Term paper on new urbanism



Introduction

New Urbanism is an urban planning concept which promotes walkable neighborhood design. During the early part of 20th century American urban areas started seeing a population boom as many people emigrated from other areas to stay in the cities. This necessitated the state and city council to design and develop urban areas in such a way to accommodate more population and use lands effectively. During that time automobile also came into usage. Cities planned during and after World War II were highly influenced by the revolution of automobile and were less concerned about land usage. Automobile helped design bigger cities. Before cities were of walkable length but after the evolution of automobiles, cities became much bigger in size. This type of city planning mainly focused on municipal zoning concept referred as 'Urban Sprawl' and it started the culture of automobile dependency in USA (Hamilton et. al, 2010). Urban Sprawl design employs a low density planning approach, causing the city to expand in size very fast as the number of housing and office spaces per acre are limited. New Urbanism came into limelight in 1990 but the dissent against the Urban Sprawl started way back in 1960s and 70s. Lewis Mumford and Jane Jacobs highly criticized the segregated commercial centers, car based urban planning norms and the low density design concept which didn't make optimum use of lands in the city planning. This essay will touch upon different aspects of New Urbanism including transects, density, diversity and form based code demonstrating how New Urbanism concepts apply to Simi Valley.

The Transect

The Transect refers to a categorization system which arranges all the components of the built environment on a range from rural to urban. The entire notion of transect depends on the gradient of habitats moving along the wilderness into urban core. The distinction in social structure, design and ecology while moving along the gradient strikingly stands out. The concept of transect has been made popular by new urbanist Andres Duany. The rural to urban Transect has been categorized into six zones namely, core (T6), center (T5), general urban (T4), sub-urban (T3), rural (T2), and natural (T1) (New Urban Network).

According to Jane Jacobs, the functions of a city can be divided into primary and secondary functions. What she meant by the primary functions are the items that need to be in a city like big residential buildings, office buildings, hospitals and cultural institutions. Secondary functions are a byproduct of the primary functions such shopping centers, restaurants, cafes, delis and other activities sustained by the pedestrians (Elmlund and Bohl). The concept of the T6 zones seems to echo her viewpoint. The core (T6) refers to the centermost and densest part of the city buzzing with activity and energy with high-rising building and apartments scattered around the places. The buildings are used for multiple purposes with first few floors used for shopping, and the floors above for business and even housing. The buildings are usually attached and the fronts aligned (New Urban Network). The intersections are usually four ways with rectilinear trajectories being frequently common. The buildings have sidewalks up to 6 to 20 feet long. Open space often serves the purpose of plazas. Transportation service is frequently available in the core. Housing mainly comprises of townhouses,

apartment above retail, condominium buildings and lofts. Parking is quite systematic in the core and on-street parking is a common practice. Often recognized as downtown, many cities have only one core but big cities like New York may have many cores. Net residential density varies from 25 to 100 units per acre.

The center (T5) resembles the core in many ways with buildings built up to a sidewalk and used for multiple purposes including shopping, business and residence. Just like the core, buildings in the center too are mainly attached with the front sides aligned and the intersections are usually four ways with rectilinear trajectories being frequently common. Buildings are more than two to four stories. Transportation service is often available. Housing comprises of standalone buildings, townhouses, apartment above retail and live/work units. Surface parking is available in the center and net residential density varies from 15 to 40 units per acre.

General urban or T4 zones are mainly residential with streets equipped with sidewalks on both sides. Housing mainly is comprised of duplexes, single homes, townhouses and accessory units. Small apartment buildings are also there blending typically into the single homes. Most of the houses here have porches. T4 zones may be dotted with small businesses like coffee shops, churches, schools, library and other civic buildings. Sidewalks are usually 5 feet wide to allow room for two people to walk alongside. Net residential density varies from 6 to 20 units per acre.

T3 or suburban zones are mostly residential with buildings like schools, churches, few stand-alone stores and community centers interspersed along the way. Ample porches are there and lot width hovers between 50 to 80 feet. Most of the houses have larger backyards about 110 to 140 feet long.

