values – diversity, community, frugality, and human scale – have been the foundation of a new direction for both the American Dream and the American Metropolis. These values are not a retreat to nostalgia or imitation, but recognition that certain qualities of culture and community are timeless.

If America was reinvented, careful consideration should be given to how to create it. The investment in transit must be supported by land use patterns, which puts riders and jobs within an easy walk of stations. The investments in affordable housing should place families in neighborhoods where they can save dollars by using their autos less.

The question is if such a transformation is possible? Americans love their cars, they love privacy and independence. The goal of community planning for the pedestrian or transit is not to eliminate the car, but to balance it. A walkable neighborhood may produce increased independence for growing segments of the population, the elderly and kids.

The alternative to sprawl, the redefined American Dream is simple and timely: neighborhoods of housing, parks, and schools placed within walking distance of shops, civic services, jobs, and transit. The convenience of the car and the opportunity to walk or use transit can be blended in an environment with local access for all the daily needs of a diverse community. It is a strategy, which could preserve open space, support transit, reduce auto traffic, and create affordable neighborhoods. Such neighborhoods, called Transit-Oriented Developments (TOD), ultimately could be more affordable for working families, environmentally responsible, and cost-effective for business and government.

The redefined American Dream is New Urbanism which is a movement that addresses many of the ills of the current sprawl.

3.5. Summary of Chapter

America was founded on a belief in freedom, equality, individuality, privacy, safety, mobility and the opportunity for renewal which are summarized as “American Dream”. These ideas, this dream infused American culture and, therefore, their buildings, architecture and living environment.

From late 19th century until the end of 20th century, moving out of the city to the suburbs was believed the way to full fill this dream. Suburbs became synonymous to American Dream for more than a century.

By the end of the 20th century, studies started to prove that suburbs were in fact not as great as it was believed in the beginning. American initially moved to the suburbs for safety, freedom, privacy, mobility and home ownership. What they ended up having is isolation, traffic congestion, pollution, health problems, limited freedom, rising crime and over whelming costs. Meanwhile, the city centers have deteriorated because much of their economic vitality has decanted to the suburbs. In recent years, suburban “sprawl”, a term for poorly planned suburban growth, has become an increasingly hot – button issue in America.

America is at a point of transformation once again and the two, city and dream, are changing together. In 21st century, American Dream has been redefined to make it more accessible to the diverse population: single, the working poor, the elderly, and the pressed middle – class families. The redefined American Dream is simple and timely: neighborhoods of housing, parks, and schools placed within walking distance of shops, civic services, jobs and transit. The redefined American Dream is New Urbanism which is a movement that addresses many of the ills of the current suburbs.

4. NEW URBANISM AND NEW HOUSING TRENDS IN UNITED STATES

4.1. Origin of New Urbanism

Through the first quarter of the 20th century, the United States was developed in the form of compact, mixed-use neighborhoods. The pattern began to change with the emergence of modern architecture, zoning, and the ascension of the automobile with the availability of inexpensive gasoline. After World War II, a new system of development was implemented nationwide, replacing neighborhoods with a rigorous separation of uses that has become known as conventional suburban development, or sprawl. The majority of US citizens now live in suburban communities built in the last 50 years.

The New Urbanism is a reaction to sprawl. It is a movement that addresses many of the ills of the current sprawl development pattern while returning to a cherished American icon: that of a compact, close-knit community. New Urbanism's popularity increased beginning in the 1980s and early 1990s.

For most of human history, people have banded together for mutual security or to be close to critical resources – water, food and, more recently, ports, rail hubs and employments centers. The advent of the automobile and a host of other factors provided an opportunity to disperse – to go beyond the limits of one's own walking range or that of a streetcar line. The crowding, crime and disease, which plagued center cities in the past offered reasons enough to leave. In the postwar era, suburbia became the lifestyle of choice for most Americans. While this new way of living had many advantages, it also fragmented the society – separating people from friends and relatives and breaking down the bonds of community that had served the nation so well in earlier times. Despite of increasing sophistication of the physical and electronic networks (highways, telephones, television, etc.), America remains today a fragmented society. Networks, alas, are no substitute for true community.

The Geography of Nowhere, an excellent book by James Howard Kunstler, provides a comprehensive Look at the crisis of place in America's suburbs. Okasis that he feels America has been on since the early 20th century has devastated the built environment. Now that the ride is over, America must deal with its consequences (Kunstler, J. H., 1994).

The New Urbanism addresses that challenge. It may not be the 20th century American Dream as it was constituted in previous generation, but it could ultimately offer a better option. If the New Urbanism can indeed be shown to deliver a higher, more sustainable quality of life to a majority of his nation's citizens, it can only be hoped that it will be embraced as the next paradigm for the shaping of America's communities.

There is a growing sense that the suburban paradigm, which has dominated since the early 20th century, cannot sustain another generation of growth. The New Urbanism is the solution to the problems of Suburbia.

There are some common elements of new urbanist design. New urbanist neighborhoods are walkable, and are designed to contain a diverse range of housing and jobs.

For a growing movement of architects, planners, and developers, new urbanism is based on principles of planning and architecture that work together to create human-scale, walkable communities. New urbanists take a wide variety of approaches—some work exclusively on infill projects, others focus on transit-oriented development, still others are attempting to transform the suburbs, and many are working in all of these categories. Early in the 1960s, Jane Jacobs authored *The Death and Life of Great American Cities*, which set the precedent for the new urbanist trend by condemning the accepted planning theories of the time; calling for an increased effort by planners to reconsider the failing single-use housing projects, large car-dependent thoroughfares, and segregated commercial centers that had become the "norm" of civic planning and zoning thought. Another mid-twentieth century writer that inspired the new urbanist movement was the social philosopher/historian Lewis Mumford, who criticized the "anti-urban" development of post-war America.

4.2. Beginnings and Growth of New Urbanism in United States

It was 1990's when architects and planners in United States started to discuss "New Urbanism", "Transit Oriented Developments" (TOD), "Infill Projects" and "Walkable Neighborhoods". In the first issue of "New Urban News" in May 1996, Robert S. wrote, there is a growing tendency among architects and planners to return to practices that create a sense of place and community in the built environment. A decade later the words still ring true. More than ever, the New Urbanism is having a profoundly positive effect on planning and development practice both in the United States and abroad (Langdon, P., 2006).

New Urban News identified 648 current neighborhood-scale new urban projects in 2003, up from 472 in 2002. The increase, 176 new projects, was numerically the largest ever. The total for 2003 includes 369 communities built or under construction and 279 in various stages of planning. The survey was conducted in October through December of 2003.

Latest survey in 2004 shows that in just one year, the number of US new urban communities grew by 37 percent (Figure 4.2.1).

The great majority of development in US remains conventionally suburban. Yet the trend toward New Urbanism is growing as never before (Steuteville, R., 2004).

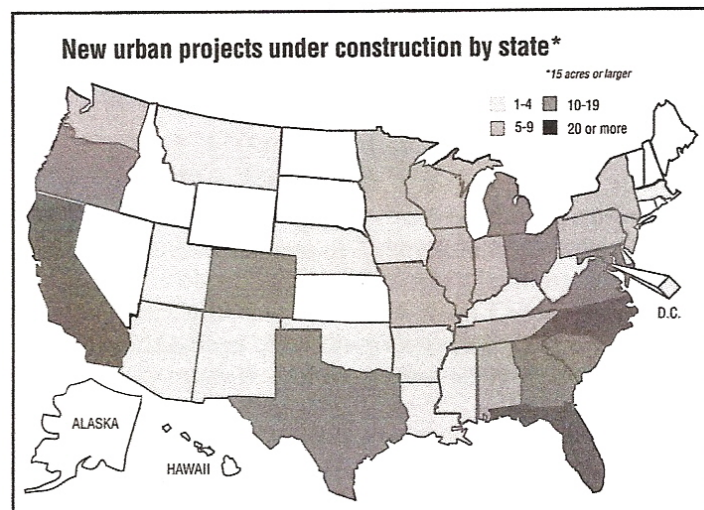


Figure 4.2.1: New Urban Projects Under Construction By State – 2004 (New Urban News, 2004)

4.3. Themes of New Urbanism

Definitions of New Urbanism's Components as spelled out in encyclopedia (Wikipedia):

-Safety is the state of being safe, the condition of being protected against physical, social, spiritual, financial, political, emotional, occupational, psychological or other types or consequences of failure, damage, error, accidents, harm or any other event which could be considered dangerous. Protection is from both the cause and from exposure to something that is not safe.

-Security is the condition of being protected against danger or loss. In the general sense, security is a concept similar to safety. The nuance between the two is an added emphasis on being protected from dangers that originate from outside.

-Privacy is the ability of an individual or group to keep their lives and personal affairs out of public view, or to control the flow of information about them.

-Diversity is the presence of a wide range of variation in the qualities or attributes under discussion. Amongst humans, particularly in a social context, the term diversity refers to the presence in one population of a (wide) variety of cultures, ethnic groups, languages, physical features, socio-economic backgrounds, opinions, religious beliefs, sexuality, gender identity, neurology.

Safety / Security:

One of the major key factors of Suburbia was safety. It can be proved that the cities following the rules of New Urbanism can offer safety, security more than the suburbs.

