

# **Questioning the Public Open Space Quality in Baykal District in Famagusta**

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## **ABSTRACT**

Urban design deals with making connections between human, places, movements and urban configurations, milieu and the built original. The urban design is beneficial in many fields of place making, environmental proctorship, social balance and economic livability. In Famagusta, there is a problem to find which type of public open spaces are in their own characteristic and function. This study was focused on public open spaces in various viewpoints of urban design in the physical perspective in Baykal area in Famagusta, North Cyprus. Public open space which going to be analysis, classifying by the author to three parts: parks, streets, and squares. The major problem of this study is, some of the public open spaces areas haven't any character for example, squares and streets, they all uses only for traffic function. And for parks there is not well designed to increase the life quality. This study focuses on applying urban design as a tool for determination of new designs and criteria to provide a fabric and attractive neighborhood to improve physical quality of public open spaces and also improve the physical characteristic of these public open spaces. The essential question in this part is, which part of public open spaces haven't any character and how urban design can serve as a tool to improve the function of Baykal urban public open space. Generally, a public space is a place that is accessible to the public at any time of day, such as parks, street, squares and etc. These spaces all serve different functions, and can easily just be seen in spatial terms. Actually, this thesis is going to concentrate on street, square and parks because these three-public space is very important and essential. Lastly as a case of this study focused on Baykal district to assets public open spaces in terms of physical characteristic. In this research author classified the component of

public open space to three part which are, square, street and parks and analyzing these component of each elements.

**Keyword:** public open space, squares, streets, parks, Baykal Neighborhood

## ÖZ

Kentsel tasarım insan mekan, ve kentsel konfigürasyonlar ile ilgili bağlantıları kurar. Ayrıca kentsel tasarım mekan yaratıma, çevre koruma, sosyal dengeyi oluşturma ve ekonomik canlılığın yarıtılmasında önemli rol oynar.. Mağusa'da kamusal açık alanlar fonksiyon ve karakter tanımı açısından zayıftır. Bu çalışmada Mağusadaki Baykal bölgesinde kamusal açık alanların özellikle sokaklar ve meydanların tanımsız olduğu ve sadece araç trafiğinin öncelikli mekanlar olarak kullanıldığı öncelikli problem olarak saptanmıştır. Bunun yanında parkların ise atıl durumdan kullanılmadığı diğer problemler arasındadır. Bu çalışma, Kuzey Kıbrıs, Mağusa kenti Baykal Bölgesindeki, kamusal açık alanların farklı bakış açıları ile fiziksel formunun değerlendirmesini hedefler. Kamusal açık alanlar, yazar tarafından üç bölümde ele alınır, bunlar; parklar, sokaklar ve meydanlardır. Bu çalışma farklı yazarların kamusal açık mekan (meydanlar, sokaklar ve parklar) ile ilgili teorilerinin ele alındığı ve değerlendirildiği bir çalışmadır. Bu kapsamda farklı görüşlerin sentezi yapılarak çalışmaya ışık tutacak teorik kısım oluşturulacaktır. Bu çalışma, kentsel tasarım boyutunda kamusal açık mekanların- meydan, sokak,park- fiziksel açıdan oluşturulacak kriterler ile ele alınmasını ve değerlendirilmesini hedefler. Çalışmaya ışık tutacak en önemli araştırma sorusu; kamusal açık mekanların karakterini belirlemek için fiziksel formun analizi bu alanların kalitesini artırmak için bir araçtır mı? Bu tez, kamusal açık mekan olgusu kapsamında meydan, sokak ve parkların fiziksel formlarının analizine odaklanır. Bu mekanlar için değerlendirme kriterlerin belirlendikten sonra Mağusa Baykal bölgesindeki kamusal açık alan olarak nitelendirilen meydanlar, sokaklar ve parkların fiziksel formunun değerlendirmesi ise örneklem olarak bu çalışma kapsamında seçilmiştir. Örnekleme Meydanların,

sokakların ve parkların elemanları ve bileşenleri belirlenmiş ve oluşturulan değerlendirme kriterlerine göre analizi ve değerlendirilmesi yapılmıştır.

**Anahtar Kelimeler:** Kamusal Açık Mekanlar, Meydanlar, Sokaklar, Parklar, Baykal Bölgesi

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# Chapter 1

## INTRODUCTION

Successful urban development should include not only great buildings but also public urban spaces such as parks, squares, and well-defined streets so that it can be livable (John, 2009). Moreover, it should have benefits to society economically, socially, environmentally and aesthetically to increase the quality of life of its inhabitants (John, 2000). For example, well-designed parks, squares, and other open spaces can improve the quality of life of cities and neighborhoods by contributing to city amenities and facilities, as well as to the health and mental well-being of people. The physical quality of urban spaces can also serve as the meeting ground for the society and the local community in a residential neighborhood (Elizabeth, 2007).

Actually, in urban design, public spaces divided into three general parts, square, street and parks. Squares also called civic space, town squares, piazzas or plazas, among other names are spaces that form a focal point in the public space network, providing a forum for exchange, both social and economic, and a focused for civic pride and community expression. Despite the fact that urban squares may be recognized as focal areas, the dimensions of these areas are examined not in the expositive expression on centrality yet in that of open spaces. Urban squares are usually formal and urban in nature rather than parks and open space, which typically are soft landscape, bigger and less seriously utilized.

Last but not least, as a city grows, inhabitants require new places for playing, relaxing, meeting their neighbors and enjoying the natural environment. Parks and open spaces provide personal, social, environmental and economic benefits and are important to our quality of life. For better understanding about the definition of parks can be said: a park is an area of natural, semi-natural or planted space set aside for human enjoyment and recreation or the protection of wildlife or natural habitats. It may consist of grassy areas, rocks, soil, and trees, but may also contain buildings and other artifacts such as monuments, fountains or playground structures.

### **1.1 Problem statement**

During the last decade's city planners have been primarily concerned with physical characteristic problem as the land use, the improvement of traffic and general communication, zoning, the relationship between the residential and industrial areas, etc. The considerations have somewhat overshadowed the importance of the square as an essential factor in town planning, as the very heart of the city. Only now does interest turn toward this central formative but in the general problem in Cyprus is public open spaces are not well designed enough to attract people.

Based on the research done so far, there seems to be a gap in the literature relating to the analysis of small-medium sized squares, streets and urban parks in neighborhoods. The unfair aspects of public spaces caused to inefficient public place. As far as the case of Famagusta is concerned, there seems to be a lot of new urban development's yet very few of them are designed to include successful open spaces. For example, why there isn't any space in some cases for people gathering together just for sitting, playing music or drawing. The city seeks to develop and manage its weakness in public space network in an efficient and equitable manner so that all residents can use the

existence of benefits. For example, the Zafer square is the biggest square in the Famagusta but there is no other function other than traffic function. In the streets, there aren't enough street furniture. In the Samsun park, there is no park furniture or other component of the park to attract people.

## **1.2 Aim and objective of study**

The primary concern of this research is to question and evaluate the physical quality of public open space design in Baykal area and learning from successful examples of small to medium-sized public open spaces which are, squares, street and urban parks. It is the overall objective of the 'Urban Space' project to provide guidance on how urban spaces can contribute to enhancing the attractiveness and quality of the urban environment in smaller urban centers. This joint strategy focuses on providing recommendations on how to create the necessary attractive and high quality urban landscapes and open spaces which are the precondition for achieving this goal.

## **1.3 Research questions**

The main research question is what are the qualities of public open space in Baykal District.

In order to achieve the aim of study this research have a research question which are:

What is the public open space?

What are the functions of public open space?

What are the physical characteristic of public open space?

How public open space systematized can assess for achieve the qualified space

## **1.4 Research methodology**

The analysis alignment is fundamentally based on qualitative research which are classify to two part, firstly literature reviews, which are secondary source and internet

sources and second part is case study. The literature review help to understand the public open space and review about square, street and park and actually case study help to asset the POS criteria which come from the literature review, analysis and evaluation, recommendation and then conclusion. The synthesis of literature review provide a theoretical frame work for evaluating and questioning the case study, case study selected from Baykal district in Famagusta. The reason for selection the baykal district is, (a): its proximity to the walled city, (b): public space elements can be analyzed in a district, (c): it has a physical quality in terms of urban context and architecture identity. In this study, the case study method was chosen as research method for analyzing and understanding public open space of Baykal district and the primary concern of this research is to look at the physical quality of public open space design in Baykal area in Famagusta learned from successful examples of small to medium-sized public open spaces such as squares, streets and urban parks.

Considering the analysis purposes and objectives, it is aggravating to advance some techniques which are the qualitative, appraisal and allegory. Moreover, the capital alignment is botheration analytic and analysis techniques to enhance the superior of research. The author has been observed the Baykal District and taken the photos from surrounding every day between 9.00 am till 5.00 pm in two weeks.

### **1.5 Limitation of study**

This study has some limitation. Due to the scope of limitation of the thesis, Baykal district has been selected as a case, the reason for selecting of Baykal is:

- The biggest square (Zafer Square) located on the Baykal area.
- The second biggest Commercial Street (On Bes Agustos street) located in this area.

- The second biggest park (Kent Park) located in this place
- The only area which have biggest squares and commercial, residential and industrial street and the second biggest park located, is the Baykal area.
- This study only focuses on the physical characteristics of public open space

## **Chapter 2**

### **PUBLIC OPEN SPACE**

#### **2.1 The importance of POS**

Urban open space are all types of spaces between buildings in the town which include path, square, plaza, parks and etc. importance of public open space classifying to three part which are, functional importance, social importance, aesthetic importance and economic importance. The functional importance, they give form and shape to the city and they provide space needed for recreation. The social importance, they create chances for interaction between people. The aesthetic importance, they preserve natural beauty and the economic importance they provide places for economic activates. Actually, there are many types of public open space such as water ways, parks, green areas, playing field, playground, plaza, square and street.

- Water ways include both natural lacks, rivers and streams which represent rich wildlife habitats and offer recreational value.
- The park is a natural preserved area available for recreation.
- The green is an open space available for recreation and is surrounded by the city elements from all sides
- Playing field are open space dedicated for playing sports such as football basketball and etc.
- The playground is an open space which is designed and equipped for the children

- The plaza an open space available for civic purposes and commercial activities and that is defined by buildings frontages and usually attached to important building.
- The square is an open space available for civic purpose.
- The streets, there are many types of streets differs in function and types, that line the such as great streets or other ways

## **2.2 Public space through history**

This section traces the evolution of Western urban public space through history from antiquity to modern times. The first section describes the development of public space in Europe, from the ancients till the Renaissance and Baroque, and identifies the primary functions of pre-modern European public space. The focus of the second and third sections is on the 'modern' age, respectively examining, a series of public spaces in London and then New York. It can be briefly said that, in the modern world, the innovator space and the current come back from that point to planning more 'positive' urban spaces. From the discussion, the complex and changing relationships between spaces and their functions are recognized, while the changing balance between public and private in the production, use, and management of public space is drawn out.

**European public space from antiquity to renaissance and baroque:** Today, the form and function of Western urban public space has its origin in the ancient civilizations. The Greek polis started to flourish around the fifth century BC while the Roman city began to grow around the third century BC, the two cultures overlapping for some centuries. Both the Greeks and the Romans appreciated urban public space considerably as places for social interaction, and this was identified by the aesthetic qualities that these areas came to possess.

In modern times the result has been a tendency for many planners, architects and historians to admire the approach to public life which these civilizations took. Most famously, Camillo Sitte, an Austrian architect disillusioned with the public space in his native Vienna around the turn of the nineteenth century, became a particular advocate of the old approach. Sitte (1889: 4) paid specific tribute to the public space of the ancient Greeks and Romans, explaining 'public squares, or plazas, were then of prime necessity, for they were the theatres for the principal scenes of public life.' Any history of Western public space should, therefore, begin with the ancients.

**The ancients:** To understand how public space functioned in ancient Greek society, it is important to understand the Greek 'polis', or 'city-state'. LeGates and Stout (2000: 31) emphasize the importance of public space to live in the polis, arguing 'Public life was essentially communistic. The polis as a social institution defined the very nature of being human for its citizens', while the physical form of the polis stressed public space.

Idea of an open space with different capacities such as open space as a fair space where natives could connect and talk around matters such as issues of the city, open space being utilized for business purposes, open space as a spot for casual gathering and group space, the stylish characteristics of open space opportunities were offering for delight and happiness. Ideas of limiting access to open space with a few people having more prominent rights than others. From Greece to Rome: Roman.

**From Greece to Rome:** Roman cities were far larger than the Greeks polis, Ancient Rome itself reaching a population of over one million. The Roman urban fabric was, therefore, richer and more varied. The core of the Roman city was the forum (Carr,

1992). The Roman forum was described As a blend of the Greek acropolis and marketplace. The bigger discussions were contained open, semi-encased and encased spaces. On the other hand, their capacities were included markets, religious gatherings, political occasions, sports and casual gatherings. They were contained piazzas, critical metro structures such as basilicas and sanctuaries to the diverse Roman divine beings. The basilica that could be utilized for legal or business purposes, was an indoor space. Temples fulfilled a double role, being used as a meeting place (e.g., for the Senate in the case of the Temple of Concord), as well as for religious purposes. Despite these spaces being used for formal and commercial purposes, the former always took priority. Therefore, as Roman cities grew, single function forums were established, with forums being cleared of the clutter of statues, arches, monuments and so forth that had built up over time notes that by 113AD Rome had ‘vast spaces for walking, business, and pleasure’.

The cities of the Roman Domain had pushed forward urban human advancement well past that of the polis at this point, not least because of the high level of public works (Mumford, 1961). Roman urban communities make some acquaintances with a more arranged approach and the generation of urban open space. It is coordinated into the texture of the city and makes a downtown region with social spaces, shopping spaces and profound spaces which are fundamentally the same as Western urban communities of today. The Romans also understood the semiotic qualities of public space. Examples of this are the strong symbolism of state and religion in Roman piazzas, where surrounding buildings contained the Senate and temple, accompanied by monuments and statues. This is a tradition that has continued in towns and cities through to today. Imperial Rome used this method to impress an image on its population. While the

Greeks recognized that the Stylish characteristics of room could upgrade the spirit and commend the psyche, Royal Rome understood that the outline of room could have controlling impacts on the population, and imperial and totalitarian regimes throughout history have used this principle.

**The middle ages onwards:** After the fall of the Roman Empire in the fifth century, city life declined in Western Europe. The church became powerful with the decline of the state and expanded its influence within the walled cities the Romans had left behind. The walls of the settlements that protected against marauding tribes constricted the development of the settlements (Pirenne, 2000), and as the settlements declined, so consequently did urban public space. However, Mumford stresses that these small settlements continued to contain commercial activity through the dark ages, and when international trade routes reopened, urban growth was accelerated.

Medieval public space was framed and usually controlled by the church. Often the only planned public space was in front of the church to provide the congregation entering and leaving, with markets often sharing the same space, and operating on a weekly cycle. The church was the center of the settlement and public life, with religious festivals, pilgrimages, and processions used to bring the community together. Growth became organic and ad hoc with an emphasis on defense. Webb, for example, describes medieval streets as utilitarian, and it was only latterly as towns prospered that streets and spaces could be improved. This also created public spaces that were independent of the church but still within the narrow confines of the town wall.

Despite the lack of formal design, the results often had their innate qualities. Alberti and Sitte both admired the medieval winding street as an aesthetic, producing

unpredictability and excitement for users walking through the city, as opposed to the rigidity of the gridiron (Mumford, 1961). Furthermore, the medieval city was a more egalitarian place than its ancient predecessors. ‘The medieval town had succeeded as no previous urban culture had done. For the first time the majority of inhabitants were free men... city dweller and citizen were synonymous terms’ (Mumford, 1961), and this was reflected in the unrestricted use of public space. The street systems that developed were organic, commercial, and vibrant public spaces.

**Renaissance and Baroque:** As the power of secular rulers and interests increased, from the middle of the fourteenth century new piazzas began to appear in many Italian cities. As Girouard (Matthew Carmona, 2003) notes, ‘the idea of a piazza expressing civic dignity and therefore unsuitable for commercial activities had clearly crystallized’. The grand piazzas of the Renaissance followed the classical world, aesthetically and politically.

These ruling interests sought to ‘regenerate’ the medieval cities by employing artists and architects to make them beautiful, as well as they’re on grand palaces, and in the process to assert and display they’re on status and wealth. As Webb notes, ‘the link between art and power is as old as civilization’. With the flourishing of the arts in fifteenth-century Italy, aesthetic principles, especially scale and proportion, became necessary in the design of urban space. Italian piazzas are changing and getting far from their medieval structures. They are making the pulverization of part of the town again. Business movement and markets are restricted from the middle frequently. While engineering and model mirrored the fantastic. Royal patronage leads to similar developments in Baroque Spain, and the Spanish in the New World used principles of Renaissance city planning drawn from the Laws of the Indies. Baroque Paris, again

via royal patronage, built its first planned square in 1605, the Place Royale (now the Place des Vosges). Therefore, the spaces that resulted were designed to display as publicly as possible, the status and wealth of the ruling classes. Again, the parallels are clear to see in the design of many contemporary public spaces, designed to show off the wealth and power of the corporate/business sector. The balance between public and private interests in the provision and management of public space represents an issue with deep roots indeed.

### **2.3 The role of public open space**

The political and public attitude towards a democratic, multicultural society changed, sometimes dramatically and painfully, as the twentieth century moved to an end. The idea of a democratic society as a “melting pot” where cultural differences become homogenized within an overriding expression of national culture has largely been replaced with a more pluralistic ideal. Rather than expecting conformity, we now strive to accept diversity in needs, attitude, and expression, and therefore in provisions for society. What is true about public open space, and particularly the urban parks, is that they are the areas where democracy is worked out, quite literally, on the ground, and consequently, the way such spaces are designed, managed and used shows the realities of political rhetoric. How can we determine a politic that can link the various heterogeneities in society without repressing difference? The nineteenth-century park, that quintessential expression of philanthropic but patronizing urban planning, was designed as “a kind of democracy, where the poor, the rich, the mechanic, the merchant and the man of letters, mingle on a footing of perfect equality” (Schuyler, 1986). It was viewed as a typical place in which voting system implied congruity. Also, it was a way for making a bond together with the integrated country. These days, we require a more mind-boggling comprehension of the law based procedure for perceiving and

accommodating the requests and what the people need in the distinctive features of our urban societies. Conventionally, the greater part was accommodated by voting systems. Yet, neither the interests of substantial minority view did not secure, nor characterize what decided legitimacy. How could we guarantee the idea that what suits one gathering of individuals did not forestall arrangement for another gathering? It had been recommended that we required the plate of mixed green bowl, in which diverse societies could discover particular articulation, rather than the recreation center as blend. So, parks that were essentially intended for a solitary and predominant culture, had suggestions. These suggestions consisted of how versatile noteworthy parks are and how much their plan instead of modified utilize, should change in the 21 centuries. Here, the issues of openness and subsidizing was what would raise. From the nineteenth century till now, between assurances to limit unseemly conduct in a recreation center and the wants of numerous clients for more differed recreational open doors was the issue which had remained a consistent issue. The problem was that the exercises esteemed disputable, mountain biking or roller-skating, for instance, had changed. What is worthy or safe conduct being a distinctive view of different social groups and gatherings. On the other hand, a few contractions by time-programming as opposed to space-programming could be settled, however obviously just a really participatory arranging procedure would resolve them. Frameworks would be a conceivable favorable position of advancing data innovation which enabled natives to share their needs and dreamed for the future into an arranging database associated with three-dimensional, GIS-based representations (Bishop, 1995). The level of trust and the access to such kind of PCs which are based on media, which individuals build for themselves still reject a few classes of society. The level of trust and the access to such

kind of PCs which are based on media, which individuals build for themselves still reject a few classes of society. This matter varies in different cases.

## 2.4 Types of public open space

Open space has an extensive variety of typologies and assessment, for example, open parks, play area, square and courts, memorial market, Community open space, streets, greenways and liner parkway, atrium, urban wilderness, and marketplaces, and found neighborhood spaces and waterfronts. However, the focus of this thesis is squares, streets, and parks because of their importance and values. This section of the research is going to explain and give general information about these types of public spaces.

**Public parks:** Frederick Law Olmsted define an urban park as “a naturalize passive structures” (Rutledge & Molnar, 1986, p.4). Open parks are built up in zoned spaces. The parks are described by the nearness of condition. Their sub-types are the focal open stop, neighborhood stop, downtown, and so on. In the western world, amid the mechanical transformation, open parks was viewed as a land abuse. Starting, they were for the change of neighborhoods physical frame.

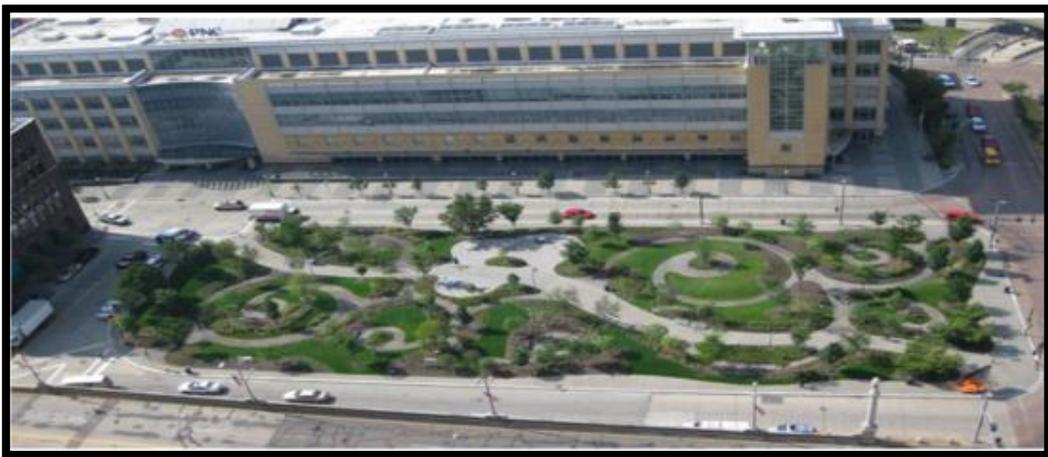


Figure 1: PNC Firstside Park, Private park in front of the downtown building, truly public, freely accessible Pittsburgh. Source: URL 1

**Squares and plazas:** The squares and plazas are parts of historic city centers. They create a meeting place such as streets. A city plaza is considered to be an area which is surrounded by constructions. The objective of building these plazas is to display the building to the maximum level. Squares and plazas are among widely developed and managed constructions. A city plaza is considered to be an area which is surrounded by constructions. The objective of building these plazas is to display the building to the maximum level. Squares and plazas are among widely developed and managed constructions. Memorials are such kind of open spots in which retaining celebrated and well known individuals hold parades and record their occasions. The memorials are scenes for keeping past occasions alive with the use of physical manifestations in the open regions. Open region is used for exchanging data to all the guests. Also, it is used for giving sightseers the open door identifies with past occasions which are experienced by the general public.



Figure 2: The Virgin's Square. Valencia. Source: URL 2

**Market:** Memorials are such kind of open spots in which retaining celebrated and well known individuals hold parades and record their occasions. The memorials are scenes for keeping past occasions alive with the use of physical manifestations in the open regions. Open region is used for exchanging data to all the guests. Also, it is used for giving sightseers the open door identifies with past occasions which are experienced by the general public. A customary type was the agricultural market. Ranchers utilized these open spaces, which were impermanent or held at a specific time, for business exercises. They could be found in places such as parks, downtown roads or parking garages.



Figure 3: Idaho Farmers Market. Idaho. Source: URL 3



Figure 4: In İstanbul's street markets. Source: Today's Zaman (Nov, 2014)

**Street:** Streets are some spaces in which cars can stroll and drive and bikes can ride. For the most part, they can associate goals to each other. Avenues incorporate such accommodations as walker walkways, person on foot shopping center, travel shopping center and activity confined lanes. Kostof's (1987 in New York) portrayed the roads as substances which are made out of a roadway or out of a passerby way which are circumscribed by structures. Jacobs (1988) believes that roads are positions of experience and trade. According to her, it is an open, political, representative and formal space in the city. In this manner, avenues are utilized as spots for mass social events which are associated with wear, politico-social, or different exercises.



Figure 5: A street behind Selimiye Mosque. Photo by Author

**Playground:** They are situated in the areas. Play areas can be also utilized as schoolyard playing. On the other hand, they can be used for natural learning or for group works. Generally, play areas had an instructive centrality. Afterward, they were, Such as physical peril of the roads. For example, made items and wellbeing changes are progressively brought into the play areas. The examples which can be named are gardens, playing regions or group gardens and the view of occupants on empty land.



Figure 6: Bonython Park-Australia. Source: URL 4

**Community open space** They are found in the area and they incorporate greenhouses, playing spaces or group gardens. They are outlined, created or kept up by inhabitants on empty land. They give stylish focal points to the neighboring occupants, and their quality can diminish the clashing impacts of urban and monetary improvement.



Figure 7: Iranians celebrating the national “Picnic celebration”. Photo by Ghasemi. Source: URL 5

**Greenway and linear parkway:** they are usually used for bicycle and walker and are long and narrow. They were used to connect the dispersed city, and they provide access to rivers, stream.



Figure 8: Greenway along a river. Source: URL 6

**Urban wilderness:** Urban wild means an undeveloped inner or outer region of the city that can be utilized for enacts. Its examples are bicycle riding, puppy strolling, and numerous different uses spreading over the extremes of recreational play areas or cookout region for investing free energy. In the following, a picture of the Oklahoma mountain urban ferocity territory in Oklahoma can be seen. It is open to the general public.



Figure 9: Urban Wildness around the residential neighborhood. Source: URL 6

**Atrium/ Indoor/ Marketplaces:** Indoor spaces are same as outside spaces. It can be a square or walker road that is a piece of the general population of the open space framework. Sometimes it is referred to as a place for the celebration or a commercial center.



Figure 10: The Grand Bazaar – Istanbul. Source: URL 8

**Found/ Neighborhood spaces:** They are open spaces that clients can claim and utilize each day, for example, road corners, ventures of the structures, and so on.



Figure 11: Outdoor dining in Germany. Photo by: Simeon Jackson.