Residential density is very less here varying from 2 to 8 units per acre. T1 and T2 zones are natural and rural zones respectively. The rural zone is the country in which development initiatives are not encouraged. Public infrastructure is almost nil or sparse in rural zones. The natural zones are wilderness areas, parks and places which have high environmental value. All the lands in this zone are permanently protected from development. There is another segment, beyond these 6 zones, known as special districts or SDs. These districts usually consist of transportation facilities like bus depots, airports, industrial plots, wastewater treatment facilities, waste disposal, hospitals and auto oriented businesses.

Density

Habitation in high density areas involves many economic, social, convenience, and environmental benefits. In her book 'The Death and Life of Great American Cities', Jane Jacobs describes four conditions ideal for the creation of a vibrant city: 1) high density of population, 2) mixture of primary uses, 3) small scale pedestrian friendly streets and blocks and 4) old buildings refurbished and mixed in with new (Wickersham). According to Jacobs, high density of population is an important factor for the growth of urban residential neighborhoods and commercial downtowns. Higher density is crucial for creating places bustling with life and activity with ample amenities within reach. It opens spaces for a lot of people walking together, less use of cars, convenient life with a good many delis, cafes, restaurants and corner stores available right within walking distance. Increased density helps in the reduction of driving, air pollution and traffic congestion. People love to stay in higher density places which provide a lot of urban amenities.

Most of the big cities, towns, and neighborhoods all over the world are of higher density such as San Francisco, New York, Boston, Washington DC, Paris, Italy, London and many others.

Most of the American cities that were constructed earlier than 1945 were designed for high residential density and these places are now the most craved places for living and have highest property values. An example of a modern city with higher density in the USA is South Beach in Miami which has average density of about 30 to 35 units per acre (New Urbanism). The buildings are mostly two to four storied buildings with very few or no parking spaces available. This place is popular among people for living because it is a perfect example of urban setting with all the amenities being in close proximity. For most of their needs, people don't need to take their cars out. The higher density has made it possible for many people not to bear the expense of possessing and maintaining a car the cost of which can exceed up to \$8,000 a year.

Lack of density increases sprawl, hinders diversity, decreases main streets and divests communities of required resources. Many municipalities under the misconception of spreading out development and reducing traffic congestion downzone large areas resulting in the unintended consequences of everyone having to drive for every small need and increased congestion. This explains why the low density suburban areas are the most congested traffic wise. Further, it is an expensive affair to maintain a spread out zones as the municipality needs to provide with water, sewage, roads, utilities and other emergency services.

Diversity

The conventional planning or the Urban Sprawl planning promotes the Euclidian zoning concept. In this concept buildings used for similar purpose are zoned in a single place in the city planning. In a typical conventional city shopping malls are situated in a one place, offices in some other place and different types of housings in different parts of the city. These types of zoning based planning were supported by national transportation policy and many state courts in the past. With this support lot of cities were planned between 1940s and 1980s in USA and even today many cities still uses these conventional techniques. Lack of diversity is one of the main problems of the Urban Sprawl. In a conventional city single family detached homes are planned in a separate part of the city from higher density low cost apartments. This causes the poor to remain in one part of the city and rich concentrated in other part of the city. Social interaction between communities is less likely and this causes the social divide between classes to increase. Even this kind of structural zoning increases the gap between rich and poor in the long run as health, educational and other better facilities may concentrate near the rich neighborhood depriving the poor. New Urbanism planning concept inspired by the European walkable city concepts uses a more compact and diverse city design planning. The city is planned around public transport hubs so that the travel time and cost is minimized. In New Urbanism, walkable streets, mixing of shops and residence is given priority. New urban planning proposes the shops to be facing the streets and situated along the pedestrian pathway. It proposes the parking spaces to be on the backside of the shops and offices. (Kushner, 2003) In this planning model, different types of houses like townhouses,