It is proved that the safety issues couldn't be solved by spreading people out more thinly, trading the characteristics of cities for the characteristics of suburbs. Okasis this could solve danger in the city streets, then Los Angeles should be a safe city because superficially Los Angeles is almost all suburban. It has virtually no districts

compact enough to qualify as dense city areas. Yet it has the highest crime rate in the United States (Jacobs, J., 1993). Cities with much higher density have lower crime rates.

Contact:

Cities also offer a much better social life than suburbs. Reformers who supported Suburbia have long observed city people loitering on busy corners, hanging around in candy stores and bars and drinking soda pop on stoops, and have passed a judgment which is “if these people had decent homes and a more private outdoor place, they wouldn’t be on the street”. This judgment represents a profound misunderstanding of cities. The point of the social life of city sidewalks is precisely that they are public. They bring together people who do not know each other in an intimate, private social fashion and in most cases do not care to know each other in that fashion. Sidewalk is a way to contact people if desired which cannot be found in suburban settings (Jacobs, J., 1993).

Privacy:

Another major aspect of suburbia was privacy and it was achieved by bigger lots and separated dwelling units. Privacy is precious in cities. In slam settlements like suburbs, everyone actually knows your affairs. In the city everyone does not – only those you choose to tell will know much about you. Architectural and planning literature deals with privacy in terms of windows, overlooks and sight lines. The idea is that if no one from outside can peek into where you live – behold privacy. This is not completely true and is simple-minded. Window privacy is the easiest to commodity in the world to get. You just pull down the shades or adjust the blinds. The privacy of keeping one’s personal affairs to those selected to know them is the critical one and is part of the default city life (Jacobs, J., 1993).

Diversity:

Diversity is also an advantage of the city. The new urbanist city has to deal with combinations and mixture of uses, not separate uses as in suburban settings. City population is large enough to support wide ranges of variety and choice. Towns and suburbs, for instance, are natural homes for huge supermarkets. Cities, however, are the natural homes of smaller scale supermarkets, bakeries, foreign grocery stores,

coffee shops, and so on. Wherever lively and popular parts of cities are found, the small much outnumber the large. These small enterprises would not exist somewhere else, in the absence of cities. The diversity, of whatever kind, that is generated by cities rests on the fact that in cities so many people are so close together, and among them contain so many different tastes, skills, needs, and supplies. The need brings mixed-use communities to life.

To generate diversity in a city's street and district, four conditions are indispensable:

1. The district, and indeed as many of its internal parts as possible, must serve more than one primary function; preferably more than two. These must insure the presence of people who go outdoors on different schedules and are in the place for different purposes.
2. Most blocks must be short; that is, streets and opportunities to turn corners must be frequent.
3. The district must mingle buildings that vary in age and condition, including a good proportion of old ones so that they vary in economic yield they must produce.
4. There must be a sufficient dense concentration of people and uses (Jacobs, J., 1993).

In combination, these conditions create effective economic pools of use. And along with them city life will get its best chances.

Density:

Density is one of the main aspects of the new urbanist approach. It is hard to define the proper density for city dwellings. The answer to this is something like the answer Lincoln gave to the question, "How long should a man's legs?". Long enough to reach the ground, Lincoln said. Just so, proper city dwelling densities are a matter of performance. They cannot be based on abstractions about the quantities of land that ideally should be allotted for so-and-so many people. Densities are too low, or too high, when they frustrate city diversity instead of abetting it (Jacobs, J., 1993).

There are ways to achieve high density and one of them is multi-story apartment. Apartments are today the most efficient way of packing dwellings on a given amount of building land. They also offer variations in unit types and sizes. The more

variations there can be the better. It is not easy to reconcile high densities with great variety in buildings, yet it must be attempted. The variations in an apartment building could be flats, one-bedroom units, two-bedroom units, two story loft units, etc. In New Urbanism, density should always come with variety.

4.4. Transit-Oriented-Development (TOD) and It's Principals

New Urbanists propose small, self-contained neighborhoods with a clearly defined center and edges. Today, a new architectural and city planning movement is looking to replace the suburban house-car-strip mall model. The philosophy behind “the New Urbanism” is that communities should be built around mixed-use neighborhoods, with housing, jobs, stores and services within walking distance. New Urbanism, looks to the urban neighborhoods and small towns that existed before World War II as a model for the future.

One New Urbanist approach is Transit-Oriented-Development (TOD) where the new buildings are developed around a major transit center such as metro. A transit-oriented development (TOD) is a residential or commercial area designed to maximize access to public transport, and often incorporates features to encourage transit ridership. A TOD neighborhood typically has a center with a train station, metro station, tram stop, or bus station, surrounded by relatively high-density development with progressively lower-density development spreading outwards from the center. TODs generally are located within a radius of one-quarter to one-half mile (0.4 to 0.8 km) from a transit stop, as this is considered to be an appropriate scale for pedestrians.

J.H. Kunstler identifies the principals of Transit-Oriented Development (TOD) in his book “The Geography of Nowhere” as to:

- Organize growth on a regional level to be compact and transit-supportive;
- Place commercial, housing, jobs, parks, and civic uses within distant of transit stops;
- Create pedestrian-friendly street networks which directly connect local destinations;
- Provide a mix of housing types, densities, and costs;

- Preserve sensitive habitat, riparian zones, and high quality open space;
- Make public spaces the focus of building orientation and neighborhood activity;
- Encourage infill and redevelopment along transit corridors within existing neighborhoods (Kunstler, J.H., 1994).

These principles are not new; they are simply a return to the timeless goals of urbanism, in its best sense. They are principles that over time have created the most treasured man-made environments and which, although constantly evolving with culture and technology, remain true to the human dimension and the deepest social aspirations. But they are fundamentally different from the ideas that have guided planning in America for the last two generations (Kunstler, J. H., 1994).

There is no clear definition of TOD's because the characteristics of this form of development vary greatly according to location. In general, TOD should be walkable, relatively dense, and contain more than one use. Clear benefits of TOD were found in three areas – they boost transit rider ship, they increase land values, and they are a good source of revenues for transit agencies.

More than 100 transit-oriented developments (TOD's) have been built in the United States and at least as many are in planning, according to a massive report on TOD released in 2004 by the Federal Transit Administration and the Transportation Research Board (Steuteville, R., 2004).

10 years after Kunstler, in 2004, P. Lounsdon summarizes the five main goals of TOD's in his book "Transit – Oriented Development Readies for the Next Leap":

- Location efficiency: This requires density – "sufficient customers within walking or bicycling distance of the transit stop to allow the system to run efficiently." And it requires "pedestrian friendliness – a network of streets within the transit district that is interconnected and scaled to the convenience of pedestrians."
- Rich mix of choices: This includes "a range of housing options – large single-family homes, bungalows, townhouses, live-work, and apartments" so that the TOD can appeal to many segments of population, from young people

starting out, to families with children, to the retired. A rich mix also includes affordable housing and many activities within walking distance, so that a resident can do several errands on one trip, without a car.

-Value capture: This primarily economic measure may include “higher tax revenues from increased sales and property values”. Value capture also refers to reduced transportation costs for residents, including the ability to reach amenities, such as child care facilities at transit stations, bike parking and rental, and guaranteed rides home from work.

-Place making: Areas within walking or biking distance of a station should be people places. They also should work within the landscape and “weave together different building forms, uses, tenures, and densities” among other objectives.

-Resolution of the tension between “node” and “place”: Too many stations in the US have been planned solely as transportation nodes, surrounded by parking for people who drive to the station. More stations and their surroundings must be designed to be pleasant, livable communities (Langdon, P., 2004).



Figure 4.4.1: Aerial view of growth patterns in Arlington County, Virginia (Internet)

High density, mixed use development is concentrated within 1/4 to 1/2 mile from the Rosslyn, Courthouse and Clarendon Metro stations, with limited density outside that area.

4.5. Infill Development

Another approach for New Urbanism is “Infill Sites”. Infill Sites represent undeveloped parcels of land that have been “skipped over” in the process of growth and are surrounded by existing development. This can occur in inner-city locations or in suburban areas (Figure 4.5.1).