**Waterfront:** Water can be fused into urban areas in four distinctive ways: as water focuses or wellsprings, pools, water which streams in liner heading, for example, a waterway, trench, and so forth, and the in the coastline. The utilizations are isolated into the streaming classifications. The characteristics of these classifications are attractive, social, instructive, biological, recorded, relaxation, diversion, working and private. The typology of open spaces obviously differs in shape, size, utilization and numerous different other matters. This investigation will center on urban squares. In the accompanying segment, urban squares will be characterized in a more point by point way. Subsequent to giving a couple of meanings of an urban square, the sorts, structures, and components of a fruitful square streets and parks will be reviewed.



Figure 12: Summer Paris Plage at Pompidou Expressway. Source: URL 9

## 2.5 Public open space

Public space relates to all those parts of the built and natural environment, public and private, internal and external, urban and rural, where the public has free, although not necessarily unrestricted, access. It includes: all the streets, squares and other rights of way, whether predominantly in residential, commercial or community/civic uses; the open spaces and parks; the open countryside, the ‘public/private’ areas both internal and external where public access is welcomed like private shopping centers or rail and bus stations; and the interiors of essential public and civic buildings such as libraries, churches, or town halls (Varna, 2016).

Through differentiations and arrangement of the modern urban areas, some of the public open spaces functions have been adjusted or disappeared. Truth be told, the development of globalization and urbanization over contemporary engineering and

urban plan has brought about the difference in the visual personality of numerous urban conditions. (Ela, 2003). Present day open spaces of a few urban areas have been changed into spotless, least lines, basic structures, here and there free from affiliation and importance. A portion of the examination on general society open spaces demonstrated the significance in the structure of the urban space, particularly in the development of the social-social and personality of the nearby assembled condition and its clients. In this manner, open space ought to be available and alluring for various clients of any age, sexual orientations, and social foundation. It ought to be a land that could be utilized with, by each national. Open space has a basic part in the urban communities amid history (Stanley, 2012), although, the part of 'open sense' expanded after some time. The concept of public open space and seeks to explore the complexity of both public open space as a physical view, its use and users. The importance of open spaces to our environment and quality of life is increasingly recognized (Tseira Maruani, 2007). In the numerous modern nations of our new world, open spaces as a fundamental piece of land which utilize arranging choices are taken into consideration. In any case, there are different ways to deal with open space arranging. There exists no broad concession to alluring arranging criteria for example: how much open space is required, where open spaces ought to be found or how they ought to be utilized.

### **2.5.1 Square**

The square or court is a standout among the hugest parts of city configuration. In urban areas, a standout as a hugest method for planning a reasonable setting for open and business structures is considered. This chapter will review three important parts of public open space which are, square, street, and park. To have a better understanding of the shape of square, there is a classification to identification of such general types which is to be the basic of the categorized (Peter G. M., 1963). One of the most

important elements of the city, beside the city block and street, is undoubtedly a square. The square is not only a space surrounded by buildings but also a place of special privilege used for public displaying of architecture.

The most magnificent urban compositions, such as Piazza San Marco in Venice, Piazza San Pietro in Rome, Concorde in Paris or Palace square in St. Petersburg, are unique because of the correlation between the space, surrounding buildings and the sky stimulating emotional and mental response, which can be compared to the reaction caused by other art forms (Pencic, 2010). This section is going to give a general review from types, functions, and forms of squares, according to the Zucker's classification types of squares classify to five categories, the closed square, dominated square, nuclear square, grouped square and amorphous square which is the best and comprehensive classification between sources. The function of a square is classified into four parts, internal, associated, arterial node, and multiple function squares. And the forms of a square is classified into six parts, triangle, trapezoid, rectangle, L form, circle and ellipse and hemicycle square. This information and classification will be comprehensively explained in this chapter.

### **2.5.1.1 Types of square**

Numerous attempts have been made for classification the form that squares may take. Paul Zucker and Sitte outlined two of the most influential theories. Sitte believes that the shapeless square and the space conformed to a focal protest which are outside his definition of the topic and they are not important for him. Assembled squares are the questions which have a considerable importance for Sitte. He believes that they are not nonexclusive. Yet, there is more than just one way in which squares can be connected to each other and to the urban texture. (Moughtin, 1992).

A 'square' usually refers to an area framed by buildings. A distinction should be made

between squares primarily designed for grandeur and/or to exhibit a particular building, and those designed as 'people places'. This distinction is not absolute: many public spaces function as both, though if we judge one of them in terms of the other, difficulties may arise. Spaces designed to show off a particular building or for certain civic functions, for example, may be unsuccessful as people places, but successful in their more formal roles. For a better understanding of squares aesthetic qualities, the ideas of Camillo Sitte and Paul Zucker are of particular value. Rob Krier's typology of urban spaces is also useful. While Krier's was, a morphological structuring based on geometric patterns, both Sitte and Zucker focused on the aesthetic effect (Carmona, 2008).

As per the Zucker's order and assessing different references, the best and complete grouping to be utilized as a part of this exploration is Zucker's arrangement. The shape is as changeless as those components that make it; as a rule, these components are structures thus stay for a long time. Open squares may then be named following Zucker's characterized the square as per their typology, Zucker's characterized the square under five kinds: (spaces, 2009)

- The commanded square-The shut square-The formless square-The atomic square-Grouped square

**The closed square:** The only meaningful openings in the closed square are the street that drives to it and the skyline. The main critical openings in the shut square are the road that prompts it and the sky. The inside ground space might be created from multiple points of view and may incorporate such road furniture as the ornamental model, wellsprings, asphalt, planted zones, trees, or grass and furthermore roadway.

These improvements are coincidental to the fundamental frame, and on account of a shut square they are few and confined to a little size and significance in respect to the building idea of the square. "Court Mayor" in Madrid is a solitary piece of architecture with an open focal square with an equestrian statue as a purpose of intrigue. This most straightforward type of people in general square is firmly related in configuration to the design idea of the "chamber" of a Roman house, the school quadrangle, or the royal residence yard. Be that as it may, in an opposite, in western culture, the shut square is an urban area committed to open capacities. In Greek human advancement, the closed square initially showed up in the arranged towns of 5<sup>th</sup> century before Christ. Various cases of them might be found in each of the western social time frames from that point forward. The components of the shut square are an entire walled in area intruded on just by the roads heading for it. The essential part of any locked square is its format of a customary geometrical shape, the redundancy of comparative houses or house composes, confronting the encased territory. The spatial adjust of the square will dependably be accomplished by the condition of even and vertical powers. Each façade satisfies a twofold capacity; On the one hand, it is a piece of a one of a kind structure; then again, it frames some portion of a typical urban spatial request.



Figure 13: plaza Madrid, plan. Source: URL 10



Figure 14: Plaza Madrid, image. Source: URL 11



Figure 15: Plaza Madrid, satellite. Source: URL 12

**The dominated square:** Overwhelmed square guides the perspective of a single construction or gathering of structures, a great figure, or maybe a fantastic perspective in a ruled square. The dominant component outwardly guides the area of the square ahead it. The regular part might be a congregation, a place, a city corridor, which draw in the point of view of the square, making movement and strain between the open space and the commanding components, consequently coming about tasteful attachment. The commanded square along these lines contains particular ingredients which outwardly exceed the other constraining highlights. The visual prevalence might be the aftereffect of the span of the ruling component or maybe its area or plan

relating to other parts of the square. The photo of "Notre Dame Cathedral and Parvis", portrays this space with its constrained point of view focused on the church building veneer. The components of the commanded square are recognized by one particular structure or a gathering of structures towards which the open space leads. Encompassing structures are identified with the ruled building might be a congregation, a castle, a town lobby, a structurally created wellspring, a theater and more often than not the bearing of the principal road which opens into the square sets up the hub towards the predominant building (Peter, Public square, 1963)

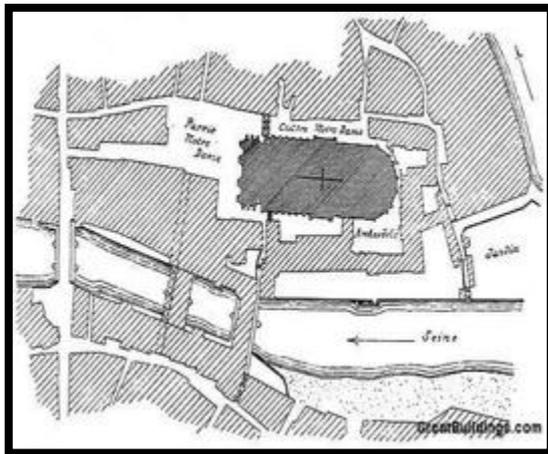


Figure 16: Notre Dame, Cathedral and Parvis in Paris, plan. Source: URL 13

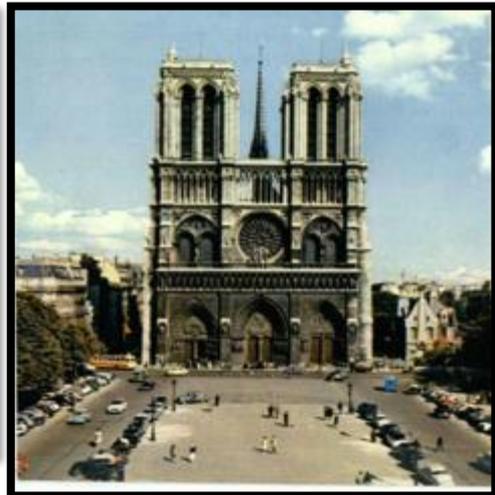


Figure 17: Notre Dame, Cathedral and Parvis in Paris, Image. Source: URL 14

**The nuclear square:** The space-related solidarity of open squares seems not rely on their engineering or normal limits. Without a doubt, any component which is outwardly solid and sufficiently substantial to shape a concentration inside the area of a square by going about as a core to the square might bring about an aesthetic entirety in guide complexity to the evidence no coordination of the environment. As opposed to "Nelson's Column, "the "Curve of Triumph" in Paris is so overpowering in

connection to the encompassing components of the Park de l'Etoile which it makes doesn't make just a tiny square of this measurable round open space yet, a ruled square. In the square, A person on foot is just aware of the structures and trees, masterminded in aligned loops about the emanating roads, as a minor part of the square's aggregate outline. Be that as it may, a tiny square isn't made with every statue, pillar, or wellspring put in a square. These focal interests may simply add to the furnishing of the square while diverse parts direct the space related game plan of the square. This is the circumstance with the Plaza Mayor, which is a "shut square" despite the fact that it contains a midway found the equestrian statue.

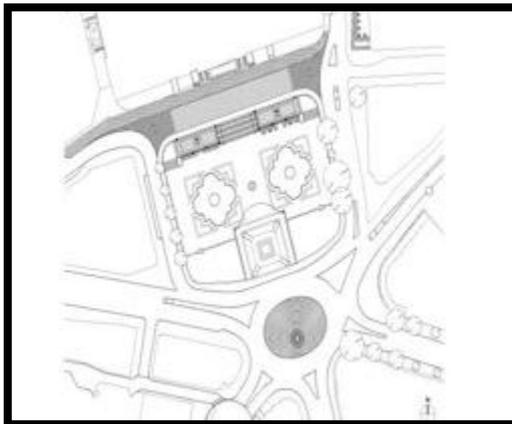


Figure 18: Trafalgar Square in London, Plan. Source: URL 15

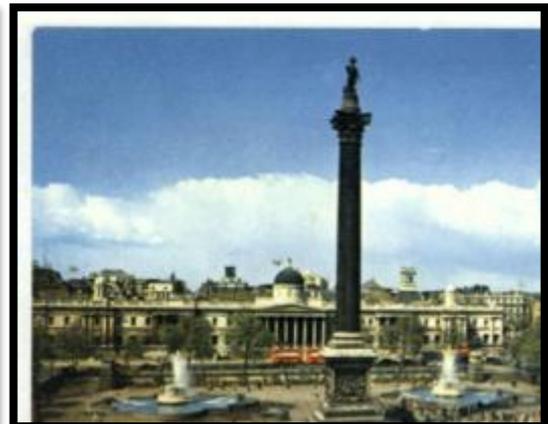


Figure 19: Trafalgar Square in London, Image. Source: URL 16

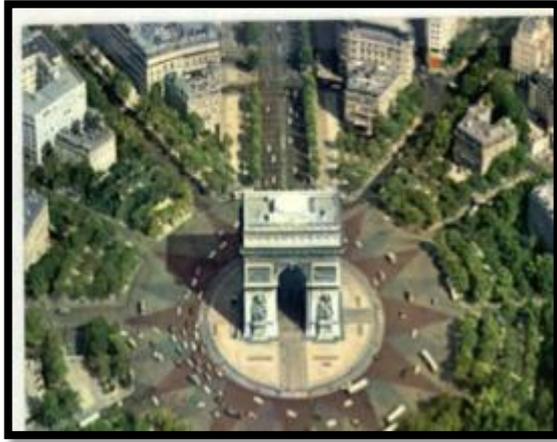


Figure 20: Place de l'Etoile in Paris, Image. Source: URL 17

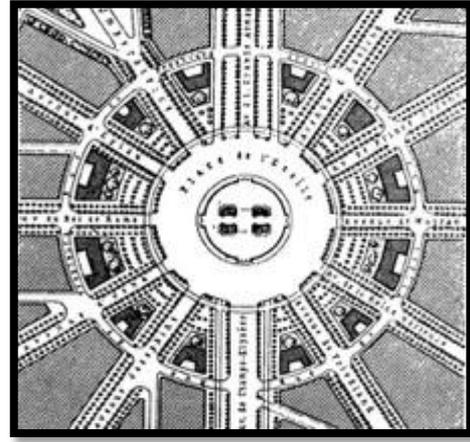


Figure 21: Place de l'Etoile in Paris, Plan. Source: URL 18

**Grouped squares:** China's people built up a kind of scene painting on printed paper that was intended to be seen in a constant movement. Numerous specific scenes were finished but then coherently moved to an alternate point of view and area as they unrolled. In the outlining of urban areas, beautiful outcomes have frequently been acquired when public squares were created in spatial relationship to each other. A less formal non-hub connection between the Medieval and Renaissance gathered squares was gotten by the opportunity of a common side and the intersection point at right sides of the tomahawks. The third classification of a typical prevailing building, for example, a castle or house of prayer as in Salzburg. In conclusion, squares might be assembled without coordinate physical contact using some connecting gadget, for example, a road, a congregation steeple, or an arcaded way. The arrangement above, indicates the ancient Roman concept of 'Grouped Squares'. Here five 'fora' are directly related to axes and common sides, yet they maintain their individuality through porticoes and walls which provide inter-connecting passageways. In each case, the size and proportion of the separate fora vary. (Peter, Public Square, 1963).



Figure 22: Imperial Fora in Rome, Image. Source: URL 19

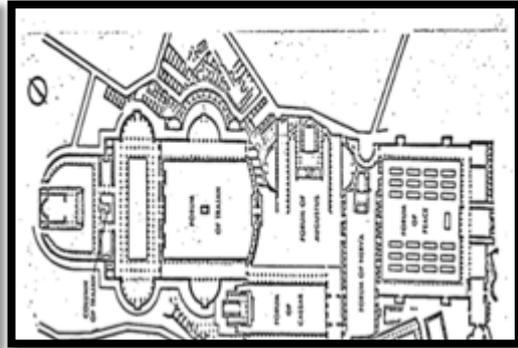


Figure 23: Imperial Fora in Rome, Plan. Source: URL 20

**The amorphous square:** The fifth spatial classification adopted from Zucker is the "Amorphous Square". This is the term used to describe and classify all those so-called squares which are, from an aesthetic point of view, formless. Yet, in order to clarify the meaning of the term "square" as used in this study, this variation must be mentioned to indicate that many open spaces formally bear the title of "square" even though they are crossroads such as New York's "Times Square," Boston's Scollay Square", and Vancouver's Pioneer Place. Each square may not be easily categorized as closed, dominated, nuclear, or grouped; this question is often more complex and requires what may be termed as "multiple classification." Consider the case of the Piazza San Pietro. The etching by Piranesi shows how the Piazza may reasonably be classified as each of closed, nuclear, dominated, and grouped. By looking into the square from the main entrance point, there is a closed square bounded by lateral colonnades and the basilica's facade. (Peter G. m., Public squares, 1963)

### 2.5.1.2 Function classification

Every square has many purposes; in numerous squares, the quantity of capacities might be exceptionally confounded. The social highlights of squares identify with the very ethos of group touching. The standard features of squares link to an ethos of group

touching upon such an expansive part of urban life as to include: religion, politics, defense, economics, public transportation circulation, farming, aesthetics, and leisure. Due to the social feature of the (Chansellor, 1907).

A functional classification has been devised to depict the social capacity of squares systematically. This grouping sets up three kinds which are known as the "interior capacity" square, the "related capacity" square, the "blood vessel hub work, " and the "various capacity" square (Giedion, 1963).

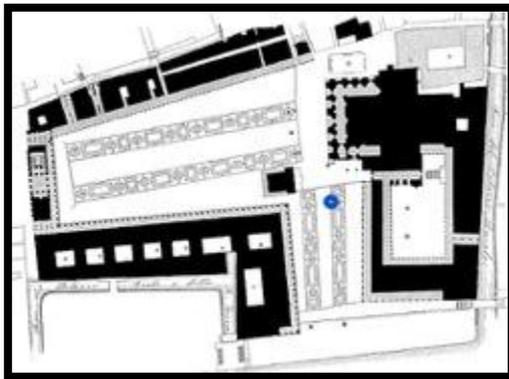


Figure 24: Piazza san Marco in Venice. Plan. Source: URL 21

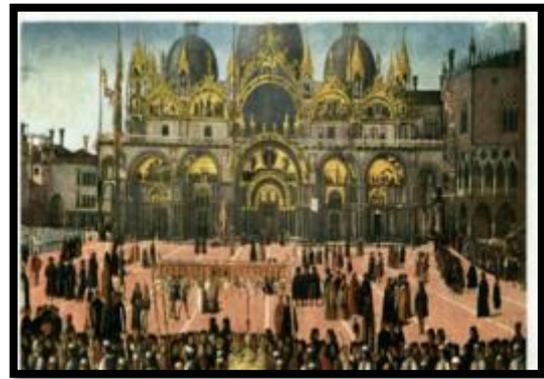


Figure 25: Piazza san Marco in Venice. Image. Source: URL 22

**The associated function square:** The related capacity square is one whose reason for existing is specifically related, and subordinate to land or building utilize that abuts the square. It depends on the degree that if head joins with which it is related change, at that point the capacity of the square would likewise change, (however not the shape). The connected capacity square is efficiently perceived because of some current building or scene highlight (Peter, Public Square, 1963).

**The arterial node function square:** The arterial node hub work square is a junction. It is designed as the crossing point of roads as well as an open square. It is practically

reliant upon the course courses that meet there and may likewise incorporate substantial person on foot regions. An example is the Place de l'Etoile and Laser town square in Czechia. This nuclear square, with the Arch of Triumph commemorative of Napoleon's victories, is the center of 12 radiating road. (Paul, 1955)

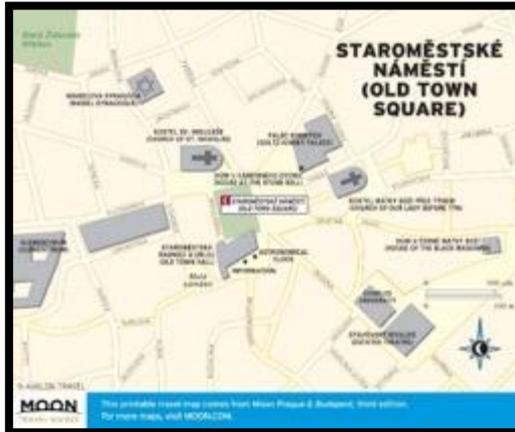


Figure 26: Laser town square in Csechia. Plan. Source: URL 23



Figure 27: laser town square in Csechia. Image. Source: URL 24

**The multiple function square:** The different limit square is the most puzzling, the most entire, and the most tricky to describe. It includes the qualities of the internal limit square, and the related limit square; and the vein center square, be that as it may, it symbolizes significantly more. Its inside limits are not the general formalized development of a business focus, yet rather: the unusual remarkable limits, the standard easygoing components of agreeable get-togethers, a site of unconstrained activity, a place of open mindfulness a picture of the gathering. It is an all around valuable open space in the heart and focal point of the group. This is the pragmatic sort to which this suggestion is fantastically guided; it is perhaps more easily portrayed by a case (Paul, 1955). Syntagma (Constitution) Square in Athens is an alternate limit square sketched out in the 1830's as a main convergence of the detailed course of action for the front-line city. It was at initial an imperial living arrangement square with the

illustrious living arrangement masterminded on the rising of the east side; the regal house is by and by the seat of the Greek parliament. Regardless, Syntagma is in excess of a forecourt for this authoritative structure. Eight streets, of which four are vein action courses, join at the square making it a "Carrefour"; one half of the central zone is a little stop (the Garden of the Muses), the remained is an outside bistro worked by four lodgings on the edge of the square. This is a regularly utilized square, in an urban zone of high walker levels; it is a gathering focus, a position of recreation for Athenians and voyagers from morning until late night. For present-day Athens, Syntagma is the vital concentration of metro life as the Agora was in the old-time frame?

### 2.5.1.3 Forms of squares

According to the historical context, the study of shapes is certainly a legitimate pursuit. This chapter needs to recognize, first of all, that the public places of geometrically, ordered city plans and city extensions will be on a regular design, while organic cities will accommodate open space as they can in the improvised fabric of their history. As mentioned, in agreement with Krier, no significant addition will be derived from treating the two classes of public place separately purpose of plan analysis is seen to deviate from basic forms of geometry. Also, their combinations at the same time the



Figure 28: Syntagma  
(Constitution), Square in Athens.  
Image. Source: 25



Figure 29: Syntagma  
(Constitution), Square in Athens.  
Image. Source: URL 26

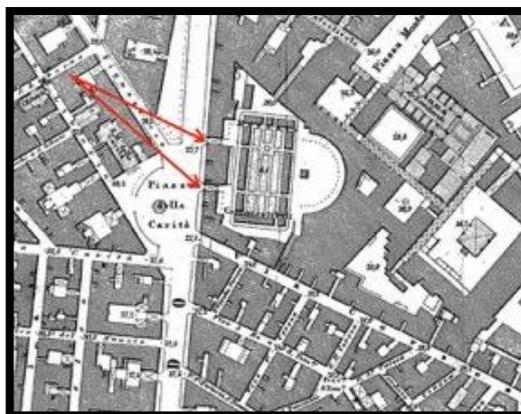


Figure 30: Piazza mercato (sachet), Una delle Piu  
belle citta in Poland. Plan. Source: URL 27

purest circle or square will possess visual rigor only to the degree that its building walls are uniform and its open space uncluttered (Pencic, 2010).

According to Kostof, one of the main issue related to public spaces is adaptability, making the connection with the form, in the broad sense of the term physical structure, unavoidable. Every space is shaped according to the functions that are performed in it, or conversely, the shape of the space attracts certain function. Thus, building a city house, church or park, and according to the basic standards for accessibility, visibility, etc., will shape a specific form, or vice versa in going cities, existing free space, according to the form acceptable for certain function, will adapt to the emerging needs (Pencic, 2010).

A difference of another sort is also axiomatic. The shape of a medieval marketplace or civic square has a specificity contingent upon patterns of traffic that marketplace or civic square has a specificity contingent upon patterns of traffic that often predate the open space, and upon intricacies of process over time in the density and vigor of the confining structures. The popularity of triangular shapes, for example, can be explained by the incidence of traffic intersections of two or three country roads converging upon the town center (Kostof, 1999)

**The triangle:** The triangular public place of organic towns is almost always the inflated crossroad, the original setting for open-air markets. The feature is a commonplace of medieval English cities, it is likely to appear at the foot of the castle where three important roads come together. The shape is fixable, and the sides tend to give building or receding in gentle curves the points where the converging road open into the square are loosely defined. There are two main methods of categorizing

squares – by function and by form. There are numerous examples of recent plaza design where one or other of these two equally important criteria of excellence have been neglected. The empty windswept place surrounded by under-utilized buildings is all too common in the modern city, while its opposite or counterpart, the busy traffic island or faceless car park around which are scattered collections of non-related buildings, is also endemic in the urban scene.

In geometricized form, the triangle is rare. The best-known instance, place Dauphine in Paris had a good enough excuse, its site being the prow like the western tip of the Ile de la Cite. Otherwise, the straight-sided triangle usually turns out to be the formalization of prior, more irregular form, as with two key instances in Rome Piazza Araceli at the foot of the Campiglio and the double triangle of Piazza di Spagna. The effect of this square has inflated the crossroad, and the characteristic setting is open for air market. This square is created where three important roads come together because of this, the shape of this type of square is flexible, but it has geometricized form.



Figure 31: Ile de Cite square in Paris. Image. Source: URL 28



Figure 32: Ile de Cite square in Paris. Plan. Source: URL 29

**The trapezoid:** The principle here might be said to be the intrusion of a climactic façade on one of the points of a triangular plaza. The schematic reproduction of a perspective box so simulated might account for the identification of the type with the Italian Renaissance. The telltale sequence, which some scholar consider deliberate, consists of Bernardo Rosselino’s square at Pienza. (Traks, 2011).



Figure 33: Bernardo Rosselino square in Rome. Image. Source: URL 30

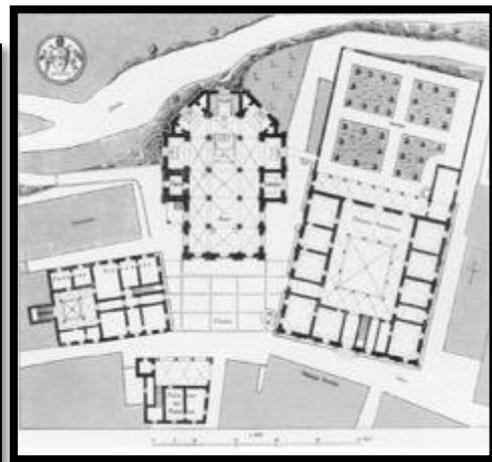


Figure 34: Bernardo Rosselino square in Rome. Plan. Source: URL 31

**The rectangle:** As a perfect square, the form is relatively rare also contends that the rectangle is the only configuration of space that grows well, subdivides well and is efficient to use. Two famous examples are the place des Vosges in Paris and Queen Square at Bath. Because of the equality of the sides, this type does not easily lend itself to architectural emphasis, directing attention onto the open of the checkers of the urban grid to the town square, commemorate. This fact by placing the courthouse or capital on a slight eminence in the middle of the space and actually, the common rectangle is possibly the most frequently used shape for the public square (Matthew Carmona, 2003).