lofts, single family houses and bungalows are all planned in the same region. The design also proposes a shopping mall and different types of retail stores in each area so that the local needs are mostly met within walkable distance. This model encourages different types of population to stay in a single region and mix with one another. This helps create a more socially unified city with different types of people getting the opportunity to intermingle. Jacobs in her book strongly supported diversity as crucial for city planning. She said that "Diversity is natural to big cities. Cities may fairly be called natural economic generators of diversity, and natural economic incubators of new enterprises. The same physical and economic conditions that generate diverse commerce are intimately related to the presence, or production, of other kinds of city variety" (Jacobs, 1961).

Form Based Code

Form based coding is regulations adapted by a city or county to foster more consistent built results and quality public realm by usage of form. These codes are not mere guidelines for the city or county but they are laws. This coding system is more discrete than the conventional zoning concept. In the conventional planning, a city merely uses guidelines for planning, built and expansion with priorities given to parameters like FAR, setbacks, parking rations, dwellings per acre and traffic. On the other hand, form based code actually defines each character and it is governed by the law to ensure quality and objective of the community (FBCI).

A form based code consists of many elements. Regulating plan of a form based code defines where building form standards should apply and what physical characters needs to be coded. Public space standards define the

specifications for public realms like sidewalks, on street parking, street trees, street lighting and decoration and travel lanes. Building form standards define the actual building shape, size, features and the regulations controlling those parameters. Architectural standards regulate the external materials used in the construction of a building and the quality of those materials. Landscaping regulation defines the scope of landscape used in the public and private space. Standards for private landscaping, parking lot screening and shading, pedestrian movement standards etc. come under landscaping regulation. Signage standards define and regulate the allowable signage sizes, placements, illumination and materials. Finally environmental codes protects by creating laws and codes for water drainage, slope development, tree protection and sunlight access.

In her 1961 book "Death and Life of Great American Cities" Jane Jacobs highly criticized the zoning based concept. She opined that this highly formula based Euclidian structuring would create vast disparity in the society compromising the quality and built of the city. She also stated that form and utility based cityscapes may sometimes look unplanned and disorderly but the planning is ingrained in its basic diverse use which makes it a more successful design. (Buckner, 2008)

Simi Valley Case

Simi Valley situated on the outskirts of the Los Angeles is one of the happiest cities in USA. As California enforces zoning restrictions for city expansion to all its cities, Simi Valley is no exception. With a population of around 126, 874 (Census, 2012) and a population density of around 2900 it is one of the densest cities in California. However, whenever the population density

exceeds 2000 persons per square mile, small cities begin inward infiltration causing urban planning problem for the city. Bigger cities like Los Angeles, San Francisco and San Diego are already getting into complex urban planning scenarios. Those cities were planned according to conventional city planning methods but during 1960s and 1970s California came up with the zoning restriction laws which caused huge problem for those cities as they were not able to expand beyond certain limits. For Simi Valley, this problem was nicely handled by the city council. Simi Valley has not planned its urban area using zoning concept; rather its design is based on new urbanism methodology. The industrial areas are situated in different parts of the city and so does the residential areas. City center of Simi Valley consisting of the train station and bus terminus is also the transportation hub of the city. This central transportation hub helps reduce the average travel time of the city dwellers.

Conclusion

New Urbanism is a concept that completely differs in its approach at urban planning from conventional planning methods. In USA, conventional planning methods are more geometric or Euclidian. Conventional methods employ low density, zone based urban planning. This creates a city which may be beautiful to look at and easy to expand but with a lot of problems. Urban sprawl or conventional planning uses more land than is required, creates more air pollution and traffic congestion. The overall cost for the society increases in that kind of city design. This design also discourages diversity. On the other hand new employs the concept of transect, density, diversity and form based code in city planning. This design encourages diversity in its

planning. It creates the city in such a way that dependency on automobile is reduced. New Urbanism is gaining more and more popularity among different states in the USA and the near future is likely to see more and more urban planning based on this concept.

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