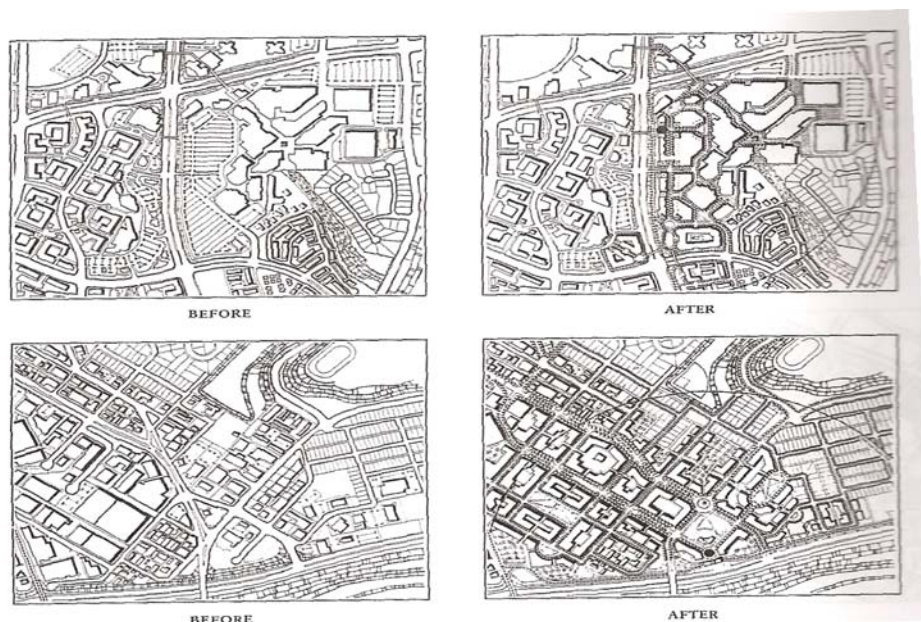


Figure 4.5.1: Examples to Infill Development (The Next American Metropolis, 1993)

A major solution to sprawl is infill development – the creative recycling of vacant or underutilized lands within cities and suburbs. Every city, town, and suburb has these types of properties. They range from the single vacant lot to surface parking lots to empty shopping malls. Successful infill, for example, address traffic issues by creating communities where people live closer to work and school, and where biking, walking, and transit can substitute for auto travel.

Successful infill development can offer these rewards for communities:

- Provide housing (both affordable and market rate) near job centers and transit.
- Increase the property-tax base.
- Preserve open space at the edge of regions.
- Provide new residents to support shopping district and services.
- Capitalize on community assets such as parks, infrastructure, and transit and create new community assets such as child-care centers, arts districts, and shopping areas. (Successful Infill Development Workshop, 1999)

Successful infill development refers to the planning, design, and construction of homes, stores, workplaces, and other facilities that make existing cities and towns more livable.

Successful infill often includes:

- New development on vacant lots within urbanized areas.
- Redevelopment of underused buildings and sites.
- The rehabilitation of historic buildings for new uses.

Successful infill looks, feels, and functions differently from development that is single use, low density, and dominated by automobiles and highways. It creates neighborhoods and districts that embrace a mix of uses and incomes, where a wide variety of citizens live, work, and play. It serves pedestrians and cyclists as well as autos. In short, successful infill is based on the scale of the pedestrian.

Half of the new projects under construction identified by New Urban News in 2002 were infill. That figure represents quite a change for New Urbanism, a trend that started in the 1980s and early 1990s (Steuteville, R., 2004).

4.6. Benefits of TOD's, Infill Developments and Case Studies

Mixed land use, a balance of density and reserved green space, a balance of automobile transportation with walking, bicycling, and transit, the provision of attractive and functional public spaces, the mingling of different styles and price levels of housing – these and other strategies offer the potential to increase physical

activity, decrease air pollution, protect source water, control injuries, and improve mental health and social capital. The best utilization of existing infrastructure and the best opportunity to preserve the open space will come from infill and redevelopment. Therefore it should always be a central part of a region's growth policy.

Community design does affect people's ability to meet others, and that's one reason why it influences their state of mind. Social connectedness is clearly good for mental health. It is believed that people with strong social networks live longer.

Clearly, walking is better for people's health, and walking is more common in the kinds of settings that new urbanists neighborhood – one featuring “higher density, land-use mix, connectivity, aesthetics, and safety” – engaged. In a study, 35 percent of people in the high-walk ability neighborhood were overweight, as compared to 60 percent in the low-walk ability neighborhood. At a time when the nation faces epidemics of inactivity, obesity, and related disorders such as diabetes, this is compelling public health issue (Frumkin, H., Frank, L., Jackson, R., 2004).

4.6.1. Case Study 1 - Ellington, Washington D.C. , US – Transit Oriented Development (TOD)

In the 1920s, U Street in Washington DC, the capital corridor known as “Black Broadway,” boasted thriving cabarets and was a favorite stomping ground of the jazz elite, including hometown legend Duke Ellington. But over the years, the area fell into disrepair. By the time Donohoe Construction came onto the scene (hired by developer Donatelli & Klein) in 2002, the only structures occupying the corner of 13th and U streets were trailers. Although the land was devoid of buildings requiring demolition, the site offered its fair share of hurdles, many unseen (Figure 4.6.1.1).



Figure 4.6.1.1: View from Ellington’s Roof (Torti Gallas and Partners, Inc.)

Metro tunnels 35 feet below grade sliced diagonally across the lot, requiring the installation of auger piles and a 3-foot concrete transfer slab to displace the weight load of the intended new building (Figure 4.6.1.2). At 43,000 square feet, The Ellington would house 186 rental apartments and 15,000 square feet of ground-floor retail space, plus two levels of underground parking. Moreover, the area’s rich legacy left the architects at Silver Spring, Md.-based Torti Gallas and Partners beholden to strict design parameters. Located in a historic district with an arts overlay, the site spanned three different city zones, each with different density and height restrictions.

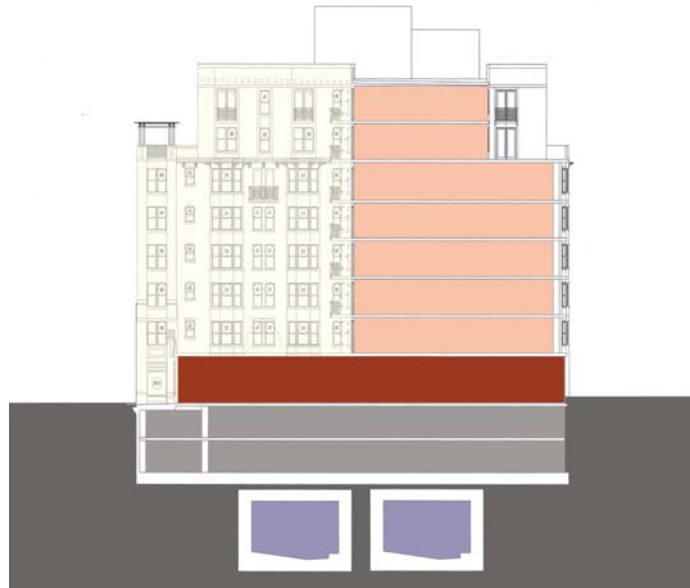


Figure 4.6.1.2: Ellington – Section showing the relationship between the building and metro tunnels (Torti Gallas and Partners, Inc.)

With 320 feet of frontage, The Ellington is bigger than anything on the block, but it doesn't read as a Goliath. Three wings project out onto U Street, forming intimate courtyards in between (Figure 4.6.1.3). And although the building is eight stories at its apex, the upper two floors are set back from the perimeter walls to minimize visibility from the street. This deft use of void space allows for rooftop terraces for some of the residences (Figure 4.6.1.4). On 13th Street, the massing steps down to a more modest, four story façade, clad in red brick to jibe with nearby Victorian row homes. This transition allowed the architects to offer another housing option – soft lofts with banked windows and spandrel panels (Figure 4.6.1.4).



Figure 4.6.1.3: Ellington – Aerial (Torti Gallas and Partners, Inc.)



Figure 4.6.1.4: Ellington at Night (www.ellingtonapartments.com)

“When you’re doing dense urban infill, you have to make sure the building will fit in,” notes Maurice Walters, a principal with Torti Gallas and Partners. “I guess the outcome we’re most happy with is how this project activates the street. We like the building, but we’re almost more excited about what’s now happening on the sidewalk with the signage, the cafes, and the retail life. The building feels like it’s always been there.” (Rouse, J., 2006).

Ellington has been awarded as “Best Mid-rise Apartment” in 2005. It is located across metro station which qualifies it as a “Transit – Oriented Development”. It is a mixed-use building with residential, retail and parking.

First floor is mostly retail (stores accessed from the street). A small portion of the first floor is designed for resident’s use. At the main residential entrance, there is a lobby and front desk with 24 hour security. While the lobby gives people the luxury hotel feeling, the front desk next to it provides safety. It could also be said that the lobby is a reflection of the identity, similar to the public image in suburban settings. This main entrance with lobby and front desk is the public space (Figure 4.6.1.5).

Semi-public spaces, such as club room, exercise room, business center are located at the back of the first floor. These spaces are strictly for residents. While these public spaces give the residents a chance to be social, meet people, have “contact” which is one of the themes of New Urbanism, they still provide security and privacy, main aspects of New Urbanism (Figure 4.6.1.6).



Figure 4.6.1.5: Ellington - Lobby (www.ellingtonapartments.com)



Figure 4.6.1.6: Ellington – Club Room (www.ellingtonapartments.com)

Parking is located below grade. It is designed to serve to residents as well as retail customers. Residential parking is separated from retail parking with full height overhead doors and is accessed with card readers only, again to provide security and privacy from public.

It is important to make sure that new buildings such as Ellington welcomes public, adds value to the neighborhood and these goals are achieved with the retail stores at first floor. The stores bring people and life to the building. If the building had a fence around it and was private only, it wouldn't add anything to the neighborhood; it would probably take from it.

While it is so important to bring the public to the building it is also equally important to stop the public at front desk. Beyond front desk, it is private.

Residential floors can be accessed through elevators. And stairs located at four locations. Elevators are at the main entrance of the building, after lobby and front desk. Receptionist at front desk provides security. Stairs are also secure. They can only be accessed with card readers.