**The L form square:** Normally, this is a combination of two separate adjacent rectangular spaces with the monumental case of the Piazzetta S. Marco in Venice. Many of the medieval specimens are certain convergences of this kind. But, as Enrico Guidoni has pointed out, the notion which probably originated in Tuscany in the 13th century as the product of an early interest in perspective, did influence the design of integral L square especially those of churches. The difference here is that space fixes a particular view of the public building in a premeditated way, rather than being an accident of urban development (Kostof, 1999).

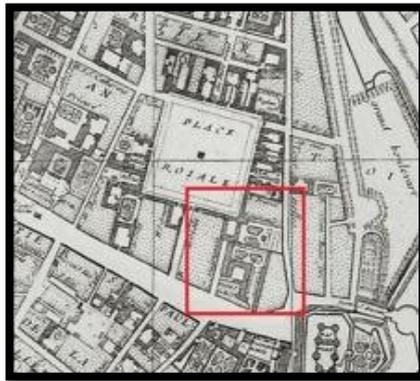


Figure 35: Des Vosges Square in Paris. Plan. Source: URL 32



Figure 36: Des Vosges Square in Paris. Image. Source: URL 33

The corner of the L shaped square become a critical point of emphasis for the visual cohesion of the space. In Venice, this corner is stabilized with S. Marco's free-standing campanile. The renaissance prefers sculpture, like the Gattamelata of fountain in Bologna, and the statue of cosimo I at the piazza della signoria in Florence, also by Gimboldo.

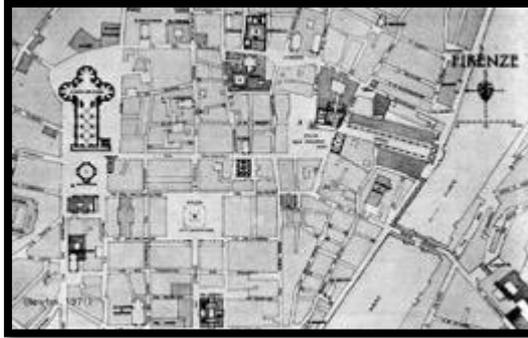


Figure 37: Piazza della Signoria in Florence. Plan. Source: URL 34



Figure 38: Piazza della Signoria in Florence. Image. Source: URL 35

**The circle and ellipse:** The ellipse is a cone-shaped section, a geometric locus, draws the orbit of planets. It has a principal role in the background of mathematicians so that the mathematics community keeps applying the name “elliptic” to describe new theories. On the other hand, every architect knows what ovate means, this word is very well-known in architecture.

In antiquity, these forms, though infrequent, were not unknown. The best location for ellipse square is St. Peter’s square which is located in the city in Rome and considered one of the most significant churches of Christianity, this square across the river Tiber, west of Rome’s center. Vatican City is surrounded by the city of Rome (Peter, Public square, 1963).

This square is divided into three parts from a morphological analysis, semi-private space, semi-public and public and between the semi-private space and public. There is preliminary space, the colonnades define the piazza and the ellipse’s long axis of the piazza, which contrast with the trapezoidal entrance, encloses the visitor with the maternal arms of mother church in Bernini’s expression.



Figure 39: Saint Peter's Square in Rome. Image. Source: URL 36



Figure 40: Saint Peter's Square in Rome. Plan. Source: URL 37

**The hemicycle:** The natural progenitor of this type is the concave recession in the building line across from an important public building like a church, the earliest examples seem to come in the first half of the 13th century, and the arrangement is widespread enough in Europe to suggest a northern rather than Mediterranean origin. Never very deep the concavity merely expands the street running along the public building and dignifies its façade without interrupt the spatial flow. In the full development type, two variants might be distinguished, based on whether the plaza breaks the line of the curve to collect traffic or keeps this line intact.

## 2.5.2 Street

Street is a public road in a city, town, or village, typically with houses and buildings on one or both sides. Any classification of streets must start with Vitruvius and his description of the three street scenes for use as the backdrop in a theatre. So far in this chapter several terms such as, street, avenue, boulevard and etc. Are utilized conversely. It is conceivable to stretch out this rundown for incorporating different words. As an example, street, lane, shopping center and promenade. They have comparative implications. Without going into excessively extraordinary a discourse of definitions. for the purpose of this chapter the fundamental refinement between the street and the road should be made. The street a demonstration of riding on horseback and a conventional line of correspondence between better places, by stallions, voyagers by walking or vehicles had utilized. So, it was any way, way or course to some end or trip.

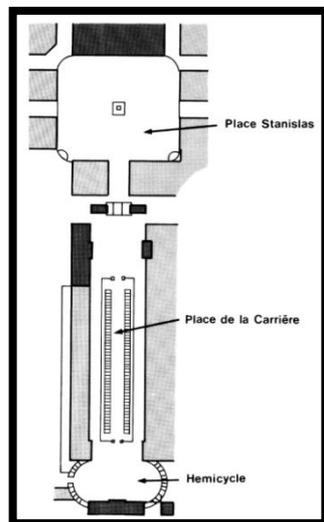


Figure 41: de Corny in Nancy in Paris. Plan. Source: URL 38



Figure 42: de Corny in Nancy in Paris. Image. Source: URL 39

The development of quick moving or overwhelming activity with all its building prerequisites of the street was contrary with the road was one specific component of

the street or the lane. the rising of the useful needs of vehicular activity to an outline authoritative opinion by Cutting edge individuals from the Advanced Developments in design and city arranging which added to the disregard of the road and the engineering. Le Corbusier was one of the fundamental guilty parties, he said: our lanes never work again. Lanes were an old thought. There should not to be such a mind-bending concept as roads, we needed to make something that would supplant the.’ Then he believed that no pedestrian can ever meet a fast vehicle again. It was conceivable to concur with the last articulation without even being forced to tolerate the previous. The origination of the city as a result of urban capacities ruled by transport, denied the road of its part or it meant such useful investigations that left the urban road without a presence or a purpose behind being. At the point when activity moved at speed, it could not be obliged inside the road. Yet, that did not wipe out the utility of the road. And also, it did it essentially to block the utilization of the road for vehicular movement (Moughtin, 1992). The scenes depicted by Serlio, using geometric perspective, are a Classical form of architecture for the tragic scene, Gothic for the comic scene and a landscape outside the city for the satyric. Anthony Vidler maintains that these three street types ‘comprised the paradigmatic mall of the older European city and the bucolic avenue made manifest in the vast areas of suburbia, the retreat of the many to Arcadia (Moughtin, 1992).

#### **2.5.2.2 Types of street**

A wide assortment of road composes, by and large, was recognizable over many assortment of settings. For example, from design urban morphology. By and by, these road types did not coast freely in topological space. However, these road types had a tendency to be perceived and requested specifically. An assortment of road typologies and order frameworks audited by this segment. A more extensive investigation of the

issue of progression would prompt. A few bits of knowledge into how contrasting options to traditional chain of importance might be built, it gave (Marshal, 2005).

Plan and land utilize choices which supplement each other. They convey a delightful harmony between land utilization and road outline. The accompanying road composes are distinguished as great street, Rural road, Avenue, and local subdivision street, Boulevard Parkway and of course these types divided into two part for pedestrian/ bicycle oriented or auto/ truck oriented (Carmona, 2008).

The road as an encased, three-dimensional space in this analysis which was placed between two lines of neighboring structures would be taken. The development of quick moving or overwhelming movement with all its building prerequisites which was contrary with the road was one specific component of the street or the avenue. The height of the useful needs of vehicular activity to an outline authoritative opinion which added to the disregard of the road and its engineering by cutting edge individuals from the modern movements in design and city arranging was so likely. Le Corbusier was one of the fundamental guilty parties. He believed that our avenues never work again. Avenues were an out of date idea. So, there should not to be such an incredible concept as roads, we needed to make something that would supplant them' Later he said: 'No pedestrian will ever again meet a high-speed vehicle.' Agreeing Based on the last explanation, it is conceivable without tolerating the previous one. The origination of the city as a result of urban capacities ruled by transport denies the road of its part or meaning. Such useful examinations leave the urban roads. When activity moves at its speed, it can't be suited inside a road. Yet that does not take out the utility of the road nor does it essentially block the utilization of the road for vehicular activities. (Carmona, 2008)

**Great Street:** The fundamental capacity of an excellent road is a blood vessel, gatherer, or neighborhood road. May work as a gatherer filling in as an essential lane for movement course in a constrained region. May work as a nearby goal road for a peripheral business area and it is Designed to convey vehicles at low speeds (under 30 mph), another component of the first way is a goal road for a city, utilized as a concentration of capital, social, and business movement.

The first road Serves free walker movement and also travel and bikes. It incorporates wide walkways, crosswalks, and walker offices because of the accentuation on person on foot travel and Bicycle paths are permitted, yet for the most part, they are not necessary on these roads considering lower velocities and volumes, and the enthusiasm for keeping foot-explorer entry separations to a base (Moughtin, 1992).

**Avenue:** Avenue is a standout amongst the most critical kinds of lanes. It might work as a blood vessel, gatherer, or a provincial setting as a neighborhood course, yet by and large at low to direct speeds and a urban road serving a scope of movement levels inside and between different region composes and described by wide walkways (scaled to the encompassing area utilized) and on-road bike offices.

An avenue is traditionally a straight road with a line of trees or shrubs running along each side, which emphasize arrival at a landscape or architectural feature. A boulevard is usually a widened, multi-lane arterial street with a median and landscaping between the curbs and sidewalks on either side (Marshal, 2005).

**Rural road:** It might be utilized as an arterial, gatherer or neighborhood course, however with an assortment of paces. A street outside of a city and town serving a

scope of movement levels in a national setting and cleared shoulders can be utilized to give bikes and people on foot convenience. "Additionally, multi-utilize ways isolated from the roadway might be a suitable treatment for bike and walker facilities". Obliges transport offices including turnouts as proper. Open travel stops and shelter ought to be unmistakably checked and set inside the privilege of way (Moughtin, 1992).

**Local/ Subdivision street:** Neighborhood or subdivision roads are a basic component in the road organization. They connect private and business territories. Nearby lanes are not characterized by possession or upkeep obligation. They are characterized by the way that they practically give guide access to arrive utilizes inside subdivisions (Bulter, 2007).

Characteristics similar to each include:

Neighborhood or subdivision roads are a basic component in the road organization. They connect private and business territories. Nearby lanes are not characterized by possession or upkeep obligation. They are characterized by the way that they practically give guide access to arrive utilizes inside subdivisions.

### **2.5.2.3 Zones of streets**

**Development zone** improvement zone is the zone which is situated outside of the road where general society or private plots is found, or possibly they will be situated later on. The relationship of the structures in the headway zone to the street is a crucial fragment of the character of the street, and furthermore how its abilities for the street customers. In a downtown locale, it is likely that this zone consolidates structures fronting or greatly near the back of the walkway. In rustic or nation locales, the change zone will presumably consolidate a more significant setback between the street and the made piece of the street front (the structures). Dependent upon setting, this district

could be a parking structure, a front yard with a living course of action, or undeveloped land. Here and there, for an utility strip is required behind a walkway which effectively moves the headway zone more removed from the street (Wallstrom, 2012)

Since the progression zone is outside the street, the sorts of street parts around there can change extensively. Segments specific to the transportation framework may include:

- Bike or individual on footways;
- Travel stops or workplaces;
- Open stopping regions; or

Garage associations between private packages



Figure 43: Greensbro in North Carolina. Source: 40

**Green Zone:** The green zone is an arranged region between the street asphalt (or control) and the walkway. All in all, the road outlines give at least 6 to 8 feet around there to permit space for road trees. Road trees cushion walkers and other road clients

from vehicular activity and also accommodating shade and an appealing open domain. Inside a high-thickness urban zone, the green area might be hardscaped with trees in grower. Note that the plan needs to represent the protected counterbalance of stationery articles from the through voyaged way.

Not with position street trees, green zone components may incorporate highlights, for example, other finishing, signs, seats, re hydrants, road, and walker light posts, and utility shafts. Travel conveniences, for example, transport sanctuaries can be considered, yet would commonly be obliged behind the green zone.



Figure 44: Pompeii in Italy. Image. Source: URL 41

**Sidewalk zone (or multi use path zone):** This region is saved fundamentally for a cleared walkway to convey people on foot and give access to travel and neighboring area employment. In urban and rural areas, the desire is to provide sidewalks on the two sides of the road unless there are site-particular imperatives that make this inconceivable. When making arrangements for, or obliging, travel, sheltered and available person on foot associations are required between adjoining land uses and travel stops (Edward O'Donnell, 2007).

Withdrawn walkways (situated behind the green zone) are favored because of the discrete (or support) people on foot from moving activity and take into consideration a planting territory between the walkway and travel paths. Walkway widths change given the road write and setting. Prescribed walkway widths extend from 6 to 12 feet. Smaller sidewalks (5 feet) might be adequate for nearby/subdivision boulevards in zones with low to medium land utilize densities. More extensive walkways (up to 12 feet) are favored in urban or fundamental road settings with more massive amounts of walker action (Edward O'Donnell, 2007).

In urban regions or different territories with serious improvement, it might be essential to give more wide walkways stretching out to the substance of existing structures. By and large, the walkway zone ought to take into account unhindered walkway width. Road and travel furniture, (for example, seats, junk jars, and daily paper racks), ought to be put inside the green zone or improvement zone, as opposed to the walkway zone, if there is adequate width and counterbalance from the check.



Figure 45: A trail or Path in United Kingdom. Source: URL42

On expressways or country streets, rather than a walkway, the person on foot space may comprise of a multi-utilize way zone set once more from the Roadway. Multi-

utilize ways are separate offices that serve walkers and bicyclists. The multi-utilize approach ought to be sufficiently broad to help bicyclists and people on foot securely. The favored cross-area is 10 to 12 feet with two-foot rock bears on each side. A green zone and natural zone help provide a buffer from the main travel way (Sideris, 2009).

**Motor vehicle zone (or shared vehicle zone):** The engine vehicle zone is seen as the cleared travel strategy for a street. Engine vehicle zone segments include the development ways, turn ways and diminishes, and channelized or striped black-top areas, and, now and again, the trench dish. Travel ways are fundamental to vehicular improvement and point of confinement close by a lobby. Travel way thoughts fuse the number and width of ways, the road bearing (one-way or two-way), and the width and joining of turn ways. Additionally, it is essential to think about these fragments from the point of view of their effect on different clients. Road width, for instance, can affect the breaking point of people by strolling to cross the road or the potential strategy of bikeways. The huger bit of road cross-domains in these fundamentals demonstrate a degree of path widths from 10 to 12 feet. The recommendation for 10-to 11-pathways reacts that, for most urban and provincial street makes, ways under 12 feet wide are both ensured and fitting, can reduce the general impression of the street, or conceivably allow space for various customers of the street. Additional considerations consolidate the necessity for turn ways at unions. Sufficient width and prerequisite for turn ways should be surveyed inside the setting of the greater path (Appleyard, 1981).

A common vehicle zone takes into account both mechanized and non-mechanized vehicles and normally incorporates extra asphalt for bikes. The favored treatment for bicycles on higher volume and speed streets is a different bike path? On the off

chance that a mutual vehicle zone is utilized rather, it may comprise of extra space for a common path, extra space with shared path markings, or on low-volume, low-speed lanes, a general travel path. The drain dish isn't viewed as a major aspect of the bike office (M. K. Jha, 2006).

A mutual vehicle zone takes into consideration both mechanized and non-mechanized vehicles and commonly incorporates extra asphalt for bikes. The favored treatment for bicycles on higher volume and speed lanes is a different bike path? On the off chance that a common vehicle zone is utilized rather, it may comprise of extra space for a mutual path, extra space with shared path markings, or on low-volume, low-speed lanes, a standard travel path. The canal dish isn't viewed as a major aspect of the bike office (officials, 2012).

Stopping could conceivably be given along a road. The connection between stopping path width and vehicular path width ought to be assessed (in passageways with stopping, vehicular paths may should be more extensive, contingent upon the road write and setting). In the event that a stopping zone is adjoining the voyage way, an extra balance might be given. Travel vehicles will frequently use the motor vehicle zone for transport stops if transport pull-offs are not given or suitable (Group, 2003)



Figure 46: Vehicle zone in United State. Image. Source: URL 43

**Parking/Transit Stop Zone:** The Parking zone is generally a 8 to 10-foot wide section mulling over parallel ceasing adjacent development ow. Parallel stop should be obliged to paths with cutting down speed limitd. Stopping zones are not given on roads. In particular circumstances, parkings can be associated with streets. Halting zones are (Absher, 2012). more regular on streets and frequently included on principal roads (Absher, 2012). Point halting is allowed, in a perfect world pivot edge stop. The halting/travel zone is a cleared locale. The deplete holder can be fused as an element of this zone without growing the width of the ceasing zone. This zone can moreover be used as a vehicle pullout, where fitting, or can fill in as an increase of the green zone while giving globule outs to guarantee halting and improve individual by walking offices.



Figure 47: Parking/ Transit stop zone in United State. Image. Source: URL 44

**Bicycle Zone (Bicycle Lane** A bike zone is a locale put something aside for a striped bicycle way adjacent the motor vehicle way." The width is ordinarily four to six feet of black-top. The deplete holder should not to be considered the bit of the bicycle way" (Peers, 2012). Exactly when putting adjacent a stopping zone, the bike way should be 5 to 6-feet wide. As delineated in the depiction of the standard vehicle zone, if disengage bicycle ways can't be obliged, shared ways are allowed if the outside vehicular road are 14 feet and partitioned way markings may be considered when travel speeds are 35 mph and underneath. On roads with the confined right of way, shared-way markings may be satisfactory with development rates of 35 mph and underneath (Peers, 2012).



Figure 48: Bicycle Zone (Bicycle Lane) in France. Source: URL 45

**Median Zone:** The median zone regularly gives finished support for activity moving in contradicting bearings. Medians can likewise accommodate the person on foot shelter openings in a few settings. "Turnpikes and roads typically have a middle, the street may have a core, and the major road may have a middle". However, it is atypical. Instead of persistent medians, roads may commonly incorporate discontinuous arranged islands to take into account more access, softens up focus turn paths, and give walker shelter openings. Most two-path roads don't have a median. (corporation, 2008)

The essential contemplations with medians incorporate width and treatment. Middle diameters fluctuate from 8 feet to 46 feet relying upon road write and setting. In most urban and rural areas, controls will be utilized to outline the middle from the voyaged way. Middle breaks ought to be recognized ahead of schedule in the plan and ought to be situated to take into account get to and to keep up organize availability. The middle zone incorporates road trees and greenery typically. Hardscaping might be given at limit focuses and indicated crossing focuses to encourage a person on foot to utilize. "At intersection focuses, arranging and appendages ought to be kept up to permit permeability for the walker and driver".



Figure 49: Median Zone in United Kingdom. Image. Source: URL 46

Another median kind is a side median, which is utilized as a part of a multi-way road setup. Side medians isolate the essential avenue activity from movement on the contiguous access road. Side medians are ordinarily 8 feet or less in width (Abhas K. Jha, 2008).

The essential contemplations with medians incorporate width and treatment. Middle widths differ from 8 to 46 feet relying upon road write and setting. In most urban and rural areas, controls will be utilized to outline the middle from the voyaged way. Middle breaks ought to be distinguished right on time in the plan and ought to be situated to take into account get to and to keep up organize availability. The middle zone regularly incorporates road trees and growth. Hardscaping might be given at limit focuses and at determined intersection focuses to encourage person on foot utilize. At intersection focuses, finishing and appendages ought to be kept up to permit perceivability for the walker and driver. Another middle kind is a side middle, which is utilized as a part of a multi-way street design. Side medians isolate the essential avenue activity from movement on the nearby access road. Side medians are ordinarily 8 feet or less in width (Officials, 2012).

**Urban/ Suburban main street:** The urban or suburban road may work as a blood vessel, authority or nearby street. They may function as a gatherer filling in as an essential lane for movement flow in a limited territory and as a neighborhood road for a peripheral business area. They are Intended to convey vehicles at low speeds. A goal road for a city or town, filling in as a focal point of the community, social and business action. It serves significant passerby movement and also travel and bikes. Portrayed by wide walkways, crosswalks and walker comforts, because of the accentuation on the person on foot travel. Bike paths are permitted. However, they are not necessary on these lanes considering lower rates and volumes and the inclination to keep a person on foot crossing separations to a base.

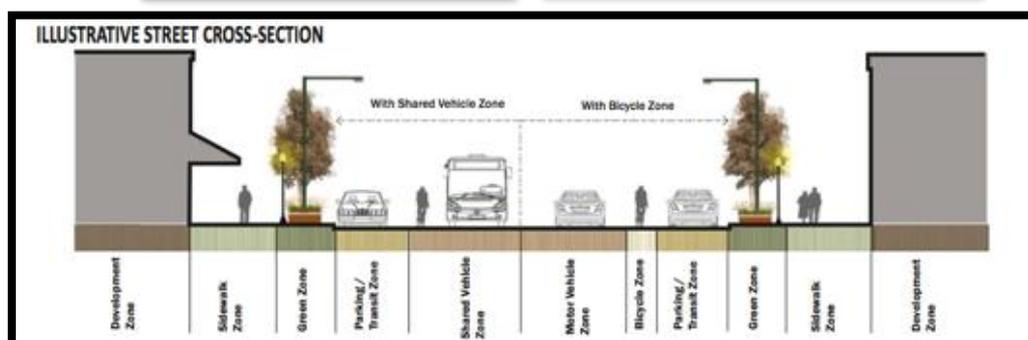
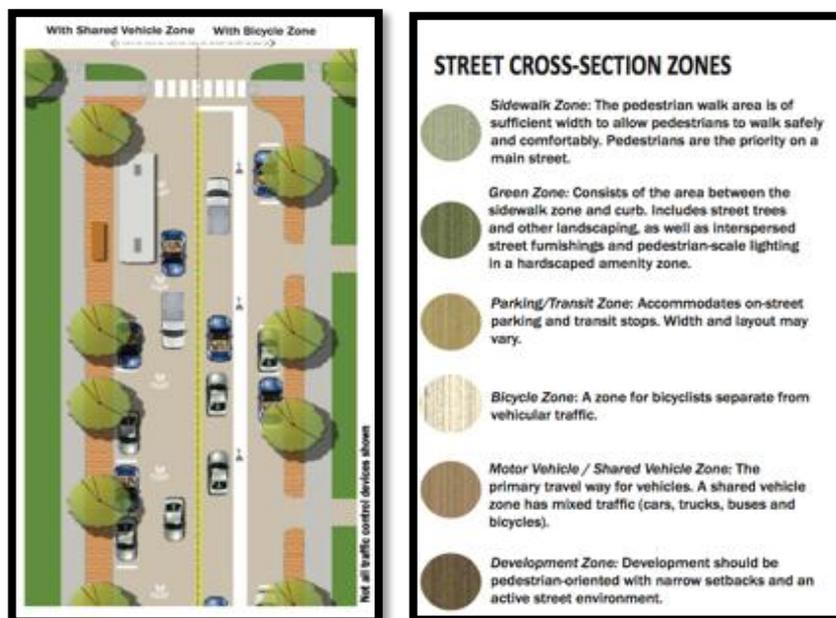


Figure 50: Urban/Suburban main street. Source: Urban Street Design Guide (2012)

**Rural Village main street:** It might be utilized as an arterial, gatherer or neighborhood road. Could work as a blood vessel in country groups. May work as a gatherer filling in as an essential lane for movement flow in a limited region. It might be utilized as a neighborhood road for a remote business locale. Intended to convey vehicles at low speeds. Bike paths are permitted, yet they are not necessary on these boulevards considering lower velocities and volumes and the desire to keep the person on foot crossing separations to a base. It is a goal for a rural village filling in as a focal point of the civic, social and business action, also, helps much walker movement and additionally travel and bikes. It incorporates wide walkways, crosswalks, and person on foot offices because of the accentuation on walker travel (Francaviglia, 1996).

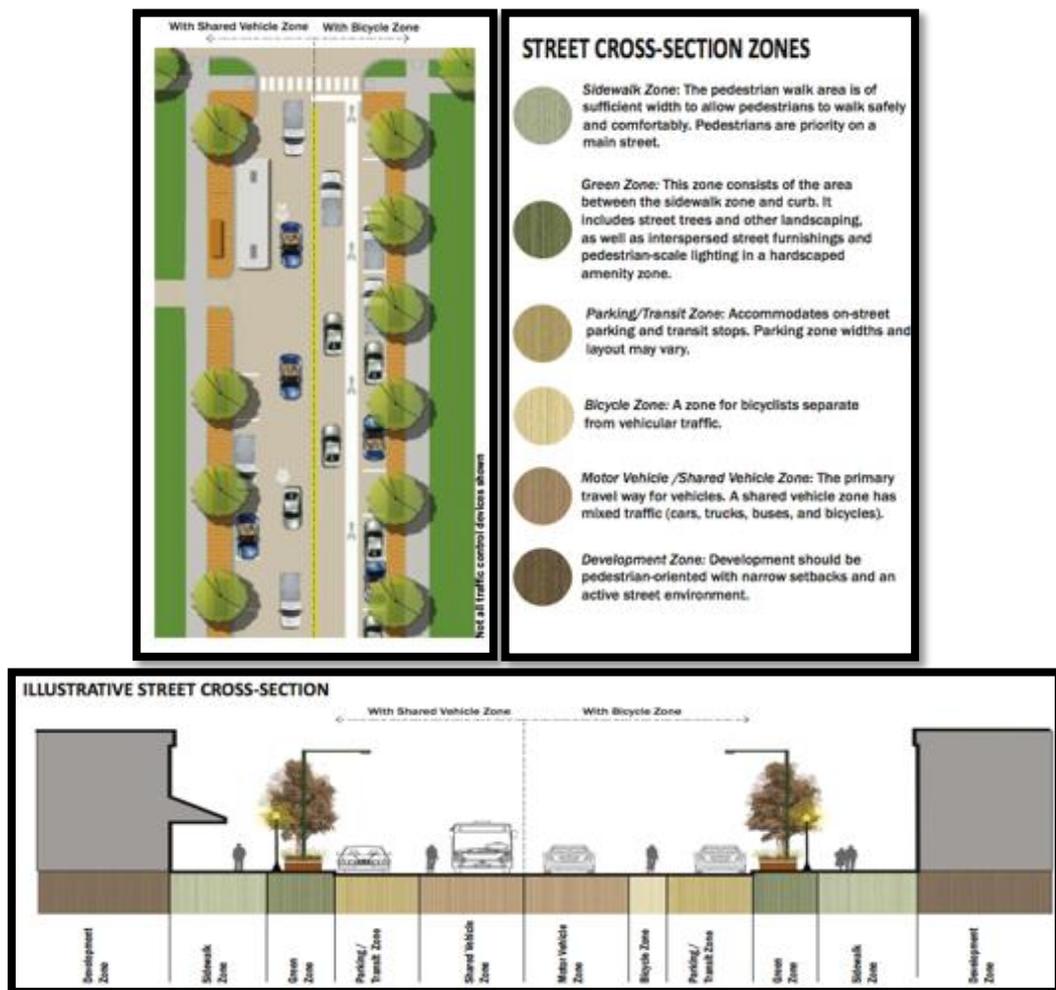


Figure 51: Rural Village main street. Source: Urban Street Design Guide (2012)

**Urban/ Suburban Avenue:** May work as a arterial or authority, yet for the most part at low to direct speeds. An urban road is serving a scope of activity levels inside and between different region types. It is described by wide walkways and on-road bike offices. "May have on-road stopping, and travel stops, covers and different civilities are situated along the road, ideally inside the privilege of way".