The whole floor is served by a single corridor, units located on each side. The corridor is long and feels like a hotel corridor. It is designed and decorated by interior designers. There are mirrors, art works on the walls. Fancy light fixture,

expensive floor finishes are all part of the corridors. Public image, identity can still be noticed.

Ellington offers 25+ unit types. The types consist of small units (studio), one-bedroom units, one-bedroom + den units, two-bedroom units, two-bedroom + den units and two story loft units. Varies unit types, sizes are offered to vary life styles at the same location. Several unit types give residents the freedom to choose, the opportunity to express their selves and their identities differently (Figure 4.6.1.7 thru 14).



Figure 4.6.1.7: Ellington – Junior One Bedroom Unit (562 sq. ft.) (www.ellingtonapartments.com)



Figure 4.6.1.8: Ellington – One Bedroom Unit (737 sq. ft.)
(www.ellingtonapartments.com)



Figure 4.6.1.9: Ellington – Deluxe One Bedroom Unit (813 sq. ft.)
(www.ellingtonapartments.com)

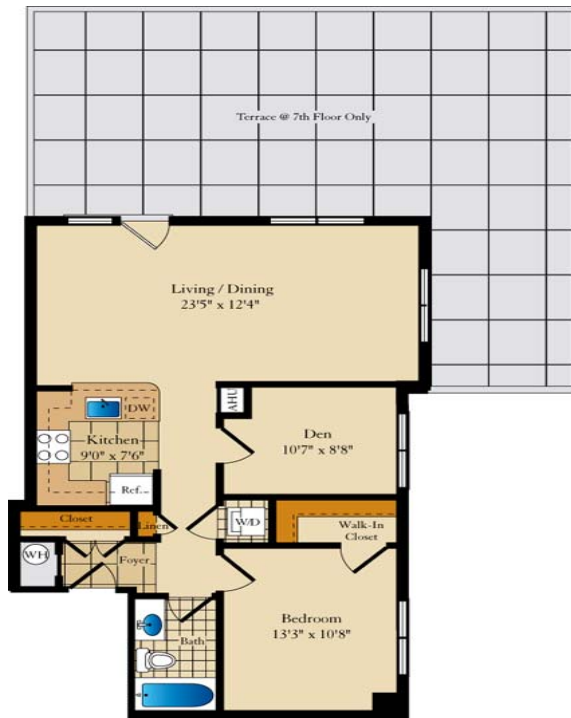


Figure 4.6.1.10: Ellington – One Bedroom with Den Unit (824 sq. ft.) (www.ellingtonapartments.com)



Figure 4.6.1.11: Ellington – One Bedroom with Loft Unit, First and Second Floor Plans (804 sq. ft.) (www.ellingtonapartments.com)



Figure 4.6.1.12: Ellington – Two Bedrooms Unit (925 sq. ft.)
(www.ellingtonapartments.com)



Figure 4.6.1.13: Ellington – Two Bedrooms with Den Unit (1,095 sq. ft.)
(www.ellingtonapartments.com)



Figure 4.6.1.14: Ellington – Two Bedrooms with Loft Unit, First and Second Floor Plans (1,162 sq. ft.) (www.ellingtonapartments.com)

Unit plans are designed according to current building codes and Fairhousing requirements. Building codes ensure quality of construction, mechanical, electrical, plumbing, structural systems, life safety and many more aspects. Fairhousing requirements, as discussed previously under equality in New Urbanism, assure that handicapped people have the same like in a multi-story building. Units as well as all public spaces are designed to be used by people with wheelchairs if desired.

The number of people who want to live near transit service is on the rise. Of all the types of housing preferences, “demand for housing near transit is growing fastest”.

Local governments have an incentive to seek transit-oriented development because it generates financial benefits. In the best developments, the station is embedded in a lively mix of shops, restaurants, housing, offices, and amenities. Ellington is one of the many examples.

4.6.2. Case Study 2 – Kenyon Square, Washington D.C., US - Transit Oriented and Infill Development

Kenyon Square is an exceptional new condominium located in Columbia Heights, Washington DC. The neighborhood has a similar story with Ellington. It was popular in early 20th century but by the end of the century, the whole neighborhood

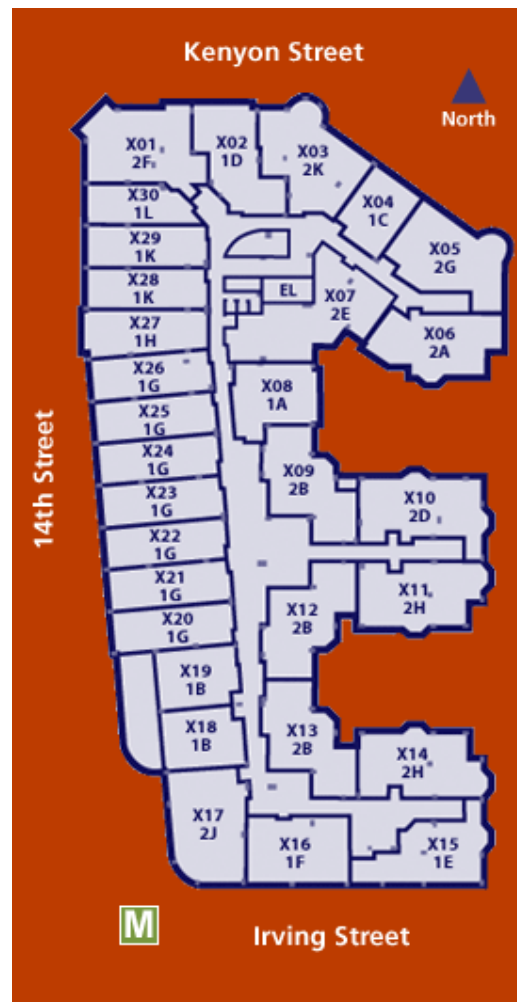
fell into disrepair. Most of the homes were in very bad shape, the streets were not safe and it wasn't a good neighborhood anymore.

In 2000, developers decided to invest in this area. The land was cheap, the area had a metro stop and there were several empty city blocks waiting for developers.

In the past 6 years, developers turned this area into a construction site. These new developments brought the neighborhood to its old plays.

The old homes are being renovated, many retail stores are opening their doors to the customers, and historic theater is being renovated. The house prices more than tripled and the neighborhood became popular again.

Kenyon Square is one of there new developments. The building is located adjacent to a metro station, between existing buildings which qualifies it as Transit Oriented and Infill Development at the same time.



- o - 1 Bedroom: 1A, 1B, 1C, 1D
- o - 1 Bedroom Loft: 1K, 1L
- o - 1 Bedroom w/Den: 1E, 1F
- o - 1 Bedroom Loft w/Den: 1G, 1H
- o - 2 Bedroom: 2A, 2B, 2D, 2H
- o - 2 Bedroom Deluxe: 2F, 2J, 2K
- o - 2 Bedroom w/Den: 2E, 2G

Figure 4.6.2.1 – Kenyon Square Typical Floor Plan (www.kenyonsquare.com)

The design of Kenyon Square represents an evocative tribute to the historic architecture in the Columbia Heights neighborhood. A graceful sequence of glass and brick neoclassical facades, designed by the award-winning firm of Torti Gallas and Partners, responds to the subtle variations in geometry along 14th Street with both drama and sophistication.

The building's southern façade reflects an inviting "streamline deco" style, with sweeping expanses of glass and stunning views of the city. An illuminated cylindrical turret on the southern corner heightens the building's presence as a compelling new landmark within the Columbia Heights neighborhood. Along the mid-block, Kenyon Square presents a robust "industrial deco" façade, with masonry piers and large expanses of glass.

The northern portion of the building reflects an Italianate style in keeping with the tradition of grand Washington, DC apartment houses. A rich palette of masonry with cast stone detailing and French balconies wraps the façade onto Kenyon Street, forming an elegant front entrance facing the plaza. A dramatic bayed corner, capped with a rooftop belvedere, complements the newly renovated Tivoli Theater across from the building (Figure 4.6.2.2).



Figure 4.6.2.2: Kenyon Square – North Site (www.kenyonsquare.com)

Kenyon Square offers an abundant array of amenities and services, ideally suited to working, shopping, dining, entertaining, and relaxing. Controlled access ensures optimum security; while building highlights include beautifully landscaped gardens, quiet patios, expansive city views, and convenient first-floor retail, including a new upscale restaurant.

Community amenities include:

- Glass and brick neoclassical façade
- Landscaped grounds; Patio with landscaped garden; Rooftop with garden terraces, outdoor grille and sundeck with panoramic city views
- Elegant lobby, lounge, great room, rotunda and library
- Controlled access to building and underground parking
- Secondary entrance and lobby at Columbia Heights Metro
- Underground parking available with elevator access to residential floors
- Storage units available
- 24-hour attended front desk
- Dedicated TV channel for front door security camera
- High-tech party room with plasma TV, outdoor garden, and full kitchen

- Fully-equipped business center with high-speed Internet
- Urban chic décor
- Covered loading area and dock

Kenyon Square offers 153 new condominium residences, including two-level loft-style units. The units range in size from one bedroom to two bedrooms with den, featuring spacious floor plans, highly functional kitchen layouts, and light-filled rooms. Many of the homes also offer balconies and expansive views of the city (Figure 4.6.2.2).

Features include:

- Open floor plans
- Stainless steel appliances
- Walk-in closets
- Minimum 9' ceilings in living areas
- Hardwood floor in living room, dining rooms, kitchen, and foyer
- Ceramic tiled bathrooms
- Berber carpet in bedrooms, lofts, and dens
- The latest technology for structured wiring and high-speed internet
- Cable, telephone, and internet outlets in every room
- Full and French balconies and terraces

Kenyon Square's condominium homes accommodate a variety of lifestyles and design preferences. Options include elegant, traditionally inspired residences and contemporary, dramatic open lofts.

A fresh, creative plan enlivens Kenyon Square's one-bedroom/one-bath homes. A large, open entertainment area features abundant windows and encompasses the living, dining, and kitchen areas. A separate bedroom area opens into the living room with sliding barn doors. Selected homes will feature elegant French doors and balconies or terraces (Figure 4.6.2.3).

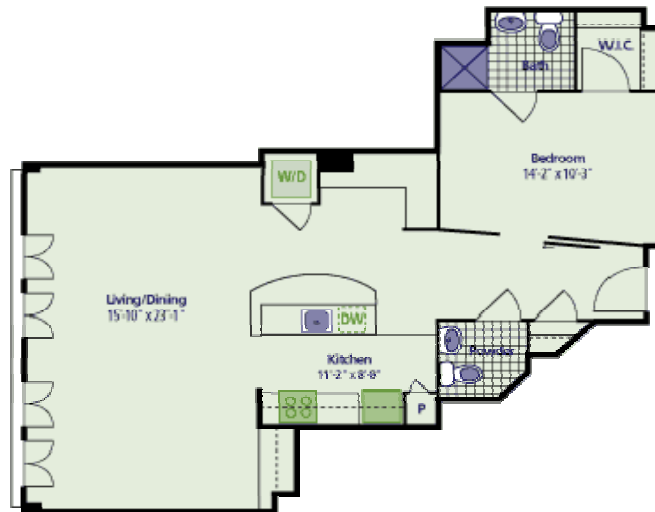


Figure 4.6.2.3: Kenyon Square – One Bedroom Unit Plan (903 sq. ft.)

(www.kenyonsquare.com)

A two-story loft design highlights the one-bedroom plus den homes, which include two bathrooms. These residences are prominently situated within the building, overlooking the vibrant 14th Street corridor with large expanses of glass and private balconies. These homes include raised dens and bathrooms, open kitchens with islands, and two-story living and dining areas on the lower level. Large master bedroom suites feature overlooking "catwalks" and generous closet space on the upper level (Figure 4.6.2.4 thru 8).

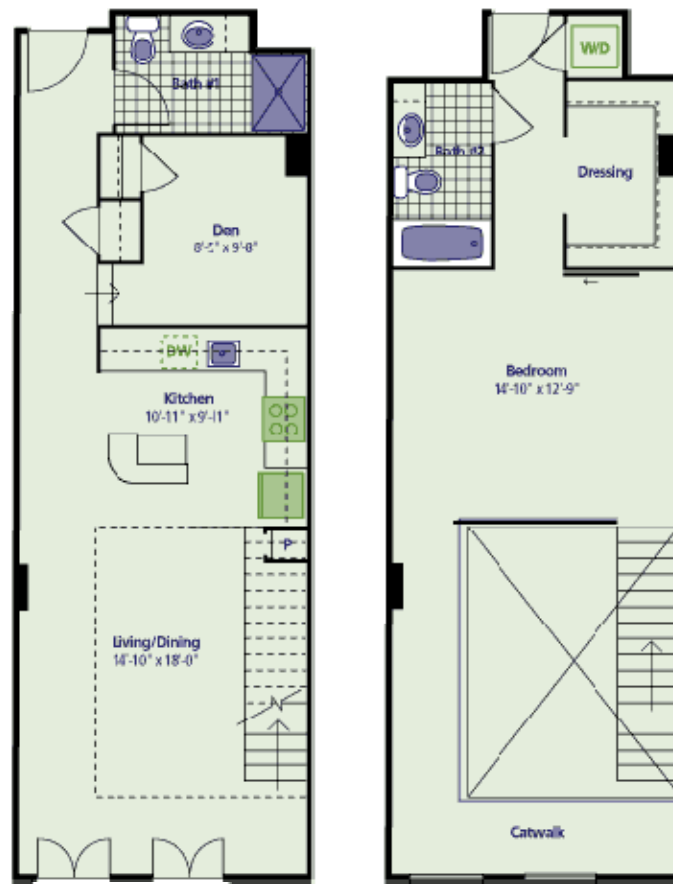


Figure 4.6.2.4: Kenyon Square–Two Story Loft Unit Plans (Upper and Lower Floor) (www.kenyonsquare.com)



Figure 4.6.2.5: Kenyon Square Loft Unit – Lower Floor (www.kenyonsquare.com)



Figure 4.6.2.6: Kenyon Square Loft Unit – Lower Floor (www.kenyonsquare.com)



Figure 4.6.2.7: Kenyon Square Loft Unit – Upper Floor (www.kenyonsquare.com)



Figure 4.6.2.8: Kenyon Square Loft Unit – Upper Floor (www.kenyonsquare.com)

Kenyon Square's two-bedroom/two bath homes are typically situated along the building's prominent corners, offering an abundance of windows and natural light. Architectural features include bay windows and corner towers, creating dramatic living spaces within. Selected homes offer French doors and balconies, full balconies, or terraces (Figure 4.6.2.9).



Figure 4.6.2.9: Kenyon Square – Two Bedrooms Unit Plan

4.7. New Urbanism and Its Applications in Other Cultures

One of the main differences between Suburbia and New Urbanism is the usage of automobile in daily life. “Mode Split” is the percent of trips by each type of travel means: auto, walking, bike, or transit. It can vary greatly, depending on the quality of the environment and demographics. For example, suburban Huntington Beach has a 91% auto mode split while inner-city Philadelphia has only 23% of all trips in autos.

Different countries demonstrate significant variations in the relationship between land use, public transportation policies, and travel behavior. In European communities auto use is generally between 30% and 48% of all trips; transit comprises between 11% and 26% of all trips; and pedestrian/bike trips are from 33% to 50% of the total (transit there is supported with healthy pedestrian environments). In comparison, the U.S. average mode split is 86% via auto, 8% walking, 3% bike, and 3% by transit. Canada has a similar walk/bike mode split but a much higher transit utilization – 15% of all trips rather than 3%.

China:

China’s economic growth during the past twenty-five years (averaging nearly 10 percent a year) may be the largest sustained economic expansions in modern history. Sixty percent of all the world’s exports are now made in China. China’s economic growth also has been transforming its built environment. Over 300 million people moved from the countryside to the nation’s cities during this period. The growth continues: China’s urban areas will have to accommodate upwards of 500 million people who are expected to move to towns and cities by 2050. To accommodate this growth, China is building about 6 billion square feet of new residential development each year.

Chinese planners and officials are now having reservations about continuing the very high-density, skyscraper-type construction that has characterized so much of the recent new development in many of China’s large cities. China’s planning officials now embrace the concept of new satellite cities – some with a half million or more people – in outlying suburban areas of major cities, such as Beijing and Shanghai.

The new cities are largely self-sufficient. They include the full mix of uses, facilities, and infrastructure to support the expected population. The satellite cities are often planned with new urbanist design characteristics. Qingpu, 35 miles west of Shanghai is one of the new satellite cities. The city is planned for 500,000 to 600,000 people.

The nonindustrial part of Qingpu will consist largely of high-density residential apartment neighborhoods with a mix of commercial, office, schools, recreational, cultural, and public uses planned at designated sites throughout the neighborhoods. A major expressway and light-rail transit will connect the new city to Shanghai.

Blocks in the residential apartment district, with buildings 6 to 8 stories tall, will vary from about 600 feet to 1,200 feet in length. On internal residential streets, sidewalks will be 18 feet wide with 36 foot-wide streets. The residential densities will be about the same as in parts of Berlin and Amsterdam – significantly higher than most new urbanists plans in US.

The urban core and a few other high-density areas are planned for commercial uses with 15- to 18- story buildings. A few neighborhood streets are planned for apartment buildings with street level retail and restaurants.

The plan is highly focused on pedestrian activity. There will be parking but everyone is expected to be able to live, work, and play without owning or using an automobile.

It is intended to be more convenient to walk, bicycle, or take public transit than to drive a car in and around the new city – an inversion of the American land development prototype. The build-out period for the entire new city of Qingpu is estimated to be fifteen years (Ziegler, H., E., 2004).

England:

Historically, the British constructed houses and apartments within walking distance of stores, pubs, and everyday services. They achieved population densities that made frequent bus and rail service feasible. But recent studies have tested the United Kingdom's community-building abilities. The New Towns program, which began after World War II and continued up to the 1980's, mostly produced communities

that “were pretty much failures”, says David Lunts, director of urban policy under Deputy Prime Minister John Prescott.

During the Conservative administration of Prime Minister Margaret Thatcher, the government loosened the nation’s planning controls by making way for extensive suburban housing development and what the British call “out-of-town retail”. After an onslaught of outlying, automobile-oriented retail damages many of the old, pedestrian-scale retail districts, the Labor government of Tony Blair took a different approach, reinstituting many national planning controls. In August 2004, George Ferguson, the President of the Royal Institute of British Architects (RIBA) called for Stronger recognition of New Urbanism (Stevens, A., 2004).