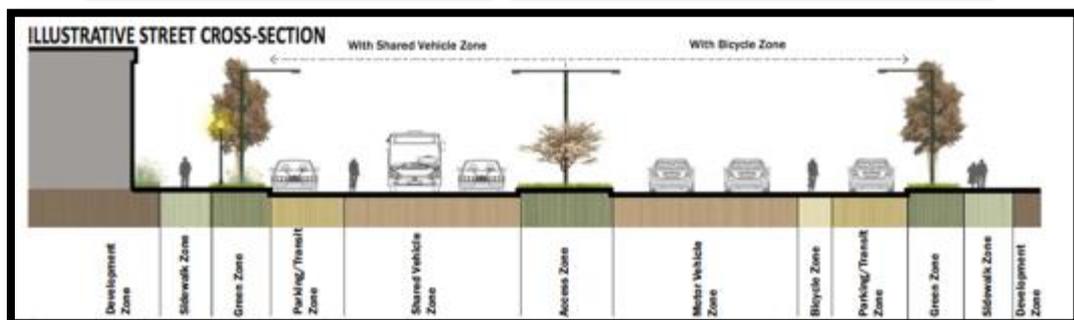
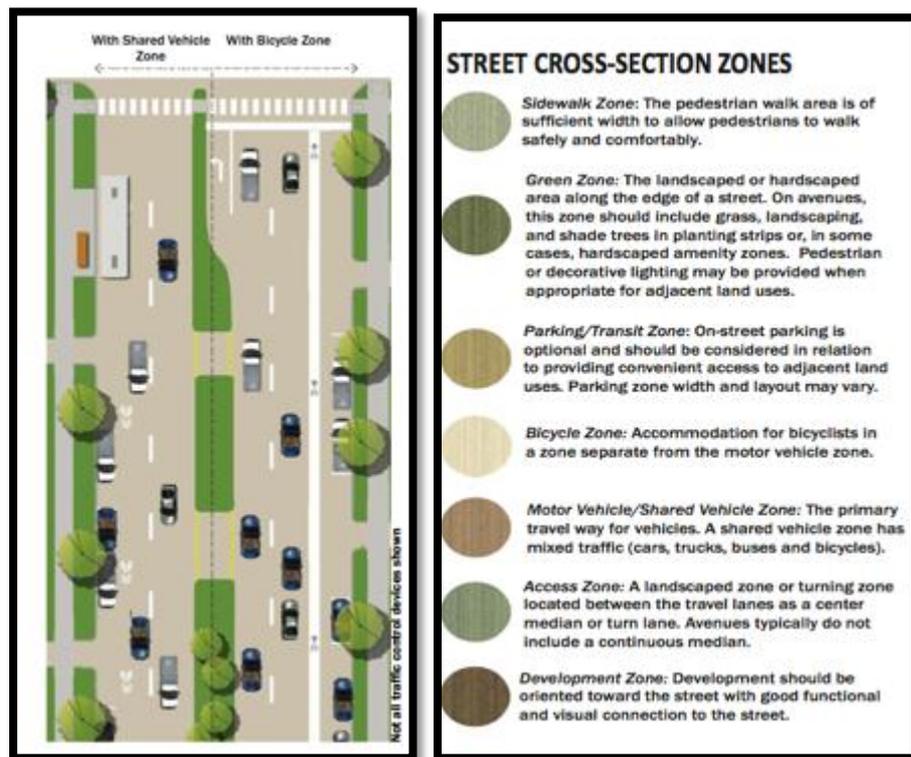


Figure 52: Urban/ Suburban. Avenue Source: Urban Street Design Guide (2012)

**Rural Avenue:** May work as a blood vessel, gatherer or nearby, course, however for the most part at low to direct speeds and volumes. A rural street is serving a scope of movement levels inside and between different region composes. It is described by wide walkways and on-road bike offices and may have on-road stopping. Travel stops, covers and different comforts are located along the roadway, ideally inside the privilege of way (Frederick R. Steiner, 2007).

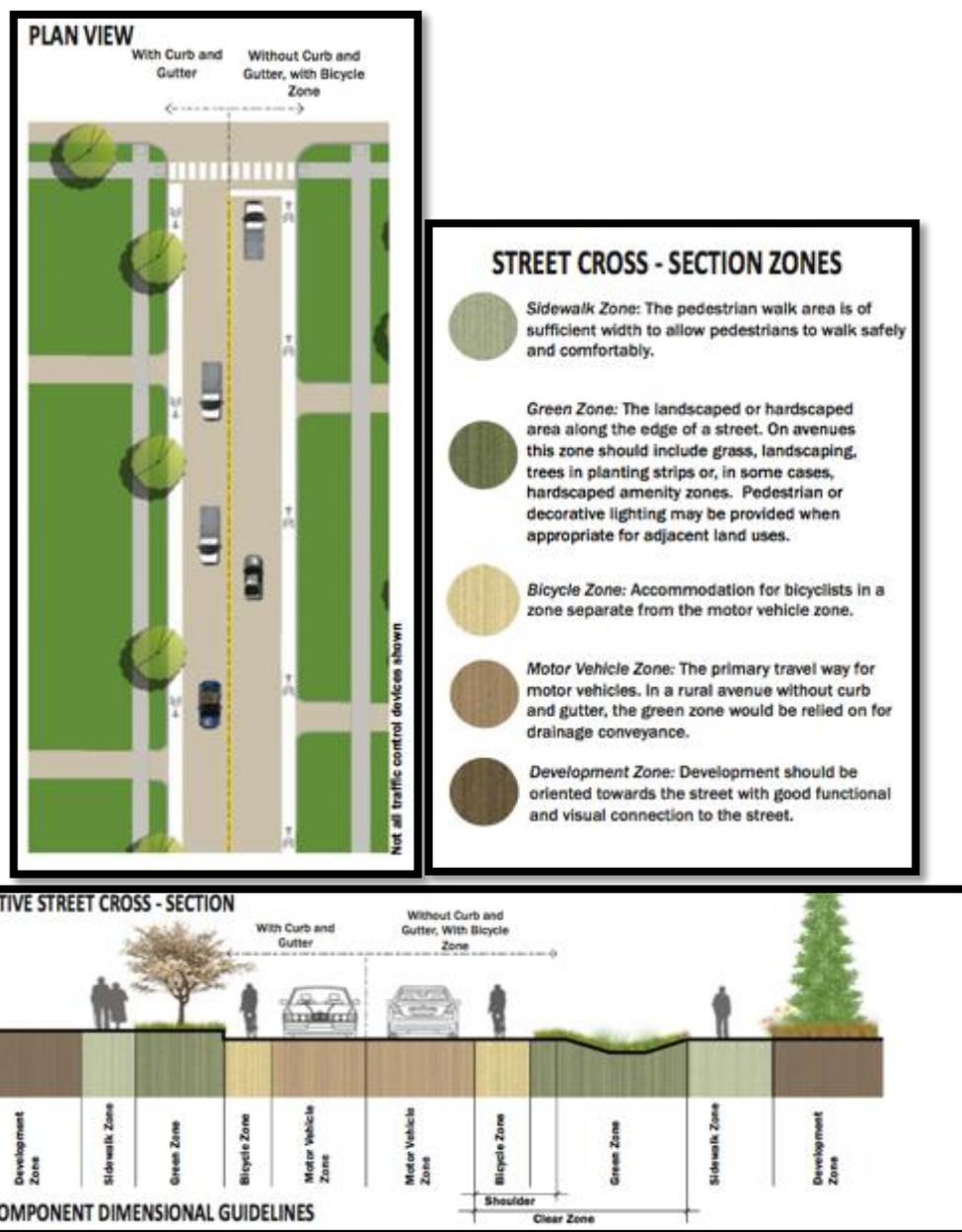


Figure 53: Rural Avenue. Source: Urban Street Design Guide (2012)

**Urban/ Suburban Boulevard:** Frequently works as an arterial intended to convey vehicles at direct speeds. Avenue described by different paths and including a street middle. Wide walkways and on-road bike paths are essential to suit people on foot and bicyclists because of higher velocities and higher activity volumes for engine vehicles. Travel stops and asylums might be situated inside the privilege of way, expecting associations with walkways and on-road stopping isn't required. It is permitted where proper, however uncommon because of the idea of the road. On the off chance that gave, stopping ought to commonly be put on a different, parallel facing road isolated by a side median (Pratelli, 2014).

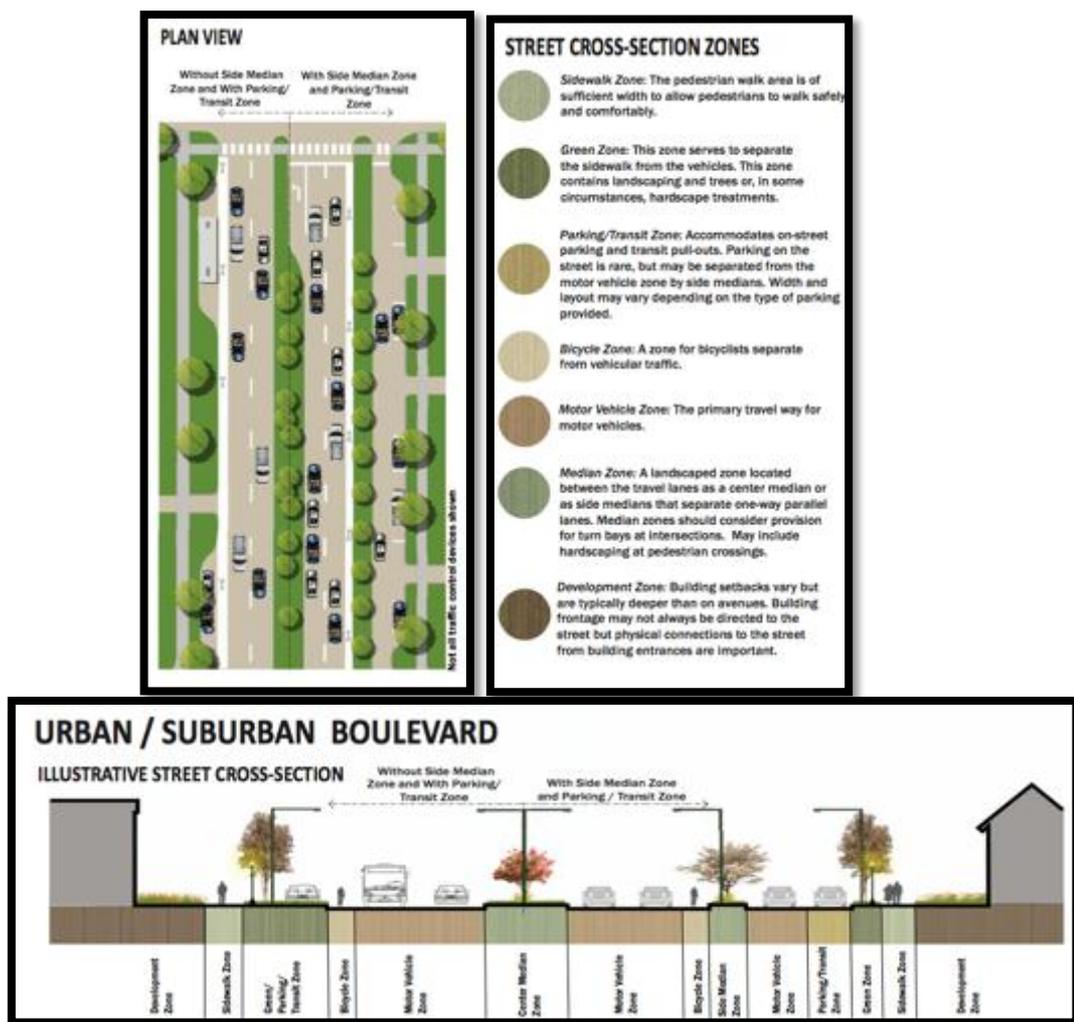


Figure 54: Urban/ Suburban Boulevard. Source: Urban Street Design Guide (2012)

**Rural Boulevard:** Regularly works as an arterial intended to convey vehicles at direct speeds. Avenue described by numerous paths and including a broad middle. Wide walkways and on-road bike paths are essential to oblige people on foot and bicyclists because of higher velocities and higher activity volumes for engine vehicles. Building difficulties will ordinarily be more profound than on roads. "Travel stops and havens might be situated inside the privilege of way, expecting associations with walkways and On-road stopping isn't required. It is permitted where fitting, however uncommon because of the idea of the road, and contiguous land employment (Frederick R. Steiner, 2007) ".

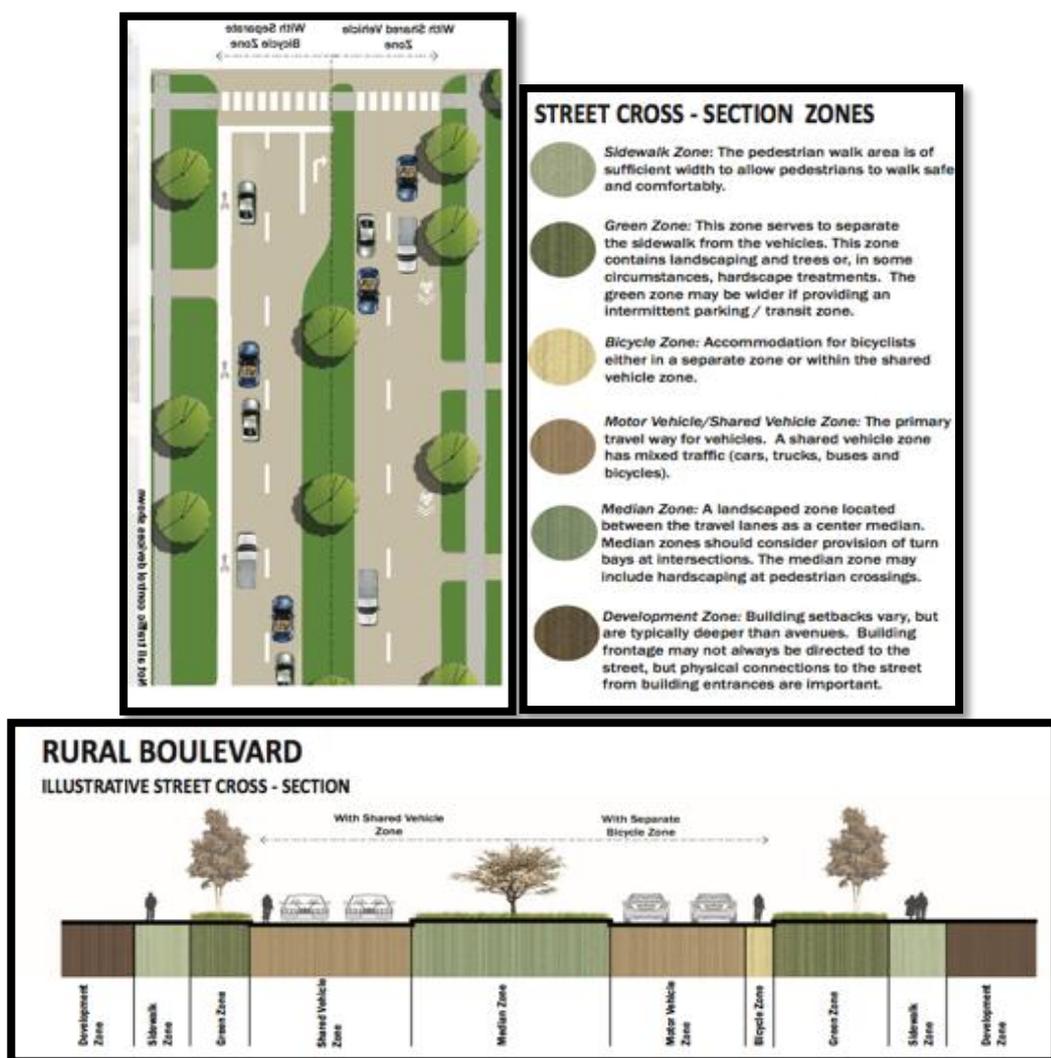


Figure 55: Rural Boulevard. Source: Urban Street Design Guide (2012)

**Urban/ Suburban Parkway:** Frequently works as a arterial outlined with control of access to convey vehicles at direct to high speeds. Urban or rural lane regularly described via arranging or individual plants along roadsides and medians. Land utilizes set once more from the road and is usually not arranged toward the parkway. The person on foot and bike movement typically accommodated on separate multi-utilize ways in a perfect world found neighboring the office. Helpful access to off-road travel stations stops and stop and-ride parcels and trailer, and semitrailer truck activity is often present (Macdonald, 2007).

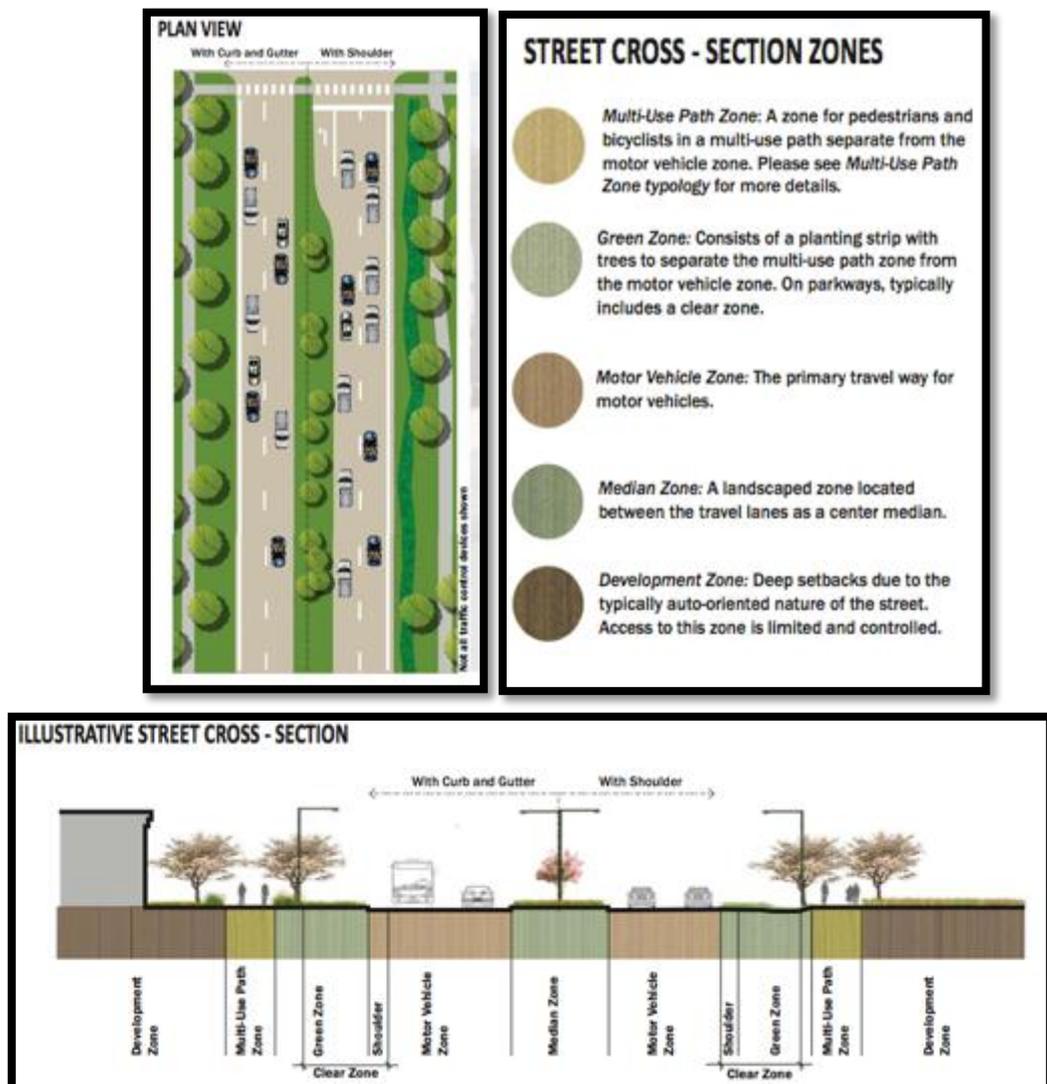


Figure 56: Urban/ Suburban Parkway. Source: Urban Street Design Guide (2012)

**Rural Parkway:** Regularly works as an arterial designed planned for control of access to convey vehicles at direct to high speeds. Rural avenue frequently described via finishing or natural vegetation along roadsides and medians. Land utilizes set once more from the road and is ordinarily not arranged toward the parkway. The person on foot and bike movement usually gave on discrete multi-utilize ways in a perfect world found neighboring the office and advantageous access to on-road travel offices and off-road stations and stop and ride parcels. The substantial truck movement might be available.

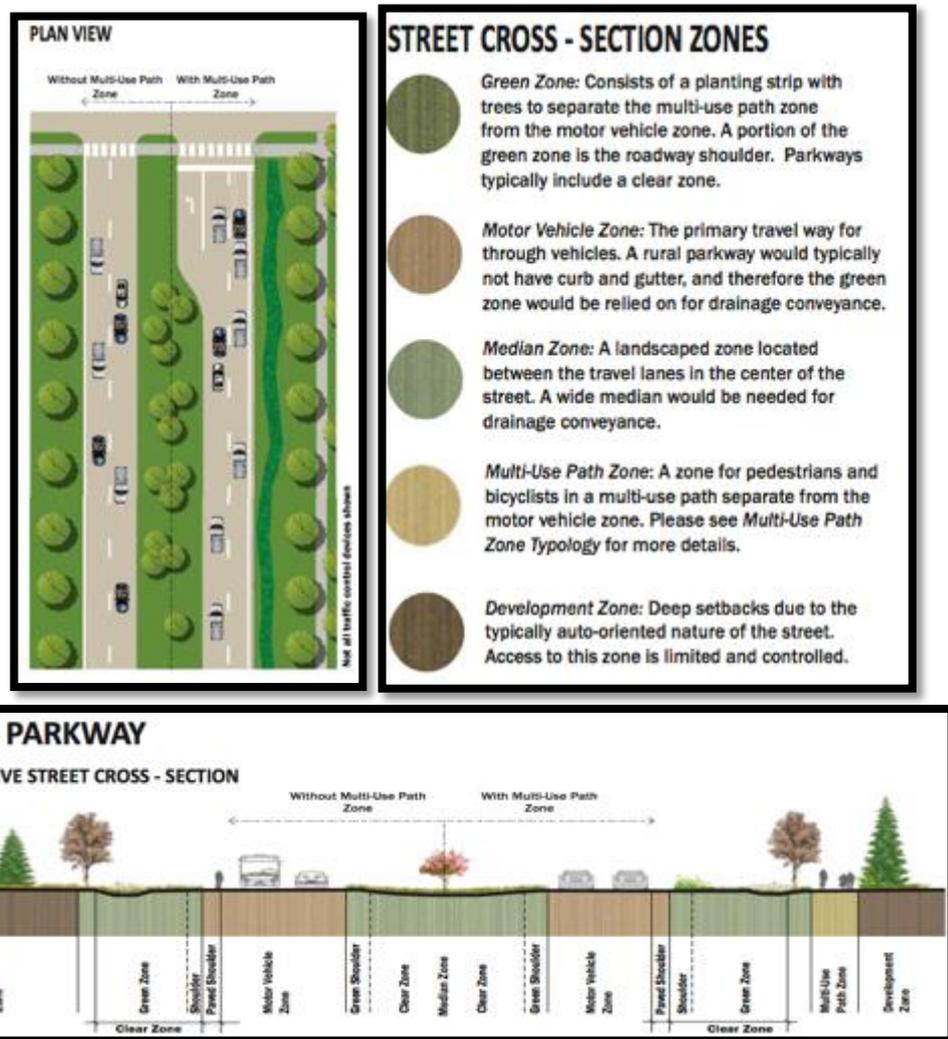


Figure 57: Rural Parkway. Source: Urban Street Design Guide (2012)

**Rural Road** It might be utilized as an arterial, gatherer or neighborhood course, however with an assortment of paces. A street outside of a city and town serving a scope of movement levels in a national setting and cleared shoulders can be utilized to give bikes and people on foot convenience. "Additionally, multi-utilize ways isolated from the roadway might be a suitable treatment for bike and walker facilities". Obliges transport offices including turnouts as proper. Open travel stops and shelter ought to be unmistakably checked and set inside the privilege of way (Officials, 2012).