There is pressure to get large volume of housing built fast, because a housing shortage, especially in greater London, has caused prices to shoot upward. In the search for effective ways of building communities, Prescott and his staff have reached out to American new urbanist and others. Prescott has visited Seaside, Florida, Milwaukee, Chicago and Washington D.C., in this quest for useful strategies.

To discourage sprawl and reinforce existing urban areas, the government has introduced a sequential test. Development is generally restricted to using existing urban land unless it can be demonstrated that there is no room for it. Developers are not permitted to construct new retail if it can be shown that it would harm existing retail areas. The government has also issued a “density directive”. Prescott expects all new housing developments to conform to a density of 35 dwellings per hectare (14 dwellings per acre).

One of the first developments produced by Prescott’s housing initiative – Greenwich Millennium Village, master planned by Ralph Erskine on a site overlooking the Thames River – embodies that attitude. The first completed section is a dense set of buildings with strong exterior colors and staggered heights ranging from 6 to 13 stories (Figure 4.7.1).



Figure 4.7.1: Greenwich Millennium Village, England
(www.englishpartnership.co.uk)

Canada:

Vancouver, Canada is worth studying because “it has an international reputation for achieving a generally high standard of design and for generally making the most of its superb natural setting. Its citywide design strategy and neighborhood visioning have much to tell other countries about how urban intensification will have to be negotiated with local communities if it is to be successful.

The city has dramatically increased the number of people living near the center, greatly improved the character of some of the neighborhoods, and set a high standard for urban design in North America (Putner, J., 2003).

To understand how Vancouver managed to set a high standard for urban design, following need to be understood:

- Population within the 44.3-square mile city grew by 16 percent from 1991 to 2001, to 546,000. The city, in the past two decades, has emphatically reversed the population decline that began in the early 1970’s.

- Vancouver gained many immigrants from Hong Kong, Singapore, and other cities where tall buildings are the norm and where people are accustomed to living close together.

- The region is hemmed in between the Pacific Ocean to the west, mountains to the north and east, and the US border to the south, limiting its ability to sprawl.

- Land costs are high, giving developers an incentive to squeeze as much building space onto a site as possible.

During a downturn in the office market in the 1980s, Vancouver changed its zoning to encourage residential development surrounding the central business district. Vancouver became the fastest-growing residential downtown in North America. It never allowed free-ways within the city limits, so as traffic tie-ups on the region have grown, many people – including families with children – have concluded that it makes sense to live in or near downtown, where they can walk or bike to work or use the extensive system of buses, ferries, and SkyTrains.

What has resulted is a crisp, contemporary skyline punctuated by slim towers, many of them with tones of white and light green and an abundance of glass. The towers feature bays, recessed or projecting balconies, and other angles and articulation, melting away the buildings mass. Some towers curve. Some become smaller toward the top. Large window expanses often are divided into segments, creating interesting patterns with consistently modern detailing (Figure 4.7.2).



Figure 4.7.2: A typical Vancouver block: A grocery store at the base of towers meets a wide sidewalk (New Urban News, 2003)

It is new urbanist in that it is intense, mixed-use, and socially diverse. The city presses developers to set towers back from the street, behind two-to six-story bases frequently containing retail activities or townhouses. Towers give density and financial viability to a project.

Though almost always spare and modern in their styling, the townhouses are positioned like urban townhouses from a century ago, with their entrances several steps up from the sidewalk, helping protect the inhabitants' privacy. The townhouses usually stand a few feet back from the sidewalk, making room for tiny outdoor sitting areas overlooking the street.

Many tower complexes have courtyards – either open to the public or, more often, secured for resident's use. By providing much of the housing in tall buildings, more ground is freed for use as private and public open space than would be the case if all

the housing were low- and mid-rise. Many of the open spaces are spectacular pieces of landscape architecture (Figure 4.7.3).

People confuse height and density. They think lower is better – more in touch with the ground and with nature. But handled well, a combination of towers and townhouses may actually deliver a better balance of ground space and amenity-supporting density. The “Vancouver Style” of development will be seen increasingly, not just in Canada but in the western US as well (Langdon, P., 2003).



Figure 4.7.3: A Vancouver block with towers, mid-rise buildings and Townhomes (New Urban News, 2003)

The Beginnings of New Urbanism in Europe:

A group of 75 European and American architects and urban designers spent a week of intensive discussion about New Urbanism, traditional design and the European particular context during the First Euro Council from April 1-6, 2003 in Brussels and Bruges. The sessions included presentations and criticism of built and unbuilt projects, and discussions on the progress of urban design.

The first Euro Council meeting was lead by New Urbanists from America and Europe. The Council called as Council for European Urbanism (CEU) included representatives from every Western European country except Denmark, Iceland and the Czech Republic. Those who attended were practicing New Urbanists with considerable experience.

The second Euro Council was held in Stockholm in October 2003. Professionals from many nations and disciplines gathered in Stockholm to sign the Charter for European Urbanism. The signing officially forms the Council for European Urbanism (CEU). The event followed a spring council in Bruges devoted to reestablishing the practice of quality urbanism in Europe. The charter was modeled on the Charter of the New Urbanism, signed in Charleston, South Carolina, in 1996.

Recent Developments in Istanbul, Turkey:

During the last fifty years, Istanbul, the largest city of Turkey, has experienced rapid uncontrolled population growth due to the rural – urban migration. In the late 20th century, large scale housing estates have been developed on the edge of the city to meet the housing needs. Today the problem with the housing stock in Istanbul is not the necessity anymore, but the environmental quality. On the other hand in recent years increasing number of luxury housing development have been observed.

In the recent years, increasing number of luxury housing settlements in peripheral areas has been developed. Settlements with luxury villas have especially been preferred by high income families (Dulgeroglu, H., Turgut, H., 2006).

In a way, these development patterns rewind the early suburbs in United States. The wealthy people had left the over – crowded cities to have bigger homes on large lots. One difference is, in early suburbs in United States, the roads were wide enough, traveling between there wasn't traffic congestion yet. In Istanbul, moving further out

of the city, would mean spending more time in the traffic and increased traffic congestion which is already bad enough. Another difference is American suburbs were not gated communities and were developed more organically than the ones in Istanbul. It is also interesting to notice that the housing preferences in Turkey started to move away from the disadvantages of suburbs and started to move back to the city centers.

Another recent housing trend in Istanbul seems to be multi – story dwelling blocks, called residences, closer to the city and business centers. These residences offer a first – class hotel amenities to their residents. The first examples in Istanbul are Akmerkez Residence, Polat Tower Residence and Elit Residence. These developments are also targeting the very high – income group only. They are separated from the neighborhood with walls and gates and they have no intention to add any value to the area. The developers main goal seems to be create an ultra – luxury, isolated block, without any connection to the neighborhood.

Looking at these new developments, outside and inside the city, one could argue that these patterns were mostly copied from United States. While this might be partially true, it is noticeable that the patterns were changed in many ways. Early suburbs in United States, almost a century ago, attracted wealthy people first. They started to leave city centers to live in bigger homes on large lots but these new areas were not ultra – luxury nor gated communities, and the traffic congestion did not exist at that time.

Shortly after the high – income group, the middle class moved to the suburbs leaving the city to the poor and minorities.

The mid – rise, high – rise residential towers do not exist in United States, either. While the population started to move back to the city centers, the type of neighborhood they are seeking is different than in the residences in Istanbul. The buildings in US, designed by New Urbanist, aim to add a value to the neighborhood, are mix – use developments and serve to all income groups at the same time. High, middle and low income groups.

Have the opportunity to live in the same building and neighborhood. There are no gates or walls around the buildings so that the building truly becomes part of the area with retail stores at the first floor serving everyone on the street. The security

only starts when you enter the building, the private area. Public area is kept as public as it should be to minimize the isolation. In Istanbul's residences, the characteristics of New Urbanist movement are not observed.

Knowing the problems of suburbs and also knowing that it won't take Istanbul a century to face these problems as it took US, one would wonder if a better solution could be proposed for new developments for the city. One approach could be focusing on infill sites or poorly developed sites in city centers. These areas could be redeveloped with the principals of New Urbanism while historic buildings could be preserved within the new developments. This way, the quality of housing environment could be increased, historic elements of the city could be preserved and city centers would attract the residents again.

4.8. Summary of Chapter

Through the first quarter of the 20th century, the United States was developed in the form of compact, mixed-use neighborhoods. The pattern began to change with the emergence of modern architecture, zoning, and the ascension of the automobile with the availability of inexpensive gasoline. After World War II, a new system of development was implemented nationwide, replacing neighborhoods with a rigorous separation of uses that has become known as conventional suburban development, or sprawl. The majority of US citizens now live in suburban communities built in the last 50 years.

While suburbs had many advantages, it also fragmented the society, separated people from friends and relatives, broke down the bonds of community, caused pollution, health problems, increased crime rate, abused nature and limited freedom. Suburb's unplanned growth is called out as "sprawl" and became a major concern to planners, architects, and developers in the late 20th century.

The New Urbanism is a reaction to sprawl. It is an urban design movement whose popularity increased beginning in the 1990's.

There are some common elements of new urbanist design. New urbanist neighborhoods are walkable, and are designed to contain a diverse range of housing

and jobs. The themes of New Urbanism can be summarized as safety / security, contact, privacy, diversity and density.

For a growing movement of architects, planners, and developers, new urbanism is based on principles of planning and architecture that work together to create human-scale, walkable communities. New urbanists take a wide variety of approaches—some work exclusively on infill projects, others focus on transit-oriented development, still others are attempting to transform the suburbs, and many are working in all of these categories.

A transit-oriented development (TOD) is a residential or commercial area designed to maximize access to public transport, and often incorporates features to encourage transit ridership. A TOD neighborhood typically has a center with a train station, metro station, tram stop, or bus station, surrounded by relatively high-density development with progressively lower-density development spreading outwards from the center. TODs generally are located within a radius of one-quarter to one-half mile (0.4 to 0.8 km) from a transit stop, as this is considered to be an appropriate scale for pedestrians (Joseph, E. B., 2005).

Another solution to sprawl is New Urbanists other approach, infill development. Infill development is the creative recycling of vacant and underutilized lands within cities and suburbs. Successful infill development offer housing (both affordable and market rate) near job centers and transit, increase the property tax base, preserve open space, provide new residents to support shopping districts and add value to the neighborhood. Infill developments create mid – to high – density neighborhoods that embrace a mix of uses and incomes, and it serves pedestrians and cyclists.

It is clear now, that suburbs were the American Dream of past century. America is leaning towards New Urbanism as new American Dream in 21st century. Transit – Oriented developments as well as infill developments are considered as successful developments given the fact they serve to a diverse group of people, income groups and fulfill the modified dream. Similar developments are noticeable all around the world.

In a brief review of Istanbul, Turkey's recent developments, it is understood that the new developments are mostly gated communities (residential only) which serve to

the high – income group and they seen to take advantage of the neighborhoods they are located rather than adding a value to their environment.

One could propose to look into the transit – oriented and infill developments in United States as well as other countries and adopt a similar approach for Istanbul, Turkey.

5. CONCLUSIONS

One of the main differences between Suburbia and New Urbanism is the usage of automobile in daily life. “Mode Split” is the percent of trips by each type of travel means: auto, walking, bike, or transit. It can vary greatly, depending on the quality of the environment and demographics. For example, suburban Huntington Beach has a 91% auto mode split while inner-city Philadelphia has only 23% of all trips in autos.

Different countries demonstrate significant variations in the relationship between land use, public transportation policies, and travel behavior. In European communities auto use is generally between 30% and 48% of all trips; transit comprises between 11% and 26% of all trips; and pedestrian/bike trips are from 33% to 50% of the total (transit there is supported with healthy pedestrian environments). In comparison, the U.S. average mode split is 86% via auto, 8% walking, 3% bike, and 3% by transit. Canada has a similar walk/bike mode split but a much higher transit utilization – 15% of all trips rather than 3%.

Of course the cost of gas and transit infrastructures investments affect these distributions, along with land use patterns. In Europe today gas costs are three times those in the USA. Perhaps this explains a portion of the difference (Calthorpe, P., 1993).

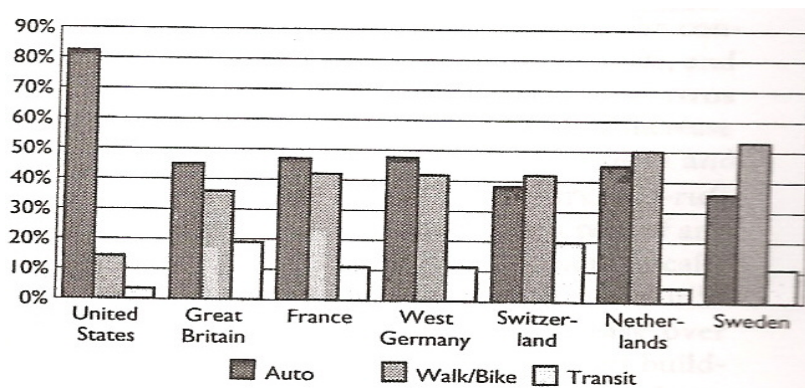


Figure 5.1: “Mode Split” Chart (The Next American Metropolis, 1993)

After reviewing the “mode split” chart and the outcomes for Europe, one can argue that Europe is already following the main rules of New Urbanism.

The housing trends and its environment is a changing and revolving subject. The most popular trend 30-40 years ago might become the least desirable trend today. And no one can guarantee that the society will go back to where they were 40 years ago.

In the 19th century, United States was an urban country. Most of the population lived in the cities, similar to Turkey. In 20th century, there was a reaction to urban living. The society, first the high – income then the middle – income left the cities and moved to the suburbs. The city centers were left to the businesses, to low – income group and minorities. The dream was the suburban life style, again similar to Turkey in recent years.

In 21st century, the suburbs started to become less desirable due to realized problems such as pollution, the traffic, health, limited freedom, increased costs. The city centers started to become popular again. Developers started to invest in the cities following the principles of New Urbanist movement to create quality, diverse, more livable neighborhoods and attract all income groups.

United States witnessed two dreams in the past century: Suburbia and New Urbanism.

A comparison of these two dreams would be:

SUBURBIA

- 20th Century
- Low – density: Mostly single - family homes
- Non – mixed use: Residential
And commercial areas are completely separated
- Car oriented, depended neighborhoods

NEW URBANISM

- 21st Century
- Mid and High – density: Multi – story apartments, town homes
- Mixed – use: Residential and commercial areas are mixed and developed together
- Transit – oriented, walkable neighborhoods

- Multiple vehicles per household
- Income groups separated (not Gated communities but separated by location)
- Giant shopping malls
- Streets lined by off – street car parking
- Curved streets, often end in cul – de – sacs
- Limited access to transit
- Private property is important
- Higher crime rate in 21st Century than in 20th century
- Served well to larger size families of mid 20th century
- Very large scale homes (in late century)
- Public image / identity: Front facade of the house
- Public Space: Front yard, formal dining and living rooms of the house
- Semi – Public Space: does not
- Less car ownership
- Mixed income groups
- Shopping district, smaller scale retail stores
- Car parking is mostly below grade under the buildings
- Mostly grid pattern
- Transit – oriented
- Public space is important
- Lower crime rate in 21st century than in 20th century
- Serving better to smaller size families of 21st century
- More reasonable size dwelling unit
- Identity: The dwelling unit itself as well as the amenities of the building
- Public Space: Lobby and the street with retail stores
- Semi – Public Space: Amenities

exist	shared with the building residents for instance great room, club room, exercise room, corridors, ...
- Private Space: Family room, Breakfast area, backyard (and The whole second floor)	- Private Space: The entire unit. Public space stops at the unit entry door
- Deck	- Balcony or terrace
- Wood – burning fireplace	- Gas or Electric fireplace
- Attached / detached garage	- Below grade parking
- Individually is expressed by the type, style, size, materials mostly outside of the house	- Individuality is expressed by the inside of the house: (furniture, decoration, materials, ...
- Equality: Common setbacks, similar lot sizes, similar spacing	- Equality: By federal regulations, all income groups have the opportunity to live in the same development. Also handicapped people have the same opportunity as part of the regulations. (some units are designed specifically for handicapped residents)
- Safety: having the homes spaced from each other was believed to provide safety (low – density)	- Safety / Security: It is understood that close – unit communities are safer. Security in building scale is provided by building management.
- Privacy: It was believed that separating homes from each other	- Privacy: Privacy starts at the unit door. Units are mostly on the second

provided privacy (in reality,
anyone on the street or next house
can monitor personal affairs.

- Freedom: The freedom is
Limited due to the car
dependence
- Backyard
- Less mobility due to the car
dependency and traffic
congestions
- Increases traffic
- No feeling of “community”
- Isolation (no or few contact)
- Health problems due to the
driving (obesity, heart and
blood pressure)
- Less or no diversity
- Car oriented (not pedestrian)
- Construction Type: Wood
construction

and upper floors, inside of the unit
not visible from the street level.

Common corridors leading to the
units provide more privacy than
the front yard and door of suburban
house

- Freedom is more flexible due to the
mixed – use and transit oriented
development patterns.
- Semi – public courtyards, private
Terraces, roof garden
- More mobility due to the transit
oriented design
- No impact on traffic
- Feeling “community”
- Contact (no isolation from society)
- Less health problems due to the
walking (exercising)
- Diversity (religious, income, race
Household type, ...)
- Pedestrian friendly
- Construction Type: Concrete and
steel

- Not sustainable

- Sustainable due to the mid / high
density

This comparison of New Urbanism vs. Suburbia proves that housing environment preferences have been and will be an evolving image. Between the two centuries, the trend has changed in many ways. This change is not expected to stop with New Urbanism. It will keep changing and evolving. The architects and planner's goal should be to follow these evolving trends as close as possible in order to create more livable and desirable environments for the human being.