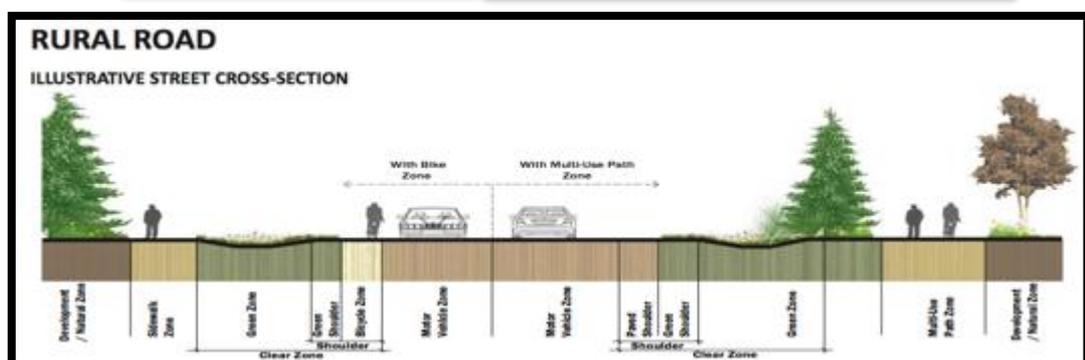
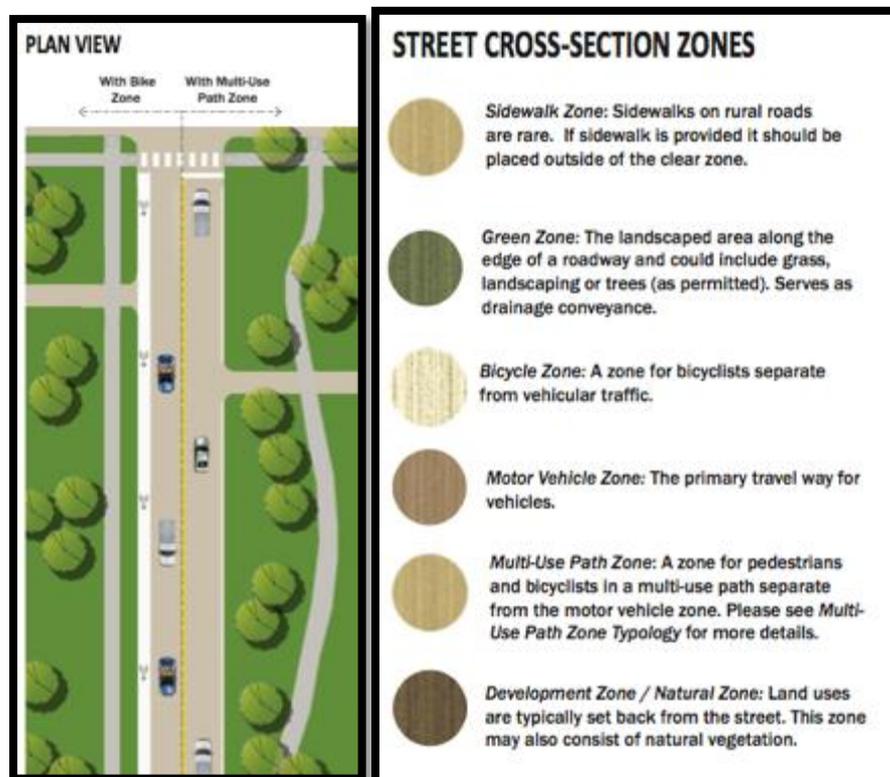


Figure 58: Rural Road. Source: Urban Street Design Guide (2012)

**Multi Use Path:** Multi-utilize way can be given as a component of a turnpike, provincial street or scenic route. Connection multi-utilize ways (particularly scenic route trails) to make associations between homes, stops, schools, and shopping regions. Shade trees are prescribed. Give a green zone of 3'- 6' on either side of the way. Walker lighting ought to be considered in more urban conditions (Charles A. Flink, 2001).

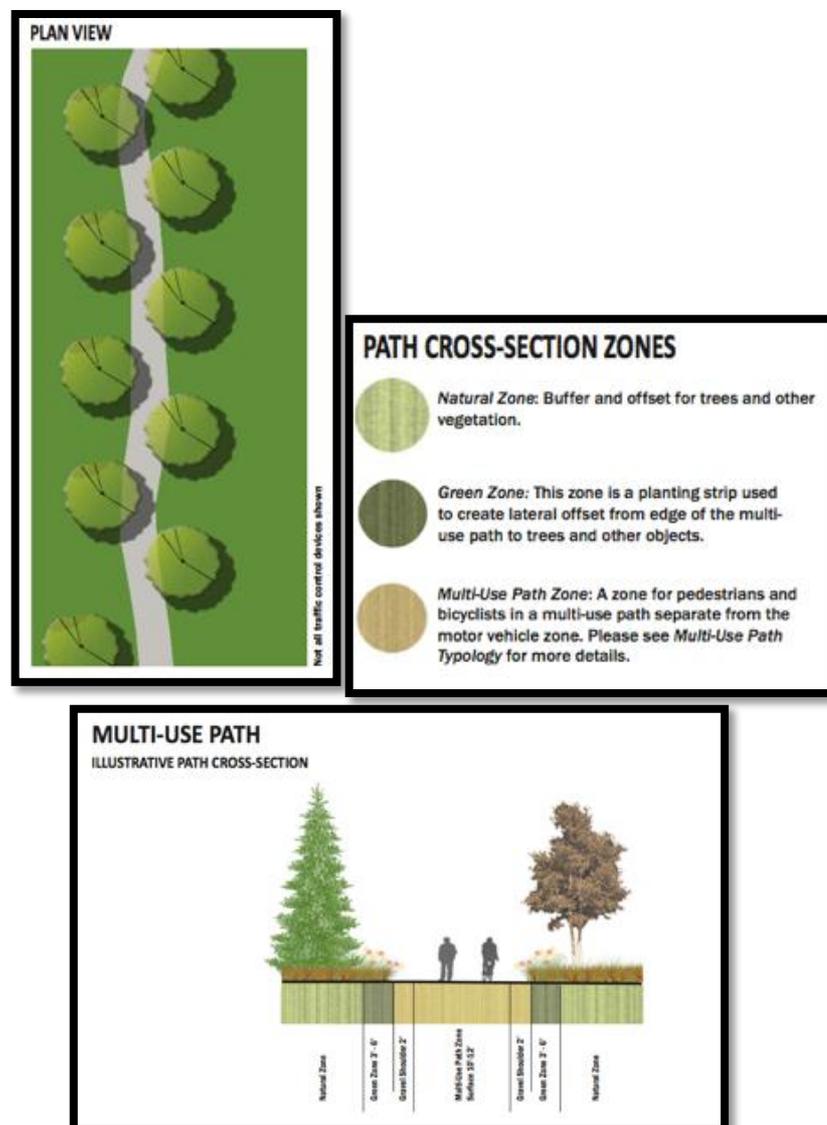


Figure 59: Multi Use Path. Source: Urban Street Design Guide

**Local/ Subdivision Street:** It conveys activity at a low speed and Street inside an area or private improvement giving direct access to arrive utilize. It gives extra linkages and associations inside and to the general road organize. On-road stopping ordinarily happens at various levels relying upon arrive utilize qualities. Stopping interest will influence road width (Officials, 2012). Person on foot action is normal, supported, and to be obliged. Neighborhood roads give essential associations in the bike system and Bike paths are regularly a bit much because of low speed and volumes but rather are permitted.

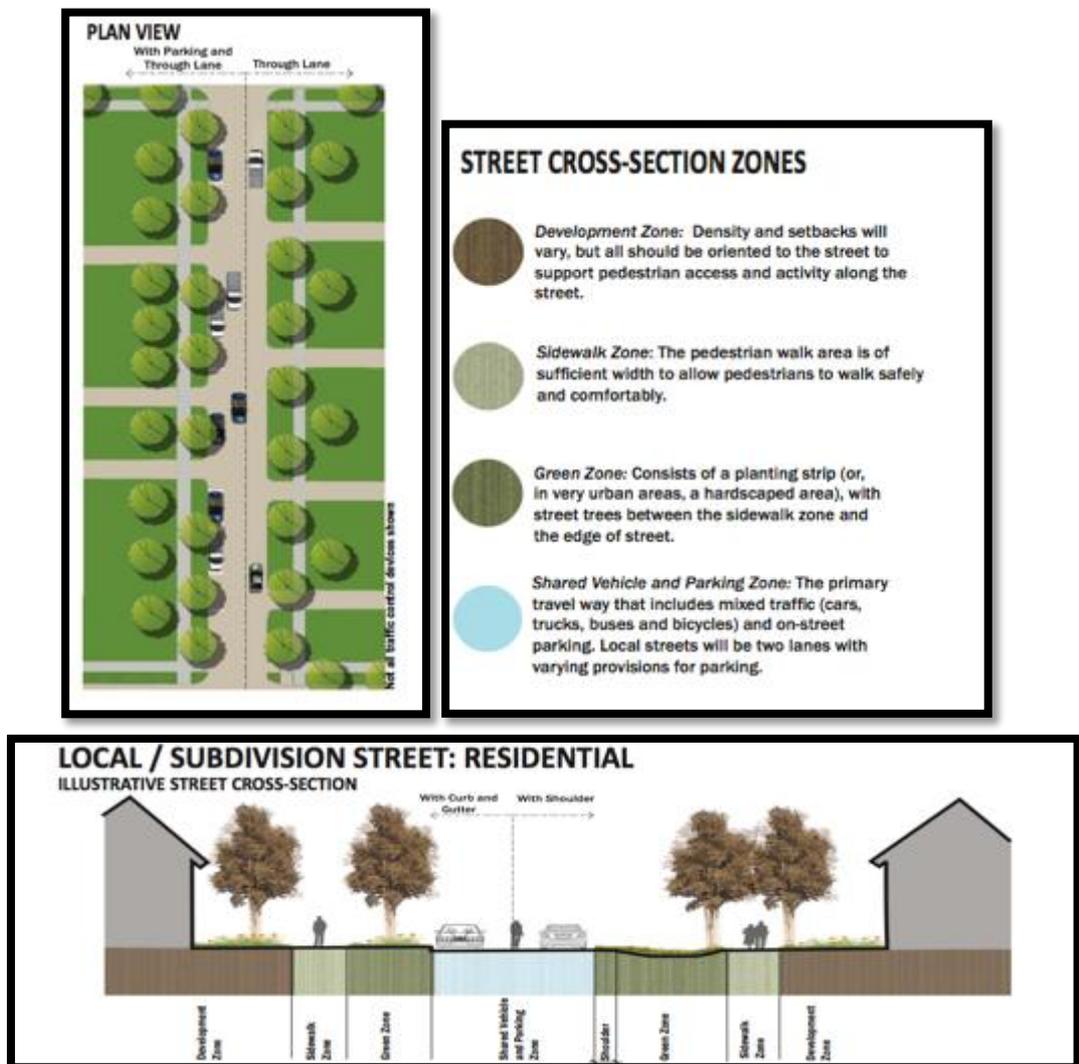


Figure 60: Local/ Subdivision Street (residential). Source: Urban Street Design Guide (2012)

Now and again, nearby roads can fill in as parallel bike or travel course to heavier voyaged lanes.: It conveys activity at a low speed and Street inside an area or private improvement giving direct access to arrive utilize. It gives extra linkages and associations inside and to the general road organize. On-road stopping ordinarily happens at various levels relying upon arrive utilize qualities. Stopping interest will influence road width (Officials, 2012). Person on foot action is normal, supported, and to be obliged. Neighborhood roads give essential associations in the bike system and Bike paths are regularly a bit much because of low speed and volumes but rather are permitted. Now and again, nearby roads can fill in as parallel bike or travel course to heavier voyaged lanes.

**Local/ Subdivision: office, commercial and industrial:** It conveys movement at a low speed. The road was giving nearby access to an adjoining office, business, or mechanical improvement. It provides extra linkages and associations inside and to the general highway arrange. On the road parking regularly happens in spite of the fact that at various levels relying upon arrive utilize qualities. Staying interest will influence road width. In new regions, this can incorporate stopping for bigger vehicles. A person on foot movement is healthy, energized, and to be suited on these roads and bicycle paths regularly not required because of low stopping volumes (Furness, 2010).

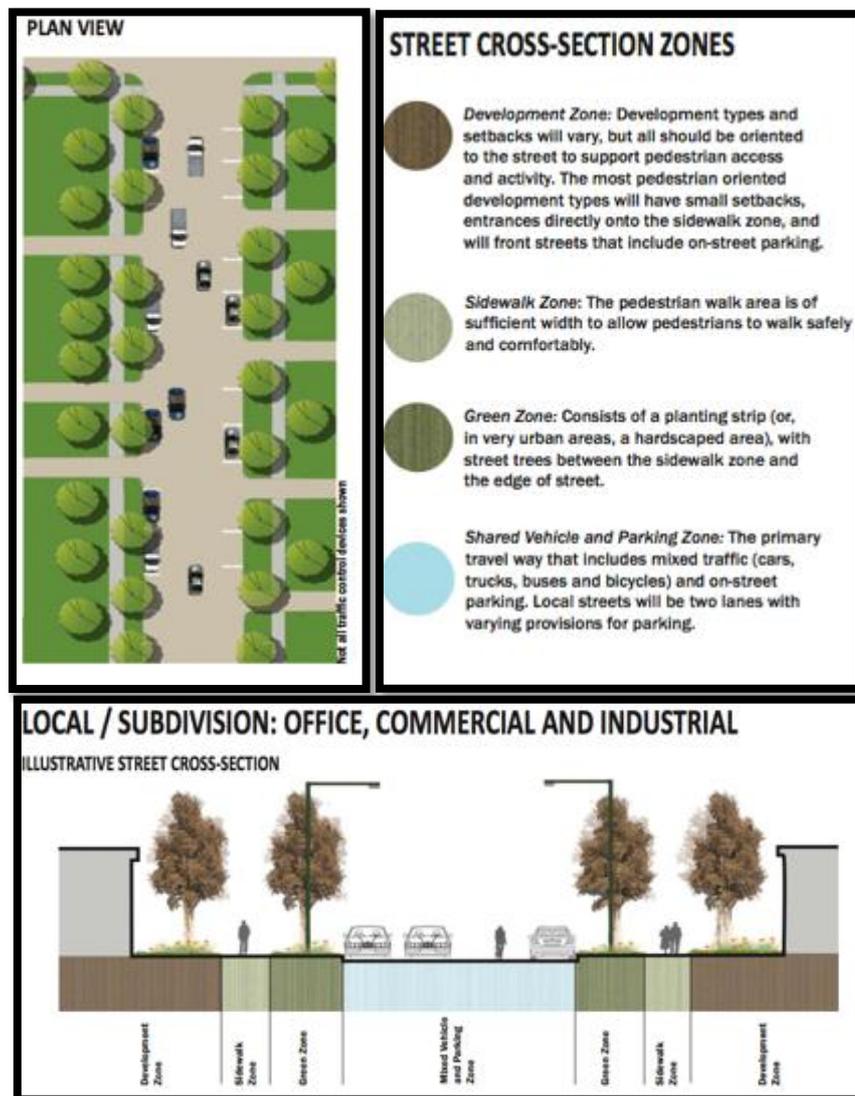


Figure 61: Local/ Subdivision (office, commercial and industrial) Source: Urban Street Design Guide (2012)

#### **2.5.2.4 function of the street**

The practical classification is partitioned into the arterial, gatherer, and neighborhood courses. An arterial usually is a higher volume street serving more extended local outings (and also neighborhood trips), may have high truck volumes, and interfaces with nearby gatherer courses. Neighborhood courses usually convey bring down movement volumes and give access to contiguous land employment. Gatherers interface these two utilitarian streets by "gathering" movement from the nearby paths and passing on it to the arterials. The road composition characterized by these rules additionally depicts a useful grouping, however one that is extended to incorporate practical contemplations for all clients. In this manner, the customary valuable orders portrayed in this segment speak to one kind of valuable outline parameter to be considered in arranging and planning complete avenues.

Streets mostly have more than one functions, and sometimes, some of these functions have conflicts with each other. Designers should consider these functions and character of that area and street (officials N. a., 2000).

Character and function of street classifying with considering the importance of function and duty of that street in the whole city.

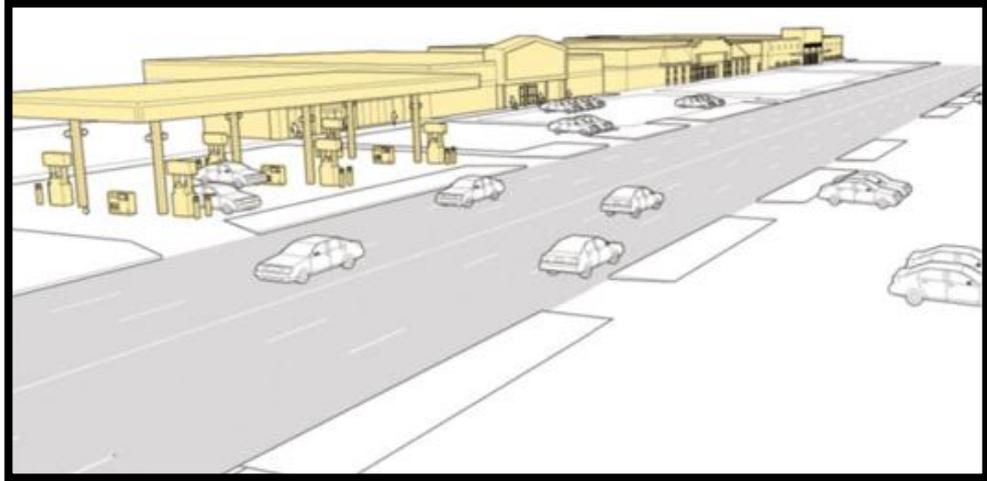


Figure 62: Commercial strip Source: Urban Street Design Guide (2012)

**Commercial strip:** Solitary hallways which could go to numerous conditions inside the urban place were business strip. Each of them had an alternate use design and character. A roadway went through an auto arranged business zone. Yet, an indistinguishable right-of-route from the two avenues beneath, it had.

**Residential boulevard:** Private streets which were a similar right-of-way had an alternate reason since it went through a neighborhood. In this condition, the road in such cases as plantings, on-road stopping and shaded walkways could be utilized (Greed, 2001).



Figure 63: Residential boulevard Source: Urban Street Design Guide (2012)

**Downtown Street:** In the core of the business area, the right-of-way turned into an occupied, brimming with transports, bicycles, autos and people on foot were downtown space.



Figure 64: Downtown Street. Source: Urban Street Design Guide (2012)

**Downtown one way street:** In the mid-20th century, many two-way downtown streets were converted to a one-way operation to streamline traffic operations, reduce conflicts, and create direct access points to newly built urban freeways. Today, many of these streets operate significantly below capacity and create swaths of empty pavement in downtown areas. While many cities are converting these streets back to two-way operation, these broad roadways can be narrowed using cycle tracks and transit lanes, which require less cost and analysis and optimize usage of the street as a public space. The conditions presented in the illustration above are typical of many city streets in the downtown center. Numerous of these streets have been designed for a 15-minute peak period and continue to well below capacity at other times of day (Officials, 2012).

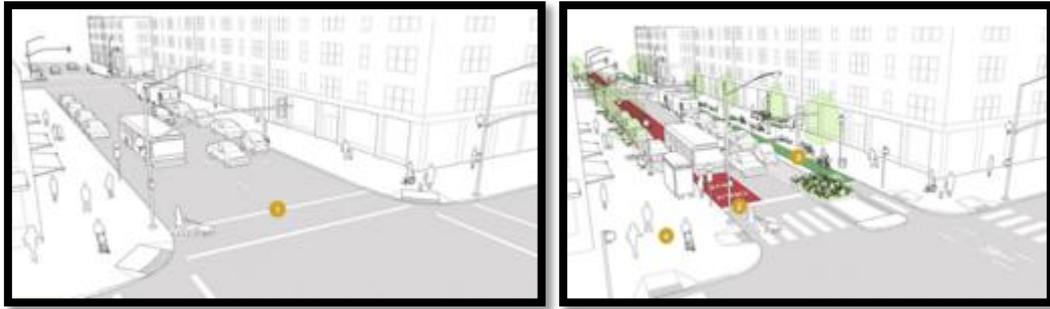


Figure 65: Downtown 1-way street. Source: Urban Street Design Guide (2012)

1- The roads which could bring about higher speeds had the same space and wide travel paths. They were an insufficient utilization of significant road space. Numerous downtown 1-way boulevards had travel paths with additional limit or pinnacle hour confined stopping paths. Riding between quick moving movement and the entryway zone caused bicyclists feel awkward. Bicyclists might make mesh into movement capriciously by twofold stopped vehicles. They would be put into dangerous conditions. These were considered that both the drivers and bicyclists were at danger. A red transport path might be connected at curbside or balance, on downtown road with substantial transport activity. Transport paths which might be infringed upon by twofold stopped autos and stacking vehicles without legitimate implementation required noteworthy authorization. Joining transport paths with transport knobs, asylums and travel flags upon their adequacy should be built. The reasons to decide crest hour paths could be evacuated and changed over to on-road stopping, transport or bicycles paths or extra walkway space were existing movement volumes. Changing over underutilized made a trip paths to have different utilizations. Inside the roadway, they could wipe out potential clashes and enhanced movement tasks.

- 2- Raised cycle or stopping cushioned cycle track which connected on the left half of a 1-way road expelled cyclists with transport activity from potential clashes. A passerby wellbeing island that abated presentation time for people on foot, it made. In a few cases, 2-way cycle tracks could work successfully on 1-path lanes. Where 2-way cycle tracks were introduced, alleviating contra-stream turn clashes by utilizing bike signals, turning confinements and different implies that enhancing imperceptibility and moderating divers turning at the convergence, were considered. As a component of a full recreation, think about enlarging walkways, when they had already been limited for extra travel paths.
- 3- As part of a full reconstruction, consider widening sidewalks, especially when they have previously been narrowed in favor of additional travel lanes.

**Downtown two-way street:** Busy parts of the downtown with two way boulevards which were the most troublesome avenues for urban communities to reconfigure and retrofit were way roads. The ill effects of two-fold stopping and stacking clashes, several of these lanes experienced. They offered inadequate lodging for bicyclists and walkers and had substantial turn volumes. Retrofit compelled 2-way lanes which utilized less path and traditional bicycles paths, they included cycle tracks which diminished the general width and offered a higher quality bike office. A compelled 2-path road in a focal business locale portrayed the above outline, while numerous downtown boulevards to 1-way tasks were changed. On the other hand, many of them which brought about lanes that were vigorously contested by transports, bicycles, individuals and autos, were not. Particularly, these lanes might be the primary course for many modes, in more seasoned urban community's Busy parts of the downtown with two way boulevards which were the most troublesome avenues for urban communities to reconfigure and retrofit were way roads. The ill effects of two-fold

stopping and stacking clashes, several of these lanes experienced. They offered inadequate lodging for bicyclists and walkers and had substantial turn volumes. Retrofit compelled 2-way lanes which utilized less path and traditional bicycles paths, they included cycle tracks which diminished the general width and offered a higher quality bike office. A compelled 2-path road in a focal business locale portrayed the above outline, while numerous downtown boulevards to 1-way tasks were changed. On the other hand, many of them which brought about lanes that were vigorously contested by transports, bicycles, individuals and autos, were not. Particularly, these lanes might be the primary course for many modes, in more seasoned urban communities (Lian Borden, 2002).

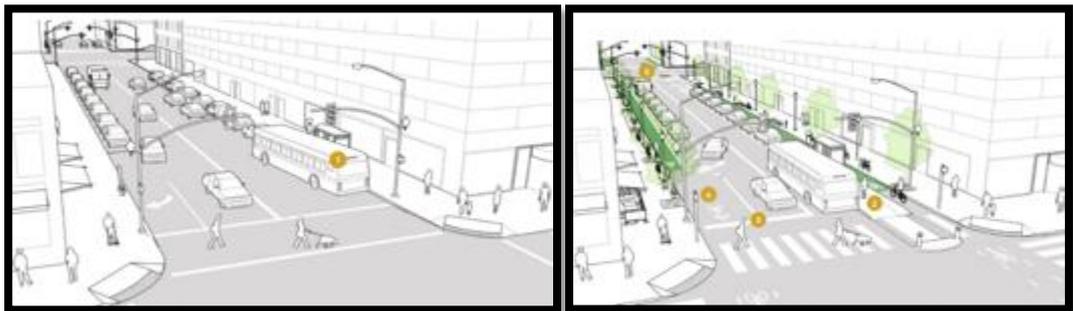


Figure 66: Downtown 2- way street. Source: Urban Street Design Guide (2012)

- 1- Confining cargo conveyance or empowering off-top cargo conveyance is urgent to take out twofold stopping blockage. Off-crest transfers are speedier and savvier and maintain a strategic distance from obstruction of the bicycle path or deferrals to transports and nearby activity. Architects may think about the utilization of vast stopping paths in these conditions.

**Downtown thoroughfare:** Real avenues that join neighborhood focuses or gone through the downtown can be perilous for walkers to About higher speeds and are a

low usage of significant street space. Different downtown one way Streets have travel courses with an additional limit or pinnacle hour bound stopping tracks. Bicyclists feel lumbering riding between active moving development and the suction zone (officials N. a., 2000).



Figure 67: Downtown thoroughfare. Source: Urban Street Design Guide (2012)

- 1- Evaluate left-turn volumes and gauge the general activity system to characterize regardless of whether left turns can be confined or dispensed with at a specific crossing point. Where left turns must be safeguarded, consider part was staging choices that give a committed left-turn stage.
- 2- A stopping cushioned 1-way cycle track, connected on each side of the road, offers a top-notch understanding to bicyclists.
- 3- The cycle track may likewise be joined with a balanced transport boarding island and different pleasantries that improve operations for people on foot and travel clients.

**Neighborhood main street:** Neighborhood fundamental avenues are an association of neighborhood life, with high walker volumes, numerous stopping turnover, key travel courses, and bicyclists all competing for restricted space. Principle road

configuration should constrain activity speeds and furnish a smaller profile with visit, superb passerby intersections. As of late, numerous principle boulevards have been essentially created through street eats less carbs and the change from four to three (or six to five) paths of movement with bicycle paths and a middle turning path or middle. The representation above portrays a primary road with four paths of movement. With medium movement volumes and high passerby action, the road has huge potential for recovery as a retail locale, yet as of now fails to meet expectations for the individuals who shop, eat, and stroll there (Officials, 2012). Visit goals have brought about numerous turning and weaving clashes along the road. 4-lane configurations have been shown to increase rear-end and sideswipe vehicle crashes and pose a higher pedestrian crash risk.

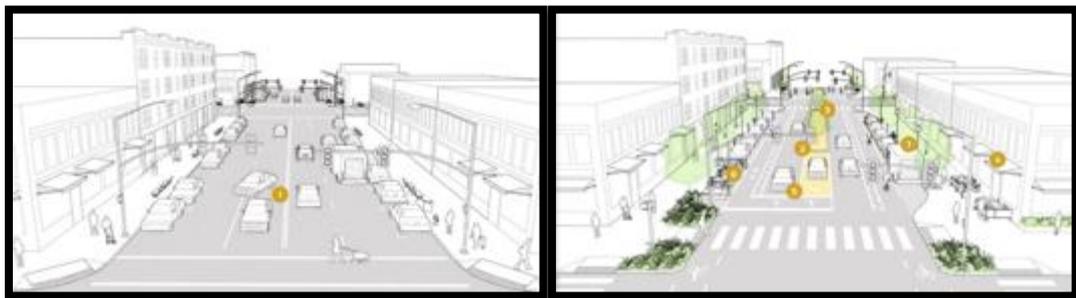


Figure 68: Neighborhood main street. Source: Urban Street Design Guide (2012)

- 1- Turn paths can lessen weaving clashes on four-path streets. In the representation over, a six-foot passerby wellbeing island can be held in the above arrangement by tapering the bicycle path cushion close to the crossing point and moving the through paths to one side.
- 2- The utilization of a street eating regimen might be completed in two stages, the primary comprising exclusively of striping and a middle turn path, and the

second, of medians and plantings to supplement the inside path.

- 3- From a monetary perspective, street weight control plans normally rank positively with entrepreneurs and positively affect nearby business action
- 4- Bike boxes enable cyclists to perform left or right turns by setting them before movement at the red light. On boulevards which have higher movement volumes, cyclists may influence a two-phase to turn.
- 5- Park lets are perfect for principle neighborhood lanes with dynamic customer facing facades, substantial pedestrian activity, and heaps of retail movement. Boulevards with both substantial cargo and stopping request, and also on-road bicycle paths, advantage from committed stacking zones close to the convergence. Stacking zones help lessen deterrent of the bicycle path and make conveyances less demanding for organizations. Stacking zones can be stripped and marked, or overseen for off-crest conveyances (Official N. a., 2003).

**Neighborhood street:** Local streets in the residential neighborhoods are usually underutilized as spaces for play and leisure. These streets should provide safe and inviting places to walk with direct access to local stores and schools. Design for local streets can combine stormwater management features, curb extensions, vertical speed control elements, and bicycle facilities that encourage safe speeds and meter through traffic (Kellet, 2005).



Figure 69: Neighborhood street. Source: Urban Street Design Guide (2012)

- 1- On 1-way neighborhood streets, travel lanes may be striped to narrow the width of the roadway. A similar traveled way supports higher speeds. It has been shown that as lane width increases, crash rates have been shown to increase as lane width increases.

**Yield street:** Two-way yield lanes are reasonable in private conditions where drivers are obliged to movement at low speeds. Numerous yield lanes have critical off-road stopping arrangements and on-road stopping use of 40– 60% or less. Make a "checkered" stopping plan to build the usefulness of a yield road. For an effective function of a yield street, motorists should be capable of using the street intuitively without risk of head-on collision. The configuration of the yield street may be different depending on whether the yield street has high or low parking utilization, flush curbs, or other features. A yield street which has parking on both sides functions most efficiently at 24–28 feet, while yield streets with parking on just one side can be as narrow as 16 feet (Tumlin, 2012).

- 1- Every private road ought to have protected and satisfying spots to walk and excellent access to nearby stores and schools. Configuration should diminish the impacts of carport clashes, decrease slice through activity, and keep up ease terminal velocities helpful for movement security.
- 2- Carports ought to be developed to limit interruption upon the walkway. Keep up walkway materials and grade crosswise over carports.
- 3- The planted furniture zone of the walkway makes open doors for road trees, bioswales, previous strips, and rain gardens.
- 4- While most yield lanes ought to have at least signage and striping, signage ought to be utilized to demonstrate bidirectional movement at progress focuses or where a 2-way operation has as of late been presented. "Stopping usage on yield roads ought to be checked nearly. When change, urban areas ought to counsel with occupants to see regardless of whether a "checkered" stopping plan ought to be stripped or stay informal".



Figure 70: Yield street. Source: Urban Street Design Guide (2012)

**Boulevard:** Avenues break huge lanes into a level with urban zones and shield the private or business road edge from the fast throughway utilizing multiway operations and facing streets. Various paths were worked at the turn of the twentieth century, however, fell into rot or were updated to interstate gauges through the span of the century. Today, numerous urban communities are reestablishing these lanes to their previous loftiness or applying refreshed avenue plan measures to overbuilt urban arterials (Macdonald, 2007).



Figure 71: Boulevard. Source: Urban Street Design Guide (2012)

**Residential boulevard:** Expansive memorable lanes and roads usually work as fast lanes, despite the fact that their neighboring area uses might be fundamentally private. By and large, these pathways have an overabundance width, underutilized on-road stopping, and an excessive number of travel paths. Retrofit private avenues by growing or actuating the middle, including curbside or left-side bicycle paths, 1 and check augmentations that give guide access from homes to the Focus middle. The representation above portrays a broad private avenue in a more established neighborhood. The focal center is underutilized. While activity volumes may not be high, speeds are, making expressway like conditions in a prevalently local location (Macdonald, 2007).

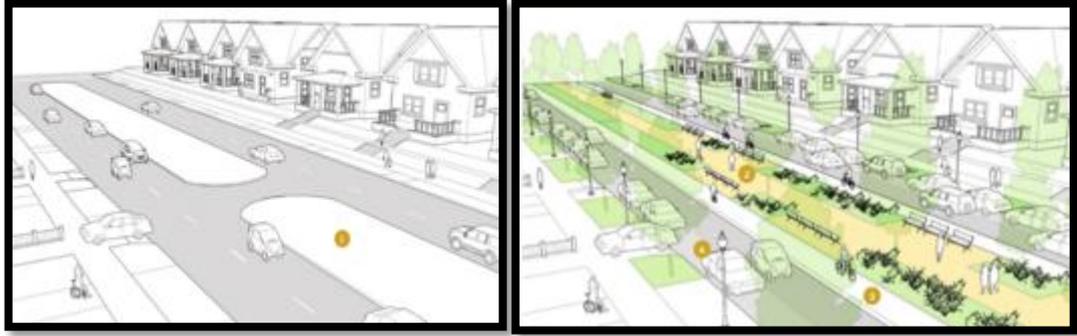


Figure 72: Residential boulevard. Source: Urban Street Design Guide (2012)

Many historical central medians are underutilized and lack recreational space. High-speed crossings cause difficulties for residents and children to access the median safely. 1- Parkways and boulevards provide natural links in an active transportation network, but many of them lack safe and sufficient paths for recreational use. Parking requirement and usage may vary depending on the amount of off-street parking available to residents. Activate the central median with plantings, street trees, walkways, and seating. Broad fundamental norms can become a community focal point as well as an active space for recreation, exercise, and leisure. Provide curb extensions and midblock crossings to make it safer and more comfortable for residents to access the median.

A raised cycle track takes advantage of the central right-of-way, avoids frequent conflicts with driveways and double-parked cars, and effectively expands the amount of recreational space along the corridor. It is essential to provide curbside parking for residents. Curbside parking gives access to the recreational median for visitors. They provide space for residents' guests to park, and narrows the overall cross-section of the road, strengthening its residential character. Where on-street parking remains underused, consider adding curb extensions, bicycle corrals, or expanding the sidewalk to take advantage of the excess pavement.

**Transit corridor:** Solitary hallways which could go to numerous conditions inside the urban place were business strip. Each of them had an alternate use design and character. A roadway went through an auto arranged business zone. Yet, an indistinguishable right-of-route from the two avenues beneath, it had. Private streets which were a similar right-of-way had an alternate reason since it went through a neighborhood. In this condition, the road in such cases as plantings, on-road stopping and shaded walkways could be utilized. Downtown Street: In the core of the business area, the right-of-way turned into an occupied, brimming with transports, bicycles, autos and people on foot were downtown space. Solitary hallways which could go to numerous conditions inside the urban place were business strip. Each of them had an alternate use design and character. A roadway went through an auto arranged business zone. Yet, an indistinguishable right-of-route from the two avenues beneath, it had. Private streets which were a similar right-of-way had an alternate reason since it went through a neighborhood. In this condition, the road in such cases as plantings, on-road stopping and shaded walkways could be utilized (Official N. A., 2003).



Figure 73: Transit Corridor. Source: Urban Design Guide (2012)

Travel hallway retrofits ought to be facilitated with arrive utilize changes to boost a passage's potential for financial development and physical change. Mishap rules and other land use directions ought to be acclimated to make a walker scale condition.

A raised cycle track on the two sides of the passageway advances the mix of bike and travel use. A middle running 1-way or 2-way cycle track might be ideal now and again to decrease the threats of handing clashes over blend with travel. Implementation measures ought to be introduced to control infringing vehicles from utilizing the committed transport paths. Now and again, middle travel paths may fill in as a course for crisis vehicles (officials N. a., 2000).

Passageways with high travel movement, where twofold stopping and nearby activity posture hindrances to productive travel, ought to be considered for BRT, LRT, or streetcar. Excellent travel administration and middle travel paths diminish clashes amongst transports and through movement on overwhelming travel courses, can speed travel times, and fortify the attractive quality of travel as a choice. Wide travel hallways are trying to cross in a single cycle. Consider the tradeoffs between shortening signal cycle lengths and giving adequate time to all people on foot to cross the road.

Off-barricade toll accumulation speeds travel vehicles and lessen sit tight time for travelers. Travel flag need gives transports. Also, light rail more green time and ought to dependably be utilized as a feature of BRT or LRT operations. A side-running transport, streetcar, or light rail framework might be predominant when adjacent land uses are hugely weighted toward one side of the passageway (officials N. a., 2000).

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**Green alley:** Most of the residential alleys have low traffic and infrequent repaving cycles which result in back roads with potholes and puddling that are unpleasant or unattractive. Green alleys use sustainable materials, pervious pavements, and effective

drainage to create an inviting public space for people to walk, play, and interact.



Figure 74: Green alley. Source: Urban Street Design Guide (2012)

1. Construct green alleys with low-impact pavement materials, such as pervious pavements with high reflectivity to decrease heat island effects.
2. Backstreets might be filled in as passerby just situations or as shared lanes. Utilize bollards, signs, and configuration includes that give clear the planned back road clients. Backroad greening and support might be set up and made by occupants or neighborhood associations.
3. To abstain from puddling, stormwater run-off ought to be attacked set up utilizing porous clearing or rain gardens along the edge of the foot-voyager way.
4. To keep a safe domain, greenback streets ought to have sufficient lighting. Person on foot scale light apparatuses that concentration their enlightenment toward the ground

What's more, limit light contamination is prescribed? Open wellbeing is of preeminent worry for all new and existing rear ways. Great lighting is an

essential to a feeling of open security in back roads.

5. Greenback roads regularly run parallel to the enormous road arrange, influencing them perfect low-speed, with low volume joins for cyclists. Rear ways give coordinate property get to and take out the requirement for carports along significant streets where individuals are strolling and biking. Think about the utilization of back alleys in every single new advancement and remodels to existing properties. Greenback roads may introduce certain capricious support obligations. Usage of finished asphalts and different materials might test to existing road sweepers and snowplows. Like shared avenues, back streets may profit by the use of snowplow suitable materials and arrangements for upkeep gear get.

**Commercial alley:** Business rear ways, yet for the most part thought of as messy or risky, can be intended to assume a central role in a downtown road organize and enhance the person on foot domain in and around business territories. The outline of business back streets should endeavor to adjust their major utilitarian highlights with



Figure 75: Commercial alley. Source: Urban Street Design Guide (2012)

their placemaking potential. Crossing points amongst back roads and walkways can square permeability for the vehicle.

What's more, passing people on foot. It is vital to raise the convergence to the walkway review and add roll strips to diminish these permeability issues. Cautioning signs ought to be given to advise people on foot of infringing movement. Cargo may utilize green back roads for stacking and emptying, which lessens twofold stopping on neighborhood lanes (LLAN B. Jacobs, 1959).

- 1- Where access for vehicles is prohibited or minimal, commercial alleys may be constructed using low-impact pavement materials, such as pervious or modular paving.
- 2- Bicycle traffic may use commercial alleys. Similar regulations as for those of shared space should be implemented. Commercial alleys can be restricted for traffic during non-delivery hours for outdoor seating or other uses. Where vehicle access is allowed, alleys should be managed to provide smooth access by trucks and other freight vehicles. Bollards and other street furniture should be designed to lessen conflicts with freight movements. In some cases, freight may be carried using hand trucks or small vehicles. In these situations, careful attention should be paid to the place of curbs and the access from loading zones to entrances to assure smooth deliveries.

**Residential shared street:** Low-volume private lanes, especially in more seasoned urban areas, for the most part, have limit or falling walkways. Huge numbers of these lanes fill in as shared spaces in which youngsters can play, and individuals walk, offering the roadway to drivers. Contingent upon their volume and part in the rush

hour gridlock arrange these roads can be upgraded and enhanced as shared lanes. Shared avenues can satisfy the requests of neighboring inhabitants and capacity premier as an open space for entertainment, mingling, and recreation. The private road appeared in the above outline is normal and regular in neighborhoods with low movement volumes. Here, the arrangement of the road organize has made a road section that capacities as a place for youngsters to play and as a social affair put for occupants (officials N. a., 2000).

Several low-volume residential streets in the United States were designed without sidewalks. Most of these streets have poor access and low volumes, enabling them to operate informally as shared spaces. Cities should aim to maintain low speeds and volumes on these streets, reinforcing their shared nature through materials and targeted design enhancements.

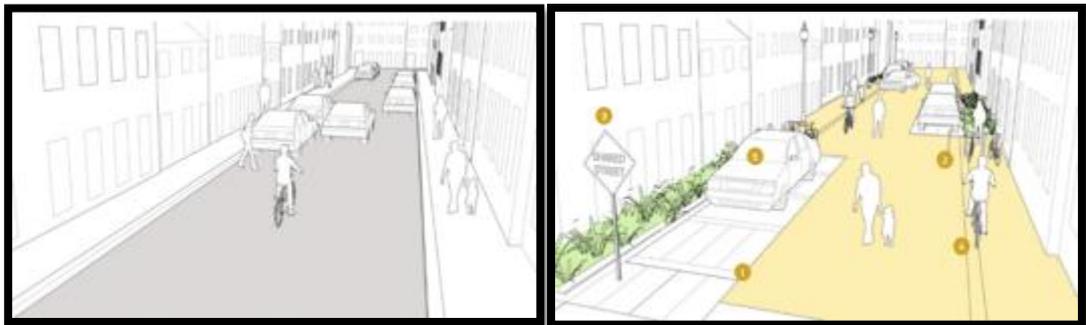


Figure 76: Residential shared street. Source: Urban Street Design Guide (2012)

1. Textured or pervious pavements that are flush with the curb strengthen the pedestrian-priority nature of the street. Special pavements, especially unit pavers, may be subject to additional maintenance costs and should be selected based on regional climate and long-term durability. Selection of snowplow-compatible materials is suggested for colder climates. Depending on

underground utilities and other conditions, drainage channels should be planned at the center of the street or along the flush curb.

2. Street furniture, including bollards, benches, planters, and bicycle parking, can help to define a shared space, subtly outlining the traveled way from the pedestrian-only space.
3. A shared street sign should be used at the entrance to a shared street. Provide warning strips at the entrance to all shared spaces. These warning strips should warn drivers and walkers.
4. Shared streets generally permit motorists and bicyclists to operate in a two-way manner. Narrower shared streets may be made 1-way for motorists, though 2-way bicycle traffic should still be allowed. Certain restrictions and regulations may be implemented for vehicles on a shared street. Designers should aim to make these behaviors implicit through designing details of the street itself.
5. On wider shared streets, staggered blocks of landscaping, head-in parking, back-in angled parking, or perpendicular parking can be utilized to create a chicane effect. In some cases, parking may be permitted directly adjacent to properties in a residential environment. Bollards, paving materials, and street furniture help to define parking spaces and to delineate private from public space. Depending on the right-of-way, designers may consider providing a 3–5-foot clear path, protected from traffic. The clear path may be defined using planters, bollards, and street furniture, as well as detectable warning strips or textured pavers. For narrower shared streets and alleys, use of a clear path is discouraged.

**Commercial shared street:** Numerous narrow or crowded downtown streets serve informally as shared streets during rush hour or at lunchtime but are not organized as such. It is essential to consider a commercial shared street environment in places where pedestrian activity is high and vehicle volumes are low. Commercial shared avenues can be made arrangements for restricted or wide cross segments, yet end up confused and difficult to keep up as a mutual space while width increments. From 1960– 80, numerous area primary lanes and downtown retail hallways were changed to person on foot just utilization. These transformations were typically called "walker shopping centers." In the time of declining downtown retail incomes by reason for rivalry from strip mall advancements outside of memorable centers, a significant number of these changes were unsuccessful or experienced poor upkeep and an absence of programming or policing. Business shared roads vary from this prior age of person on foot shopping centers in both their control and execution. Shared avenues keep up access for vehicles working at low speeds and are intended to allow simple stacking and emptying for trucks at assigned hours. They are intended to verifiably moderate activity speeds utilizing walker volumes, outline, and different prompts to moderate or redirect movement. The road in the rendering above is a regular sight in numerous more established urban areas where downtown business lanes may originate before more extensive lattice avenues. In more current urban communities, a retail region with substantial stopping use and thin, congested walkways may have comparative conditions or openings.

1. Textured or pervious asphalts that are flush with the curb reinforce the person on foot need nature of the road. Uncommon asphalts, particularly unit pavers, might be liable to extra support costs and ought to be chosen in light of

provincial atmosphere and long haul toughness. Determination of snowplow-good materials is proposed for colder atmospheres. Contingent upon underground utilities and different conditions, seepage channels ought to be arranged at the focal point of the road or along the flush check, (authorities N. a., 2000). Road furniture, including Two bollards, seats, grower, and bike stopping can characterize a mutual space, unpretentiously illustrating the voyaged route from the person on foot just area.

2. A common road sign ought to be utilized at the passage to a mutual road. In some cases, a modified Yield to pedestrian sign may be added to strengthen the change in beginning periods. "Give cautioning strips at the passage to every single shared space. These notice strips ought to caution drivers and walkers".
3. Shared avenues by and large allow drivers and bicyclists to work in a two-manner way. Smaller shared roads might be made 1-way for drivers, however 2-way bike activity should at present be permitted. Certain confinements and directions might be actualized for vehicles on a mutual road. Fashioners should intend to make these practices understood through outlining subtle elements of the road itself.
4. On more extensive shared avenues, amazed pieces of arranging, head-in stopping, back-in calculated stopping, or opposite stopping can be used to make a chicane impact. Now and again, stopping might be allowed straightforwardly contiguous properties in a private situation. Bollards, clearing materials, and road furniture help to characterize parking spots and to

depict private from open space. Contingent upon the right-of-way, planners may consider giving a 3– 5-foot clear way, shielded from movement. The reasonable way might be characterized utilizing grower, bollards, and road furniture, and in addition perceivable cautioning strips or finished pavers. For smaller shared lanes and back streets, utilization of an unmistakable way is demoralized (Meredith, 2012).

### **2.5.3 Parks**

Parks and open space refer to land that has been reserved for the purpose of formal and informal sport and recreation, preservation of natural environment, provision of green space and urban stormwater management. Parks and open space differ in size, form and the function that they perform. A strategic approach is required in evaluating the needs of a community and planning an open space is usually categorized into a hierarchy of neighborhood, district and regional open space and can be utilized for either passive or active recreation (Ageing, 2009).

#### **2.5.3.1 Types of parks**

The International Federation of Parks and Recreation Administration (IFPRA) defines urban parks as “delineated open space areas, mostly dominated by vegetation and water, and generally reserved for public use. Urban parks are mostly larger, but can also have the shape of smaller ‘pocket parks’.” An urban park is also known as green space because it provides some trees, grass or plants in an area that is otherwise composed of concrete and steel and is accessible to the public. Its amenities can be highly variable. Larger urban parks may provide recreation options, including sports fields, playgrounds, amphitheatres, event spaces and swimming pools. Smaller ‘pocket parks’ may provide only a bench and limited vegetation. The main purpose of public parks in cities is to provide a relaxing outdoor space as well as spaces for walking or

other physical fitness activities. Local or city governments usually administer urban parks. Contemporary parks and open-space planning focus on creating systems that respond to local values, needs, and circumstances. The region of the country, physical setting, landscape features, demographics, and socioeconomic characteristics are all determining factors in the form that a community's park and the open-space system will take. In each system, parks and open spaces are defined under various classifications that function individually and collectively to create a cohesive and balanced system.

Successful parks and open-space systems are often planned around distinguishing landscape features or local themes that exhibit the unique qualities of a community. The "city as a park" concept is a common theme, whereby parks and open spaces are key factors in shaping the built form and character of a community. Perpetuating an interconnected latticework of parks, natural open spaces, and trails throughout the community is another theme. Common to all systems is the notion of creating a high-quality living environment through the provision of parks, open spaces, trails, and recreational amenities (Frederick R. Steiner, 2007).

With such a broad spectrum of potential applications, the classifications for parks and open space are necessarily flexible and adaptable to the unique circumstances to which they are applied. Local needs and circumstances determine the extent to which one type of park versus another is found within a system. In a metropolitan system, emphasis on neighborhood parks, parkways, and large urban parks is common in response to the urban form and distinctiveness of individual neighborhoods. In an outer-ring suburban area rich in natural resources, creating an interconnected system of greenways, parks, and trails may be the desired vision (Frederick R. Steiner, 2007).

A typical park and open-space system consist of a variety of parks and open spaces defined under various classifications. The classifications presented here are based on consolidating generally accepted professional practices used across the country. They are meant to be guidelines, not rigid standards. Each community must refine and apply them to suit its specific needs. The table provides an overview of the classifications for a typical local park system. Additional references for park and open-space classifications include the National Park, Recreation, Open Space and Greenway Guidelines, published by the National Recreation and Park Association (1995).

**Park school:** The park school grouping relates to class locales utilized as a part of the show with or set up of, different classes of parks to meet group stop and amusement needs. By and large, these destinations are most appropriate for youth athletic offices for both school region and group-based recreational projects. Stop school locales likewise frequently give the dominant part of indoor recreational positions inside a group (Frederick R. Steiner, 2007).

To a lesser degree, school destinations can likewise be utilized to benefit neighborhood stop needs. The restricting element is that the vast majority of these targets are intensely modified for practical uses and school structures. This frequently leaves little space to oblige neighborhood-centered comforts and make a tastefully pleasant setting that would attract families to the site.

- For new development, size varies for park-school sites, with 20 acres (8.1 hectares) being the typical minimum. Sections of 40 acres (16.2 hectares) or more are preferred because the school buildings and parking can consume considerable space. Acreage can be reduced considerably in already developed areas through the use of multi-story

schools and on-street parking.

- Service area ranges from several neighborhoods to communitywide, depending on the facilities provided. The location is almost always determined by the school district, especially in cases where the district boundaries encompass more than one community.
- A variety of landscape planting is desirable, although these sites tend to be inherently utilitarian.
- Good road access is important.
- Connection to the larger community and neighborhoods via trails or sidewalks is desirable.

The design for park-school sites is driven first by the needs of the school district, with most of the facilities designed to accommodate physical education and sports programs. The facilities provided at school sites are most often consistent with the youth athletic complex and neighborhood park classifications. Local cities often partner with local school districts to avoid duplication of facilities and to leverage public capital investments. In many cases, the school district provides the land and basic facilities, and the local community funds improvements to the quality of the facilities.

Well-defined joint use agreements between the community and school district are essential to making these partnerships mutually successful (Frederick R. Steiner, 2007).

**Private park/ recreation facility:** The private park/recreation facility classification covers a broad range of nonpublic parks and recreation facilities. This includes facilities such as golf courses, fitness clubs, museums, private courtyards,

amphitheaters, horse-riding stables, water parks, and miniature golf courses and this classification is provided as a means to acknowledge the contribution that a given private facility has to the public parks and open-space system within a community. The development of private parks and recreation facilities is driven by local demand and business opportunities.

**Youth athletic complex facility:** Youth and community athletic complexes unite athletic offices to vital areas inside a community to exploit programming efficiencies and economies of scale. Union of athletic offices likewise takes into consideration a nearer affiliation fields and courts for softball, baseball, soccer, football, lacrosse, basketball, tennis, and volleyball. Provincial offices like hockey arenas are additionally given where request warrants. A more noteworthy affectability toward giving strong positions related new outsider populaces is likewise justified in numerous areas of the nation. Between players, guardians, and mentors when at booked occasions. More significant and fewer destinations additionally give more prominent comforts, for example, stopping, restrooms, and concessions, and the ability to produce income to counterbalance operational and upkeep costs (Frederick R. Steiner, 2007).

Community athletic complexes are most common and serve both youth and adult athletic programs. Youth athletic complexes are more common in larger metropolitan areas where there is enough participation in youth sports to warrant a stand-alone complex. The type of facilities found within these parks is entirely based on meeting defined community athletic program needs. With ever-changing recreational trends, greater emphasis is being placed on designing athletic complexes to be as flexible as possible without unduly compromising specific uses. As an example, “athletic greens” that can accommodate a variety of field games have replaced single-use facilities. This

is largely accomplished through site grading and field lighting placement.

Demand entirely drives the facilities provided at athletic complexes. In societies where the community is not very diverse, a common set of traditional facilities is often appropriate. In larger, more diverse cities, the facility mix can vary widely. In both cases, due diligence is required to ensure the right mix of facilities is provided at a given site. Facility quality tends to be highest at athletic complexes to accommodate competitive recreational leagues and tournament play. The facilities and amenities often found at athletic complexes include the variety of support amenities are also appropriate at athletic complexes, including restrooms, concession stands, spectator sitting areas, play areas for children, and picnic areas with shelters. Adequate parking and internal trails are also ancillary requirements. Special-use facilities that serve a specific recreational purpose (i.e., aquatic centers, ice arenas, and skateboard parks) can also be located on complex athletic sites (Frederick R. Steiner, 2007).