REFERENCES

- Albee, E.**, 2006. Wikipedia, The Free Encyclopedia, The Wikipedia Foundation Inc. Florida.
- Ben-Ari, E.**, 1991. Changing Japanese Suburbia, Kegan Paul International Press, London.
- Bennett, R. D.**, 1987. Synthesis in Suburbia, Master Thesis in Architecture, University of Maryland, Maryland.
- Boskoff, A.**, 1962. The Sociology of Urban Regions, Appleton – Century – Crafts Press, New York.
- Calthorpe, P.**, 1993. The Next American Metropolis: Ecology, Community, and the American Dream, Princeton Architectural Press, New York.
- Devaney, J. F.**, 1994. Tracking the American Dream – 50 Years of Housing History from the Census Bureau: 1940 to 1990, U.S. Department of Commerce Economics and Statics Administration Press, Washington DC.
- Dobriner, W.**, 1963. Class in Suburbia, Prentice – Hall Inc. Press, Englewood Cliffs, New Jersey.
- Douglas, H.**, 1925. The Suburban Trend, The Century Company Press, New York and London.
- Duany, A., Morrissey, M., Pinnell, P.**, 2006. Suburbia – Suburban Houses, New Urban News Press, V:10, N:2, March 2006, New York.
- Duany, A.; Plater-Zyberk, E.; Speck, J.**, 2000. Suburban Nation: The rise of Sprawl and the Decline of the American Dream. North Point Press, New York.
- Dupuy, K.**, 1979. The History of Urban Form, University of Maryland Press, Maryland.
- Dyos, H. J.**, 1967. The Victorian Suburb. A Study of Camberwell, Liverpool University Press, Liverpool.
- Fava, S. F.**, 1956. Suburbanism as a Way of Life, V:21, American Sociological Review Press, Boston.

- Fishman, R., 2005.** Six Suburban Eras of the United States, Metropolitan Institute of Virginia Tech, Alexandria, Virginia.
- Flint, A., 2003.** Health Woes, Suburban Living are linked in National Study, Globe Staff Press. Philadelphia.
- Frank, L., 2004.** Housing and Neighborhoods Preferences, New Urban News Press, V:9, N:8, December 2004, New York.
- Frumkin, H., Frank, L., Jackson R., 2004.** Designing, Planning and Building for Healthy Communities, Island Press, Washington DC.
- Frumkin, H., Frank, L., Jackson R., 2004.** Urban Sprawl and Public Health, Island Press, Washington DC.
- Jacobs, J., 1993.** The Death and Life of Great American Cities, The Modern Library, New York.
- Jacobs, J., 1972.** The Death and Life of Great American Cities. Vintage Books. New York.
- Joseph, E. B., 2005.** The Code of The City, MIT Press, Cambridge - Maine.
- Katz, P., 1994.** The New Urbanism, Toward an Architecture of Community, Print Vision Press, Portland, Oregon.
- Kunstler, J. H., 1994.** The Geography of Nowhere, A Touchstone Book Published by Simon & Schuster Press, New York.
- Kurtz, R. A., Eicher, J. B., 1959.** Fringe and Suburb Confusion of Concepts, Social Forces Press, V:37, Boston.
- Langdon, P., 2006.** A Decade of Challenges, New Urban News Press, V:2, N:1, Jan – Feb 2006, New York.
- Langdon, P., 2006.** British New Urbanism, New Urban News Press, V:2, N:2, March 2006, New York.
- Langdon, P., 2003.** In Central Vancouver, Modernism and New Urbanism Mesh, New Urban News Press, V:8, N:8, December 2003, New York.
- Langdon, P., 2004.** Transit – Oriented Development Readies For The Next Leap, New Urban News Press, V:9, N:2, March 2004, New York.
- Lawrance, J., R., 1997.** Culture & Space in the Home Environment, Globus Dunya Pub, Istanbul.

- Martin, W.**, 1956. The Structuring of Social Relationships Engendered by Suburban Residence, American Sociological Review Press, V:21, Boston.
- Mikuliak, J.**, 2005. Does The Big City Have The Worst Air. Pennsylvania Urban News Press. Pennsylvania.
- Montgomery, R.**, 1977. High Density, Low-Rise Housing and Changes in The American Housing Economy, Van Nostrand Reinhold Company Press, New York.
- Moore, C.**, 1977. Body, Memory and Architecture, pp. 120-121. Yale University Press, New Haven.
- Newton, N., T.**, 1971. Design on The Land, Harvard University Press, Cambridge.
- O'Neill, C., A.**, 2000. Strategies for Successful Infill Development. Northeast Midwest Institute Press. New York.
- Pickett, J., P.**, 2000. The American Heritage Dictionary of the English Language, Fourth Edition, Houghton Mifflin Company Press, Boston.
- Putner, J.**, 2003. The Vancouver Achievement: Urban Planning and Design, University of British Columbia Press, Vancouver, Canada.
- Rapoport, A.**, 1993. Cross – Cultural Studies and Urban Form, Urban Studies and Planning Program, University of Maryland, Maryland.
- Roth, L. M.**, 1979. A Concise History of American Architecture, Harper and Row Press, New York.
- Rouse, J.**, April 2006. Builder Magazine, Hanley Wood Inc Publ, Washington DC.
- Rusk, D.**, 1993. Cities Without Suburbs, The Woodrow Wilson Center Press, Washington DC.
- Scully, V.**, 1969. American Architecture and Urbanism, p.245. Praeger Press, New York.
- Sitte, C.**, 1965. City Planning According to Artistic Principles, pp. 120-126, Phaidon Press, London.
- Schaerer, W.**, 1956. Die Suburbane Zone Von Zurich, Geographica Helvetica Press, Zurich.
- Stein, S.R.**, 1993. The Worlds of Thomas Jefferson at Monticello, p.13. Abrams Press, New York.

- Stern, R.**, 1986. *Pride of Place – Building the American Dream*, Houghton Mifflin Company Press, Boston.
- Steuteville, R.**, 2004. *New Urban Neighborhoods Make Big Gains*, New Urban News Press, V:9, N:1, Jan-Feb 2004, New York.
- Steuteville, R.**, 2002. *New Urbanism*, New Urban News Press, V:7, N:8, December 2002, New York.
- Steuteville, R.**, 2004. *TOD is Going Strong, According to Study*, New Urban News Press, V:9, N:7, Oct – Nov 2004, New York.
- Stevens, A.**, 2004. *RIBA President Calls for Stronger Recognition of New Urbanism*, City Mayors Environment Press. London.
- Talen, E.**, 2005. *New Urbanism & American Planning: The Conflict of Cultures*, Routledge Press. New York.
- The State Museum of Pennsylvania**, 2003. *Building the Suburban Dream – Levittown*.
- Thorns, D. C.**, 1972. *Suburbia*, The Chaucer Press, London.
- Türkoğlu, H., D., Yıldız, H., T.**, 2006. *An Evaluation of Urban Housing Environment*. ITU press. Istanbul.
- Whitaker, C.**, 1998. *Architecture and American Dream*, Three Rivers Press, New York.
- Wissink, G. A.**, 1993. *American Cities in Perspective – With Special Reference To Assen Netherlands*.
- Ziegler, H., E.**, 2004. *New Urbanism in China*, New Urban News Press, V:9, N:6, New York.

ÖZGEÇMİŞ

Filiz Başaran, 1972 yılında İstanbul'da doğdu. 1990 yılında İstanbul (Erkek) Lisesi'nden, 1994 yılında da İstanbul Teknik Üniversitesi Mimarlık Fakültesi Mimarlık Bölümü'nden mezun oldu. 1994 – 1995'de Yesa İnşaat, 1995 – 1996'da Yapı Tasarım ve 1996 – 1998 yıllarında Simel A.Ş.'de çalıştı. Çalışma hayatına devam ettiği bu yıllarda, 1995 yılında İTÜ'ye dönerek yüksek lisans eğitimine başladı. Bir senelik İngilizce hazırlık eğitiminin ardından 1996 – 1998 yıllarında yüksek lisans derslerine devam etti. 1998 yılında, tez aşamasındayken Amerika'daki bir iş imkanı nedeni ile tez çalışmalarına ara vererek Amerika'ya gitti. 1998 – 2000 yıllarında Virginia'daki R&K Architects adlı firmada mimarlık yaptı ve kent dışı konutlar üzerinde çalıştı. Meslek hayatına 2000 – 2001 yılları arasında Maryland'de Computecture Inc. adlı firmada devam etti. Computecture firmasında çalıştığı sürede çeşitli kent dışı konut bölgelerinde çalıştığı gibi, Bodrum / Türkiye'de de lüks villa projeleri yaptı. Bu firmada bulunduğu sürede New Urbanism ile çalıştı ve çalışmalarına daha yaygın olarak devam edebilmek amacı ile iş değiştirdi. 2001 yılından beri Washington D.C. bölgesinin önde gelen, büyük ölçekli mimarlık firmalarından biri, Türkiye'de de Bahçeşehir, Kemer Country gibi projelerin ön tasarımını yapmış olan Torti Gallas and Partners – CHK firmasında çalışmaktadır. New Urbanism'in de öncülerinden biri olan Torti Gallas firmasında proje yöneticisi olarak görev yapmaktadır ve uzmanlık alanı çok katlı, betonarme, şehir içi konutlarıdır. Proje yöneticiliğinin yanı sıra Torti Gallas firmasında “Senior Associate” olarak çalışmaktadır.