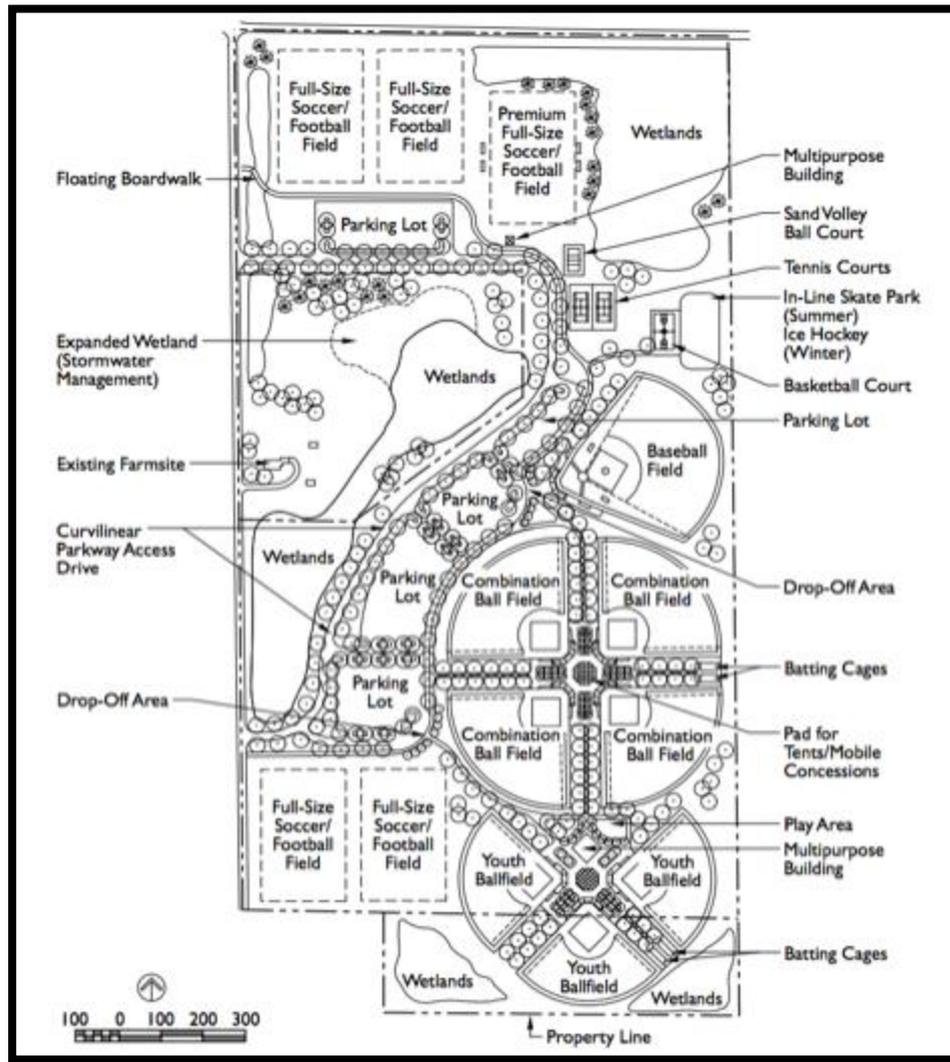


Figure 77: Lino Lakes in Minnesota. Plan. Source: URL 47

**Neighborhood park:** Neighborhood parks are the primary part of the park operation and serve a recreational and social purpose. Development focuses on informal recreation. Programmed activities are normally limited to youth sports practices and occasionally games.

The design for each park is uniquely tailored to the neighborhood it serves, rather than the generalized needs of the overall community. The common objective of all neighborhood parks is to bring people together to recreate and socialize close to home. Active, nonprogrammer recreation remains a mainstay of these parks, although

contemporary design emphasizes providing a balanced set of amenities that appeal to a broad range of individuals to increase park usage (Frederick R. Steiner, 2007).

The general palette of amenities typically found within a neighborhood park includes the following:

- Play area for multiple age groups
- Accessible trail loop internal to the park, with a connection to the community trail system and local streets
- Open maintained green space for informal use (2 to 3 acres optimal)
- Basketball half court, volleyball court, hardcourt area (for games such as hopscotch and four square), or tennis court
- Ice skating (on limited basis consistent with overall communitywide program)
- General site amenities, such as benches, picnic tables, trash containers, and security lighting.
- Picnic shelter and picnic area (for larger neighborhood parks)
- Aesthetic improvements and architectural elements arbor structure with benches and ornamental fencing, for example (The importance of this design feature should not be underestimated. Aesthetically appealing parks are far more likely to be used.)
- Ornamental landscape planting near active use areas
- Natural landscape planting and natural-based stormwater infiltration systems
- Parking, on a limited on-demand-only basis. Frequently parking can be provided on the street.
- Controlled-glare security lighting

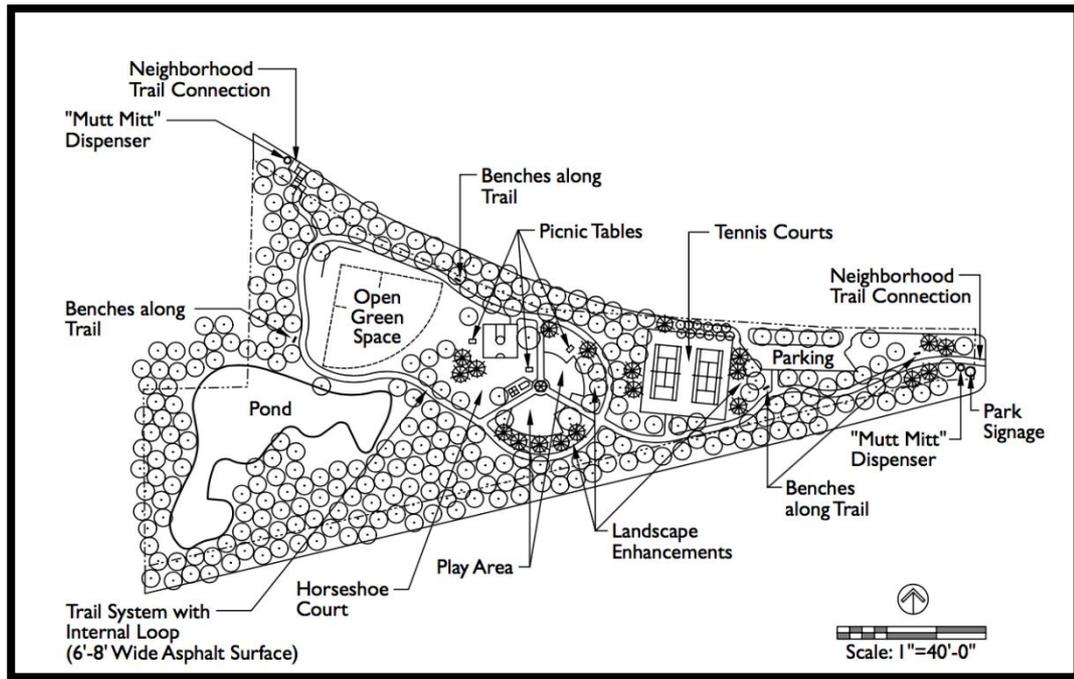


Figure 78: Minnetonka park in Minnesota. Plan. Source: URL 48

**Community and large urban parks:** Community and large urban parks are considerably larger in scale and serve a broader purpose than neighborhood parks. The main difference between a community and large urban park is that the latter is often associated with urban settings with large populations. Large urban parks also tend to be larger than community parks to provide more park space in a denser populated urban setting. They are especially prevalent in urban areas with limited natural open spaces, such as New York City's Central Park (Frederick R. Steiner, 2007).

The focus of both types of parks is on meeting wide-ranging community recreation and social needs. The facilities found within these parks are entirely based on meeting defined community needs. Development focuses on both mobile and passive recreation, with a wide array of programmed activities often being accommodated. Special-use facilities are routinely located within these parks (Frederick R. Steiner, 2007).

This type of park also encompasses unique and extensive landscape features indicative of the region.

The design for each type of park is a reflection of the community. The common objective of community and large urban parks is to bring people together to recreate, socialize, and find quiet space. Active, programmed recreation is appropriate in these parks as long as it does not unduly interfere with other activities. As with neighborhood parks, contemporary design emphasizes providing a balanced set of amenities that appeal to a broad range of individuals to increase park usage. The general palette of amenities typically found within these two classes of the park includes the following:

- Amenities common to a neighborhood park, albeit at a larger scale
- Group picnic facilities—smaller and large-scale
- Extensive looped internal trails, often serving multiple purposes
- Larger open spaces for passive and active use
- The modest level of athletic facilities (formal and informal) that blend into the character of the park (An athletic complex character is not typically desirable.)
- Open maintained green space
- Winter activities, such as ice skating, sledding, and cross-country skiing
- Special-use facilities that serve a specific recreational purpose (i.e., beaches, aquatic centers, ice arenas, campgrounds, dog parks, skateboard parks, and marinas)
- Adequate parking

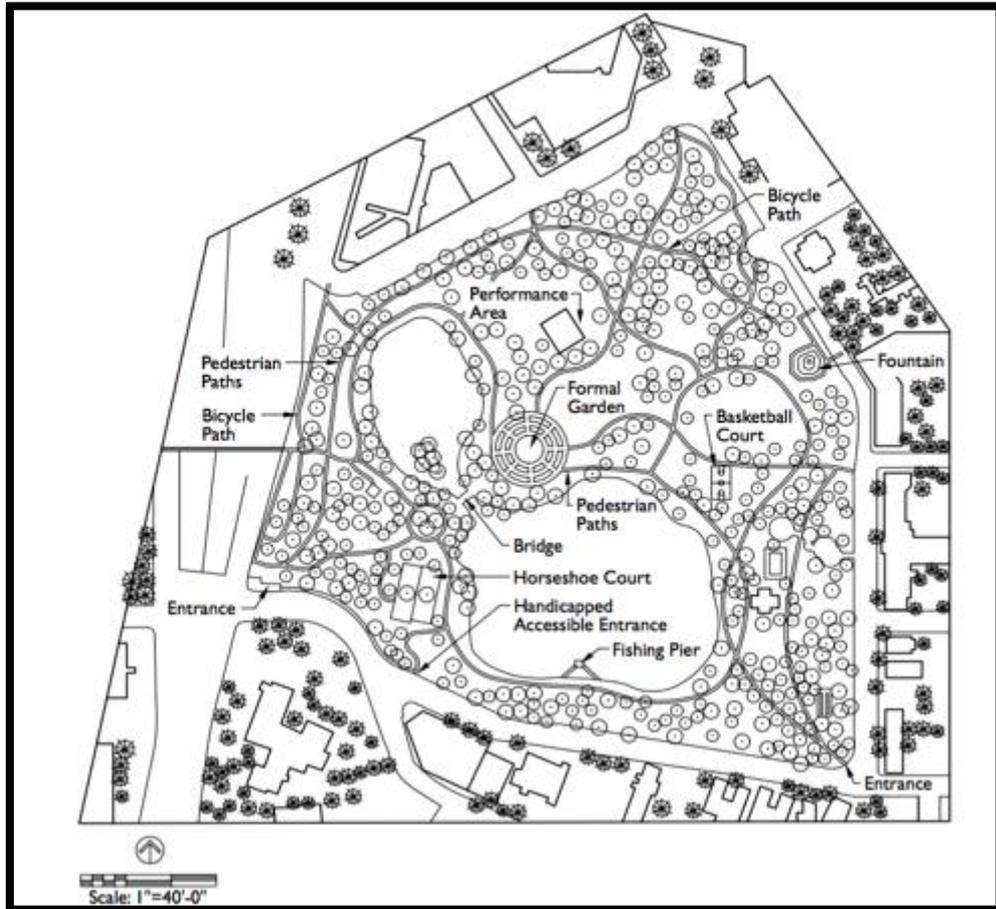


Figure 79: Minneapolis park in Minnesota. Plan. Source: URL 49

**Greenway:** are lands put aside for the conservation of personal assets, remainder scenes, open space, and visual feel/buffering. Scenic routes additionally give aloof utilize openings, frequently as trails and, incidentally, nature focuses. The critical concentrate is on ensuring natural assets and giving untamed life passages.

Greenways can take different structures. In the broadest application, scenic routes frame a system of interconnected common zones all through a group. They function as part of a borderless system that links together parks, natural open spaces, and trail corridors into a latticework of public space. In this context, the line between greenways, parks, trails, and the built environment is purposefully blurred, fostering the “city as a park” concept. Establishing an extensive continuous greenway system

requires a close collaborative relationship between the city and development community to set aside the land for this purpose.

Greenways can also take the form of a stand-alone land parcel dedicated to open-space preservation. These are often referred to as nature preserves or nature parks and often serve the same basic function as other forms of greenways.

The baseline criterion for defining greenways is to preserve the highest-quality and unique landscape features of the city. This most often includes lakes, wetlands, creek corridors, bluff lines, and remnant, relatively undisturbed natural areas exhibiting vegetative communities common to the area. Ecological buffers, which provide physical separation between sensitive or vulnerable natural resources and the built environment, are often integrated into the greenway system as part of the land development process.

Restored landscape, such as an agriculture field transformed back into a prairie, can also be integrated into the greenway system. This most commonly occurs as part of a development plan in which restored natural areas are part of an ecologically based stormwater management system, and the width of linear greenways can vary considerably. See Greenways and Trails elsewhere in this book for width information. And interpretive/directional signage. In some cases, nature centers or arboretums are integrated into larger greenways. A combination of multiuse hard-surfaced trails for biking, walking, and in-line skating and nature trails for hiking are found within most greenway systems. In select instances, no development is allowed, and the site is set aside for wildlife and community viewing from the periphery.

**Parkway:** Parkways are best characterized as linear parks that also serve as transportation corridors between public parks, historic features, monuments, institutions, and business centers. They often follow a notable landscape feature, such as a creek or river. The length of a parkway ranges from less than a mile to a complete loop around a major metropolitan area. Their width can vary considerably, with 200 feet being the practical minimum, and widths of 1,000 feet or more being common along major parkways (Frederick R. Steiner, 2007).

Landscape planting and ornamental site amenities (i.e., street lighting, site furnishings and other architectural elements) provide the visual cues that distinguish parkways from other thoroughfares. A broad, tree-lined boulevard is a common image of a parkway, as is a linear park along a major river. In keeping with the setting, heavy truck traffic is often, but not exclusively, prohibited along parkways.

Landscape planting can range from a maintained, ornamental character to one that is more natural, or a combination of both and development within parkways is limited to roadways and pedestrian trails. Sitting places and overlooks often augment trails to view a natural or human-made feature. Occasionally, picnic shelters and other standalone park features are accommodated in parkways. Roadway and trailside signage are important.

**Special use parks:** The uncommon utilize characterization covers an expansive scope of parks and diversion offices arranged toward single-reason or concentrated utilize (Frederick R. Steiner, 2007):

Nature and social/performing expressions focus, Notable locales: downtowns, courts, graveyards, noteworthy scenes, places of worship, and landmarks, Diversion offices:

oceanic focuses, campgrounds, ice fields, wellness focuses, group focuses, skateboard parks, and stadiums, Open social occasion zones: amphitheaters, group commons, town centers, and urban squares in some systems, certain types of special uses are defined under their own classifications when those occurrences are frequent enough to warrant doing so. For example, an urban square classification is sometimes used in major urban communities to accommodate public plazas, courtyards, and formal setting areas and general development of special use facilities is driven by local demand and specific circumstances.

**Regional parks:** The definition of a regional park varies considerably across the country. The characteristic distinguishing feature is that local parks typically service multiple cities and cross political jurisdictions. In many cases, a separate regional park authority is established to manage a series of regional parks (Frederick R. Steiner, 2007).

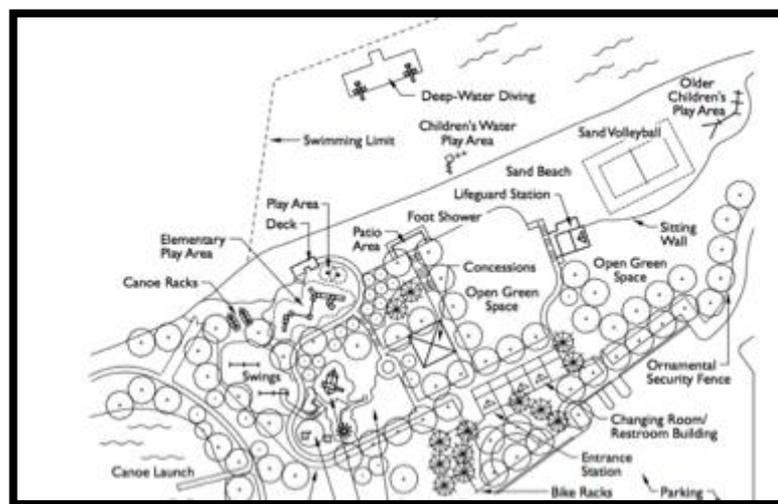


Figure 80: Minneapolis park in Minnesota. Plan. Source: URL 50

In some areas of the country, developers of regional parks focus on setting aside larger tracts of land to preserve natural resources, remnant landscapes, and open space. A key objective is protecting ecological resources and providing wildlife habitat. Passive uses, such as hiking, canoeing, and nature viewing, are most common forms of activities. The primary distinction between this type of regional parks and greenways is scale and service area. Regional parks are typically at a much larger scale (in land area) than greenways.

In other areas of the country, regional parks are an extension of the large urban park classification. In addition to preserving natural resources and open space, these parks also provide active recreational areas, gardens, picnic facilities, and other forms of special use. In parts of the country, regional parks include major national monuments and historic landscapes.

- Size varies for regional parks, with several thousand acres (several hundred hectares) being common. A size of fewer than 100 acres (40.5 hectares) is uncommon.

Major natural resource and landscape feature typically form the basis for regional parks. Service area is typically several cities.

The overall character of this type of park responds to the unique qualities of the region that the park serves. There is significant latitude in the definition of a regional park across the country, given the variety of settings in which they are located

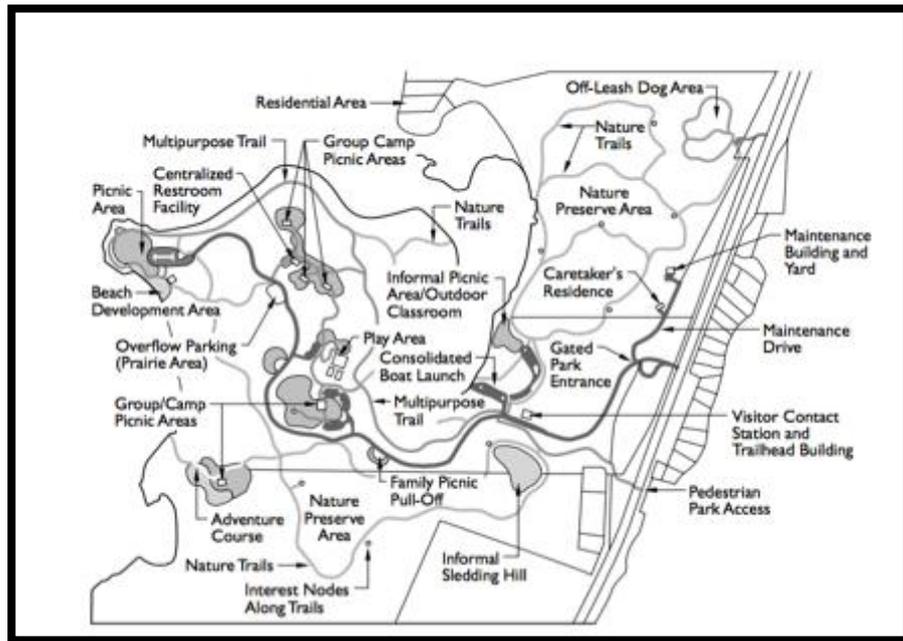


Figure 81: Carver County in Minnesota. Plan. Source: URL 51

### 2.5.3.2 Functions of parks

A Park is a space of natural, semi-natural, or planted area set aside for personal enjoyment and recreation or the protection of wildlife or natural habitats. It may consist of grassy areas, rocks, soil, and trees, but may also contain buildings and other artifacts such as monuments, fountains or playground structures. Parks belong to a large classification of land uses termed public open spaces. These places cover a broad variety of purposes that are given to serving the needs and concerns of various groups and many subdivisions of the population. They are provided towards satisfying the leisure, recreational and informative needs of the young and old, manly and female, rich and poor, and of people of varying abilities. Public areas and facilities can be publicly and privately owned or owned through a public-private partnership. All these types of public areas can be divided into two broad families of spaces: plazas, streets, and parks.

**Neighborhood park:** neighborhood parks are typically Neighborhood parks are the most straightforward shape of the park within the municipal park system. The goal of neighborhood parks is to provide spaces and events for both simple working and passive recreation. When designed well, they will more serve as the social and activity core for the neighborhood.

- ¼ -½ mile in distance from neighborhood houses
- Not cut off from the community with over roads
- Free from physical barriers that would prohibit walkable access to the park
- Designed for all age and user groups

Neighborhood parks should be developed and produced for community residents existing near to the park. Good designs include elements that encourage use and enjoyment for children, adults, elderly and unique communities. Designs should concentrate on the neighborhood use level and minimize buildings and programs that would attract large numbers of visitors, cars, lighting, and noise. Design and park operations are often structured to sustain and celebrate existing neighborhood qualities, natural features, and community cultures. An NRPA guideline is that “...active recreation spaces should consume roughly 50% of the park’s acreage. The remaining 50% should be used for passive activities, reserve, ornamentation, and conservation as appropriate.

Common Neighborhood park features include:

Meandering walking paths/ trails

Natural settings

Playscapes (suitable for different ages)

Linkages to another neighborhood infrastructure and ways

Signage

Benches

Views of Nature

General open spaces

Lighting

Dog bag stations, if appropriate

Pavilion(s)

Picnic tables

Trash receptacles

Open access ball/ sports fields

Courts

Limited parking spaces

Implementing an including citizen input process can assist planners and decisions makers in working with residents to recognize and prioritize key park design elements (Walker, 2010).

Residents can also work with planners, park professionals, and decision-makers to design features to help keep the park safe. Proper lighting, easy upkeep, and settable spaces that create “eyes on the park” are a few techniques that will positively influence crime rates by deterring negative activities, and maintaining the park by picking up trash, minimizing graffiti with public art and plantings, and keeping equipment in good working order can also help foster safer park environments. When creating neighborhood parks, it is vital to select available designs and elements the staff and community members can sustain. Leaders and citizens should prioritize features that

can support intended parks uses and results but that can be supported across time with the available fiscal, personnel, and volunteer resources (Walker, 2010).

**Community and large urban parks:** Urban parks as community engagement in important way cities can use parks, and open spaces are for community engagement. This is the process of working collaboratively with individuals and groups to improve their local environment. For parks and open spaces, community engagement obliges public officials to directly affect their supporters in the continuous design, planning, and management of these sources. This process results in educated and engaged residents that feel better connected to their communities (Walker, 2010).

While seldom contentious but more often productive and pleasant, neighborhood engagement is a vital part of making successful urban open space. Parks support community engagement by providing residents with a venue for participation in addition to their communities. They also afford a sense of place and offer essential life-enhancing qualities that aid community and individual well-being. By understanding the community benefits of parks, decision-makers can develop constituencies that can support and sustain their urban park systems over time.

Parks are one of the most powerful methods to change the character and improve the image of a community. Park improvements are often quick and tangible actions for mayors and citizens and can work in concert with other city-wide programs such as traffic management, creating cultural activities and sustainable development. Benefits of urban parks are numerous and include restorative experience, physical health benefits and improving regional air quality (Walker, 2010).

**Greenway:** Greenway Parks is an upscale community in north Dallas, Texas, bounded by the Dallas North Tollway on the east, Mockingbird Lane on the south, Inwood Road on the west, and University Boulevard on the north. It borders the city of Highland Park on the southeast and the city of University Park on the east.

A scenic route is a trait found in both urban and rustic settings that are regularly made out of a neglected railroad, channel towpath, utilize or comparative right of way, or surrendered new land. Railroad trails are a standout amongst the most widely recognized types of the scenic route, and they additionally take after direct stops.

Scenic routes are found in country territories and additionally urban. Halls redeveloped as scenic routes regularly go through both city and nation, joining them. Indeed, even in provincial place scenic routes efficiently provide occupants enter to open land oversaw as parks, as appeared differently about arriving that is vegetated however unseemly for open utilize, for example, a rural field. Where the great provincial street framework has been augmented, and upgraded to support rapid car travel, scenic routes give a choice to individuals who are elderly, youthful, less versatile or looking for a quick pace (Fabos, 1995). Scenic roads are discovered all around. Be that as it may, most illustrations are in Europe and North America.

**Parkway:** Much like the park and parkway systems designed in the late nineteenth and early twentieth centuries, there is growing recognition that a good parks system is one where individual park nodes are connected by linear green corridors. Linkages may be achieved through riparian buffers, street design, transit paths, utility rights-of-way, or any other linear corridor. Well-designed sidewalks provide the necessary comfort, safety, and sense of welcome to support walking. Pedestrian ways should be

designed with a buffer between the path and the street. In commercial areas, the buffer is often the “furniture zone” where utility poles, trees, hydrants, signs, benches, transit shelters, and planters should be placed. The furniture zone in a low-density commercial zone should be a minimum of 4.0 feet wide and commonly is 5.0 to 8.0 feet wide. In residential areas, a continuous landscape planted strip or parkway is strongly recommended to create a “detached” or “setback” sidewalk. Trees in the planted strip create a tree canopy that shades the street and sidewalk. Ideally, the planted area should be a minimum of 6.0 feet for healthy tree growth even in constrained situations; a narrower planting strip should be included. The planted strip buffers pedestrians from motor vehicles and helped accommodate curb-cuts without having to slope the sidewalk, which otherwise may result in a violation of the Americans with disabilities Act (ADA) requirements for cross-slopes.

If a planted strip cannot be accommodated due to space limitations, and the sidewalk must be attached to the curb, provide an extra 1.0 to 2.0 feet in width as an added buffer. Rolled curbs should be avoided because they typically result in drivers parking up on the sidewalk and intruding on the pedestrian realm (Frederick R. Steiner, 2007).

**Special use park** actually, special use park is one of the most important parks which has liner character and that also the elite utilizes arrangement covers a wide scope of parks and diversion offices situated toward the single reason or concentrated utilize. In the expressway nature and culture/performing expressions focuses and notable locales, for example, downtowns, squares, burial grounds memorable scene, chapels, and landmarks. The entertainment offices, for example, sea-going focuses, campgrounds, ice fields, wellness focus, group focuses, skateboard parks, and

stadiums exist also in expressway open social affair zones are amphitheaters, group lodge, town focus and urban squares (Frederick R. Steiner, 2007).

In some systems, certain types of special uses are defined under their classification when those occurrences are frequent enough to warrant doing so for example, an urban square classification is sometimes used in major urban communities to accommodate public plazas, courtyards, and formal setting areas, and the development of special use facilities is driven by local demand and specific circumstances.

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- For new development, size varies for park-school sites, with 20 acres (8.1 hectares) being the typical minimum. Sites of 40 acres (16.2 hectares) or more are preferred because the school buildings and parking can consume considerable space. Acreage can be reduced considerably in already developed areas through the use of multi-story schools and on-street parking.
- Service area ranges from several neighborhoods to communitywide, depending on the facilities provided. The location is almost always determined by the school district, especially in cases where the district boundaries encompass more than one community (Frederick R. Steiner, 2007).
- A variety of landscape planting is desirable, although these sites tend to be inherently utilitarian (BUTLER, 2007).
- Good road access is important.
- Connection to the larger community and neighborhoods via trails or sidewalks is desirable.

**Private park/ Recreation facility:** Private park often appears to be public, but the public does not essential mean public ownership. Some spaces are personally owned but are made for public use. Theme parks fall into this classification. Areas like Disneyland in California are places where the success of the park is reliant on the public, but the park itself is privately owned. They are reliant on the public because they charge user fees for the services they provide and work on cost recovery and profit basis. Within the park, they can set standards and control what people can and cannot do where people can go and when they can be there (Mohammad Mehdi Sadeghi, 2015).

**Regional parks:** A regional park is an area of land preserved on account of its natural beauty, historic interest, recreational use or other reason, and under the administration of a form of local government. A regional park can be a special park district covering a region crossing several jurisdiction boundaries, or a park system of a single jurisdiction, such as a province, county, or city. Many provinces have regional levels of government. This level of administration is responsible for the management of many municipalities, which are closely linked. Often a department within this regional government is responsible for parks that are of regional interest. Regional Parks are large recreation areas that may serve the entire City and beyond Regional plans cover geographic fields transcending the borders of unique governmental units but sharing common characteristics that may be social, economic, political, cultural, natural-resource-based, or defined by transportation. They often serve as the skeleton or framework for local government plans and special district plans, supplying unifying assumptions, forecasts, and strategies. The information that follows is modified from the American Planning Association's Growing Smarts Legislative Guidebook (2002). (Mohammad Mehdi Sadeghi, 2015).

**Design policies for regional parks:** Parking to serve 100- 300 vehicles typical. Gates located at parking lot entrances. Bicycle parking must be provided.

Typical development includes the large play area, sports complexes, basketball courts, trails, picnic areas, golf course, disc golf course, skate courts, tennis courts, pavilions, senior center, recreation center, restrooms. Should be located near major circulation routes including access to public transportation.

Table 1: Assessment of street character

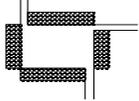
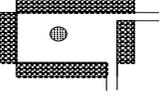
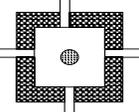
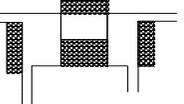
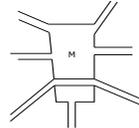
| square | Types                       | Form  | Elements  | General Characteristic of square   |
|--------|-----------------------------|---|---|--|
| 1      | <b>The closed square</b>    |    | <ul style="list-style-type: none"> <li>- Walls</li> <li>- Buildings</li> <li>- Street and sky</li> <li>- Floor</li> <li>- Decorative sculpture</li> <li>- Street furniture</li> <li>- Planted areas</li> <li>- Pavement</li> </ul>                                  | <p>Space self-contained</p> <ul style="list-style-type: none"> <li>- Enclosure interrupted only by the streets leading to it.</li> <li>- Regular geometrical form layout.</li> <li>- The repetition of identical houses, facing the enclosed area.</li> <li>- Spatial balance of the square will always be achieved by the equation of horizontal &amp; vertical forces.</li> <li>- Each façade fulfills a dual function.</li> <li>- Continuity and context of the farming structure.</li> </ul>   |
| 2      | <b>The dominated square</b> |    | <ul style="list-style-type: none"> <li>- Floor</li> <li>- Trees</li> <li>- Parking</li> <li>- Building</li> <li>- Large sculpture</li> <li>- Colonnade</li> <li>- Bollards</li> <li>- Stairways</li> <li>- Dominator</li> <li>- Leader</li> <li>- Street</li> </ul> | <p>Space directed</p> <ul style="list-style-type: none"> <li>- Characterized by one individual structure or buildings towards which the open space is directed.</li> <li>- Surrounding structures are related to them.</li> <li>- Dominated building may be a church, palace, a town hall, theatre.</li> <li>- Direction of a main street which opens into the square establishes the axis toward the dominant building.</li> <li>- Compels the spectator to move toward and look at the focal architecture.</li> <li>- Dominant square produces a directive of motion</li> <li>- The dominant structure need not necessarily be voluminous</li> <li>- Very often it is merely a gate or an arch which may dominate a whole square.</li> <li>- A fountain may also dominant a square it if constitutes an entire front in with architecture, sculpture and water.</li> </ul> |
| 3      | <b>The nuclear square</b>   |    | <ul style="list-style-type: none"> <li>- plant</li> <li>- street furniture</li> <li>- Floor</li> <li>- trees</li> <li>- planted area</li> <li>- Streets</li> <li>- Big sculpture</li> <li>- Building</li> </ul>   | <p>Space formed around a center</p> <ul style="list-style-type: none"> <li>- Nuclear Square consists of a nucleus, a strong vertical accent – a monument, a fountain, an obelisk.</li> <li>- It is powerful enough to charge the space around with a tension that the impression of the square will be evoked.</li> <li>- It will tie the heterogeneous elements of the periphery into one visual unit.</li> <li>- Dimensions of nuclear square are restricted as the visual effect of the central monument is naturally limited.</li> </ul>   |
| 4      | <b>grouped square</b>       |  | <ul style="list-style-type: none"> <li>- Connection</li> <li>- Pathway</li> <li>- Floor</li> <li>- Buildings</li> <li>- Floor</li> </ul>  | <p>Space unit combined</p> <ul style="list-style-type: none"> <li>- Individual squares may be fused organically and aesthetically into one comprehensive whole.</li> <li>- Each unit - the individual square, represents an entity, aesthetically self-sufficient and yet part of a comprehensive higher order.</li> <li>- A sequence of squares, different in size and form, develops in only one direction, thus establishing a straight axis.</li> <li>- Group of three or more squares of different shapes and proportions surround one dominant building.</li> <li>- Two individual squares fall into a coherent pattern although they are separated from each other by blocks of houses, thoroughfares</li> </ul>  |
| 5      | <b>The amorphous square</b> |  | <ul style="list-style-type: none"> <li>- Street</li> <li>- Sculpture</li> <li>- Street furniture</li> <li>- Planted area</li> <li>- building</li> <li>- Floor</li> <li>- Dominator</li> <li>- Crossroad</li> </ul>  | <p>Space unlimited</p> <ul style="list-style-type: none"> <li>- Amorphous is formless, unorganized, having no specific shape</li> <li>- It does not represent aesthetic qualities or artistic possibilities</li> <li>- However, if it shares some elements with the previously analyzed squares it may appear like one of them</li> <li>- Proportions of many of its surrounding structures are so heterogeneous, so irregular, even contradictory</li> <li>- Location and size of the small triumph arch are so dissimilar to all the other given factors</li> <li>- Unified impression cannot result</li> <li>- Disproportion in scale destroys all aesthetic possibilities</li> </ul>   |

Table 2: Assessment of parks character

| Park | Types                             | function  | General characteristic  |   |
|------|-----------------------------------|---|---|---|
| 1    | Park school                       | <ul style="list-style-type: none"> <li>- Tennis court</li> <li>- Picnic tables</li> <li>- Parking</li> <li>- Trees</li> <li>- Plant</li> <li>- Play ground</li> <li>- Park furniture</li> <li>- Pond</li> <li>- Accessible Trail loop</li> <li>- Local street</li> <li>- Basketball court</li> <li>- Half court</li> <li>- Volleyball court</li> <li>- Benches</li> <li>- Picnic tables</li> <li>- Trash containers</li> <li>- Security lighting</li> </ul>   | <ul style="list-style-type: none"> <li>• Neighborhood parks are the basic unit of the park system and serve a recreational and social purpose. Development focuses on informal recreation</li> <li>• Programmed activities are typically limited to youth sports practices and occasionally games.</li> </ul> | <ul style="list-style-type: none"> <li>• Varies, depending on specific site opportunities.</li> <li>• Service area radius of between one-fourth and one-half mile (0.4 to 0.8 kilometers) and uninterrupted by major roads or physical barriers, such as wet- lands and lakes. A reasonable walking distance is critical to a person’s propensity to use the park.</li> <li>• Centrally located within the neighborhood it serves. • Site exhibits suitable physical and aesthetic characteristic, with a balance between developable open space and natural areas. Lowlands and other lands not suitable for development are also not suitable for a neighborhood park.</li> <li>• Connected to neighborhoods via trails or side-walks. The less convenient the access, the less use a park is likely to receive.</li> </ul>   |
| 2    | Private park/ recreation facility | <ul style="list-style-type: none"> <li>- recreation facilities</li> <li>- golf courses</li> <li>- fitness club</li> <li>- museum</li> <li>- private courtyard</li> <li>- amphitheaters</li> <li>- horse riding stables</li> <li>- water parks</li> <li>- golf courses</li> </ul>  | <ul style="list-style-type: none"> <li>- The development of private parks and recreation facilities is driven by local demand and business opportunities.</li> </ul>  | <ul style="list-style-type: none"> <li>• Varies.</li> </ul>   |
| 3    | Neighborhood park                 | <ul style="list-style-type: none"> <li>- Play ground</li> <li>- Accessible trail loop internal to the park</li> <li>- Connection with local system</li> <li>- Open maintained green space for informal use (2 to 3 acres optimal)</li> <li>- Basketball half court</li> <li>- Volleyball court</li> <li>- Hardcourt area or tennis court</li> <li>- Ice skating (limited time)</li> <li>- General site amenities, such as benches, picnic table, trash container and security light.</li> <li>- Picnic shelter</li> <li>- Architectural elements</li> <li>- Natural landscape planting</li> <li>- Ornamental landscape planting</li> <li>- Parking, on a limited-on demand</li> <li>- Controlled glare security lighting</li> </ul> |   | <ul style="list-style-type: none"> <li>- Typically, 5 acres or more; 8 to 10 acres preferred, with 3 acres the desired minimum size. Service area is one-fourth to one-half mile uninterrupted by major roads and other physical barriers.</li> <li>- Service area radius of between one-fourth and one-half mile (0.4 to 0.8 kilometers) and uninterrupted by major roads or physical barriers, such as wet- lands and lakes. A reasonable walking distance is critical to a person’s propensity to use the park.</li> <li>- Centrally located within the neighborhood it serves. • Site exhibits suitable physical and aesthetic characteristics, with a balance between developable open space and natural areas. Lowlands and other lands not suitable for development are also not suitable for a neighborhood park.</li> <li>- Connected to neighborhoods via trails or sidewalks. The less convenient the access, the less use a park is likely to receive.</li> <li>- Where feasible, connected to a greenway or open- space system to expand the sense of open space at the neighborhood level.</li> </ul> |
| 4    | Community and large urban parks   | <ul style="list-style-type: none"> <li>- Grouped picnic facilities</li> <li>- Amenities common to neighborhood park</li> <li>- Extensive looped internal trail</li> <li>- Large open space for passive and active use</li> <li>- Modest level of athletic facilities</li> </ul>   |   | <ul style="list-style-type: none"> <li>• Varies, depending on function. A minimum of 20 acres is preferred, with 40 or more acres optimal. Service area can be communitywide or several neighborhoods in given area of the community.</li> <li>• Service area ranges from numerous strategic locations throughout a large metropolitan area to one centrally located complex that serves an entire community.</li> <li>• A relatively flat, open parcel of property is most desirable. The</li> </ul>   |

|   |                          |  |  |   |
|---|--------------------------|--|--|---|
|   |                          | <ul style="list-style-type: none"> <li>- Green space</li> <li>- Winter activity</li> <li>- Adequate parking</li> <li>- Special use facilities that serve a specific</li> <li>- Pedestrian path</li> <li>- Garden</li> <li>- Playground</li> <li>- pool</li> </ul>  |  | <p>topography across the site should be adequate for field drainage and stormwater management.</p> <ul style="list-style-type: none"> <li>• Access from major thoroughfares is important.</li> <li>• Connection to the larger community and neighborhoods via trails or sidewalks is desirable.</li> <li>• Adequate buffering of residential areas from lighting, noise, traffic, parking, and other impacts should be designed.</li> </ul> |
| 5 | <b>Greenway</b>          | <ul style="list-style-type: none"> <li>- Sitting area</li> <li>- Trail</li> <li>- Observation area</li> <li>- Interpretive/ direction signage</li> </ul>   | <ul style="list-style-type: none"> <li>• A combination of multiuse hard-surfaced trails for biking, walking, and in-line skating and nature trails for hiking are found within most greenway systems. In select instances, no development is allowed and the site is set aside for wildlife and community viewing from the periphery.</li> </ul>   | <ul style="list-style-type: none"> <li>• Varies, depending on opportunity and general character of natural systems within the community.</li> </ul>   |
| 6 | <b>Parkway</b>           | <ul style="list-style-type: none"> <li>- Roadway trails</li> <li>- Pedestrian trails</li> <li>- Sitting area</li> <li>- Overlooks often augment trail to view</li> <li>- Landscape planting</li> <li>- Ornamental site amenities</li> <li>- Provide the visual cues</li> <li>- Tree lined boulevard is common image</li> <li>- A liner park near the river</li> <li>- Heavy traffic</li> <li>- Picnic shelter</li> </ul> | <ul style="list-style-type: none"> <li>• Nature and cultural/performing arts centers</li> <li>• Historic sites: downtowns, plazas, cemeteries, historic landscapes, churches, and monuments</li> <li>• Recreation facilities: aquatic centers, campgrounds, ice arenas, fitness centers, community centers, skateboard parks, and stadiums</li> <li>• Public gathering areas: amphitheaters, community commons, town centers, and urban squares</li> </ul> | <ul style="list-style-type: none"> <li>• Varies. The length of a parkway ranges from less than a mile to a complete loop around a major metropolitan area. Their width can vary considerably, with 200 feet being the practical minimum, and widths of 1,000 feet or more being common along major parkways.</li> </ul>   |
| 7 | <b>Special use parks</b> | <ul style="list-style-type: none"> <li>• The development of special-use facilities is driven by local demand and specific circumstances.</li> </ul>  | <ul style="list-style-type: none"> <li>• In some systems, certain types of special uses are defined under their own classifications when those occurrences are frequent enough to warrant doing so</li> </ul>  | <ul style="list-style-type: none"> <li>• Varies, depending on need.</li> </ul>  |
| 8 | <b>Regional parks</b>    | <ul style="list-style-type: none"> <li>- Civic center</li> <li>- Baseball</li> <li>- Basketball</li> <li>- Volleyball</li> <li>- Tennis</li> <li>- Plant</li> <li>- Shuffle board</li> <li>- Horseshoe</li> </ul>  | <ul style="list-style-type: none"> <li>• Restroom</li> <li>• Amphitheater</li> <li>• Concession</li> <li>• Picnic area</li> <li>• Playground</li> <li>• Dog park</li> <li>• Skateboard</li> <li>• Park furniture</li> </ul>  | <ul style="list-style-type: none"> <li>• Typically, a minimum of 500 acres (202.3 hectares) and up to several thousand acres or several hundred hectares. Service area is regional, which generally encompasses several cities.</li> </ul>  |

Table 3: Assessment of square character

| street | Types             | Primary users  | Road user  | Flow Characteristic   | Adjacent Land Uses   |
|--------|-------------------|--|--|---|--|
| 1      | Great street      | <ul style="list-style-type: none"> <li>- Walking</li> <li>- Socializing</li> <li>- Gathering</li> <li>- Shopping</li> <li>- Cycling</li> <li>- Access to properties</li> <li>- Parking</li> <li>- Loading circulation</li> </ul>                             | <ul style="list-style-type: none"> <li>- Pedestrian</li> <li>- Buses</li> <li>- cars</li> <li>- truck</li> </ul>                             | <ul style="list-style-type: none"> <li>- Main-street design should limit traffic speeds and create a narrower profile with frequent, high-quality pedestrian crossings.</li> <li>- The illustration above depicts a main street with 4 lanes of traffic.</li> </ul>   | <ul style="list-style-type: none"> <li>- High density residential</li> <li>- Retail</li> <li>- Commercial</li> <li>- mixed use</li> <li>- civic space</li> <li>- office</li> </ul> |
| 2      | Avenue            | <ul style="list-style-type: none"> <li>- Access to Properties</li> <li>- Socializing</li> <li>- Parking and loading</li> <li>- Walking</li> <li>- Cycling</li> <li>- circulation</li> </ul>  | <ul style="list-style-type: none"> <li>- Pedestrian</li> <li>- Cyclists</li> <li>- Buses</li> <li>- Cars</li> <li>- Trucks</li> </ul>        | <ul style="list-style-type: none"> <li>- Straight route with a line of trees or large shrubs running along</li> <li>- Traffic</li> </ul>  | <ul style="list-style-type: none"> <li>- High density residential</li> <li>- Retail/ commercial</li> <li>- Mixed use</li> </ul>  |
| 3      | Boulevard         | <ul style="list-style-type: none"> <li>- Walking</li> <li>- Socializing</li> <li>- Gathering</li> <li>- Shopping</li> <li>- Cycling</li> <li>- Access to properties</li> <li>- Parking</li> <li>- Loading circulation</li> <li>- Freight movement</li> </ul> | <ul style="list-style-type: none"> <li>- Bike ride</li> <li>- Bus stop</li> <li>- Bios wales</li> <li>-</li> </ul>                           | <ul style="list-style-type: none"> <li>- Multilane arterial thoroughfare</li> <li>- Divided with median down the center and perhaps roadway</li> <li>- Parking lanes for bicycle</li> <li>- Designed for slow travel</li> <li>- Pedestrian usage</li> <li>- Above average quality of landscaping and scenery</li> <li>- Usually running through a city</li> </ul> | <ul style="list-style-type: none"> <li>- High density residential</li> <li>- Office</li> <li>- Mixed use</li> <li>- Commercial</li> </ul>  |
| 4      | parkway           | <ul style="list-style-type: none"> <li>- access to properties</li> <li>- walking</li> <li>- cycling</li> </ul>   | <ul style="list-style-type: none"> <li>- Bus stop</li> <li>- Street furniture</li> <li>- Bios wales</li> <li>- Buildings or trees</li> </ul> | <ul style="list-style-type: none"> <li>- Function as high speed thoroughfares</li> <li>- though their adjacent land uses may be primarily residential in nature.</li> <li>- Excess width</li> <li>- Underutilized on street parking</li> <li>- Too many travel lanes</li> </ul>   | <ul style="list-style-type: none"> <li>- Mixed use</li> <li>- Civic space</li> </ul>   |
| 5      | Rural road        | <ul style="list-style-type: none"> <li>- Cycling</li> <li>- Access to properties</li> <li>- Freight movement</li> <li>- Travel circulation</li> </ul>  | <ul style="list-style-type: none"> <li>- Cars</li> <li>- Trucks</li> <li>- Cyclists</li> </ul>   | <ul style="list-style-type: none"> <li>- Shared use path adjacent to the main roadway as substitute for sidewalk</li> <li>- The shared use path should meet the general criteria to serve adequately as a sidewalk or pathway</li> </ul>  | <ul style="list-style-type: none"> <li>- High density residential</li> <li>- retail or commercial</li> <li>- Office</li> <li>- Mixed use</li> </ul>                                |
| 6      | Local subdivision | <ul style="list-style-type: none"> <li>- Access to properties</li> <li>- Socialized</li> <li>- Parking and loading</li> <li>- Walking</li> </ul>   | <ul style="list-style-type: none"> <li>- Pedestrian</li> <li>- Cyclists</li> <li>- Buses</li> <li>- Cars</li> <li>- Trucks</li> </ul>        | <ul style="list-style-type: none"> <li>- Local streets in residential neighborhoods are often underutilized as space for play a leisure</li> <li>- Should provide safe and inviting places to walk with direct access to local stores and schools</li> </ul>  | <ul style="list-style-type: none"> <li>- Commercial</li> <li>- Office</li> <li>- Mixed use</li> </ul>  |

## **Chapter 3**

# **QUESTIONING AND EVALUATING THE BAYKAL AREA**

### **3.1 Brief information about Baykal district**

Baykal district is selected as a case study in order to assess the public open space physical quality. One of the reasons is, this district has a strong character with its building which carries the modern architecture value and urban space characteristics. Cooperative Houses as a Case History of the urban development of Baykal neighborhood exhibits same typologies. The original name of the area was ‘Ayluka’ in the land registration and located between Lefkoşa and Larnaka roads, extended until Canakkale district. Turkish and Greek Cypriot used to live in different parts of it; however Turkish people named the area as Baykal later on. Baykal before 1958 belonged to British military camp which was closed in 1958 and moved to the district at the end of Larnaka road called as 2.5 miles. Afterwards the Turkish doctor of the camp bought the whole land and in 1960 parcelletion had been done and each parcel sold to Turkish families. These families were mostly bank employers, merchants and lawyers that belonged to the high middle income social class.

### **3.2 Method of study**

In this study, nine cases were chosen. Four of them were streets including On Bes Agustos Blv, Sivas street, Ayhan Niyazi street and Bayraktar street. Three squares including Zafer Square, Sivas square and Ayhan Niyazi square. Also, two parks including Kent and Samsun park, all located in Baykal district. The reason that the author chose Baykal area is, three important squares are located in Gazi Mustafa Kemal Street and this street connect all three squares; and also, Zafer square is the biggest square in Famagusta. The selected streets are good examples for new development zone and the author chose four different functional street including commercial, residential, industrial and mixed use. The street carries their functional importance though at the years, as seen in figure 83, the method of the case study deals with the evaluating and questioning the public open space by the mean of square, street and parks. Squares are evaluating and questioning by determining these components which are façade, floor, height ratio, function, enclosure and figure ground. Streets are evaluating and questioning with its components which are, façade skyline, height ratio, land use, landscape, figure ground. Parks are evaluating and questioning with its component under five issue which are plant type, plant form, urban furniture, site structure and figure ground. Moreover, in the case of parks, author selected two main parks in Famagusta, Kent Park and Samsun Park. Kent Park is the second biggest park after Anit Park and it is also a good example for a well-designed park in Baykal area. Samsun Park is one of the most important parks located in Baykal area which is surrounded by residential neighborhood and doesn't have any character and attraction for people living there.

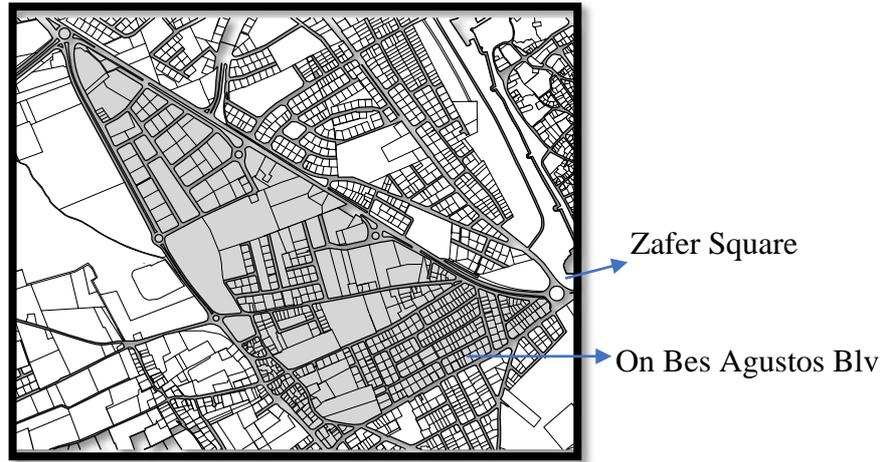


Figure 82: Plan of Baykal Area, draw by author

### 3.2.1 Criteria of Selection

The reason for choosing the cases from Magusa in Baykal area is that in the criteria for selection of streets, squares and parks, researcher choose one commercial street, a shared street, a residential street and industrial street, and from the squares, researcher choose the two-amorphous square and one nucleus square. There are two parks in this area, Kent and Samsun park, and both of them were analyzed. And the reason for choosing this area for researcher is that this is the only area which includes main streets, squares and parks. In this study, nine case were chosen. Four of them were streets including On Bes Agustos Blv, Sivas street, Ayhan Niyazi street and Bayraktar street. They were chosen because On bes Agustos street is the first Commercial street in Famagusta and Bayraktar is the first residential street in this area. Also in the case of Ayhan Niyazi street, this street is the first shared street and mixed use street in Baykal area. Moreover, Sivas street is one of the first important industrial streets in Baykal area. On the same hand, the Zafer square is the biggest square in Famagusta and Sivas and Ayhan Niyazi street linked together with Gazi Mustafa Kemal Street. In the case of parks, author selected two main parks in Famagusta, Kent park and Samsun park. Kent park is the second biggest park after Anit park and it is also a good

example for a well-designed park in Baykal area. Area is example of modern development

- It's near the old city
- It has a unique character with its buildings, public open spaces
- Opportunity to assets all public open space elements in a district

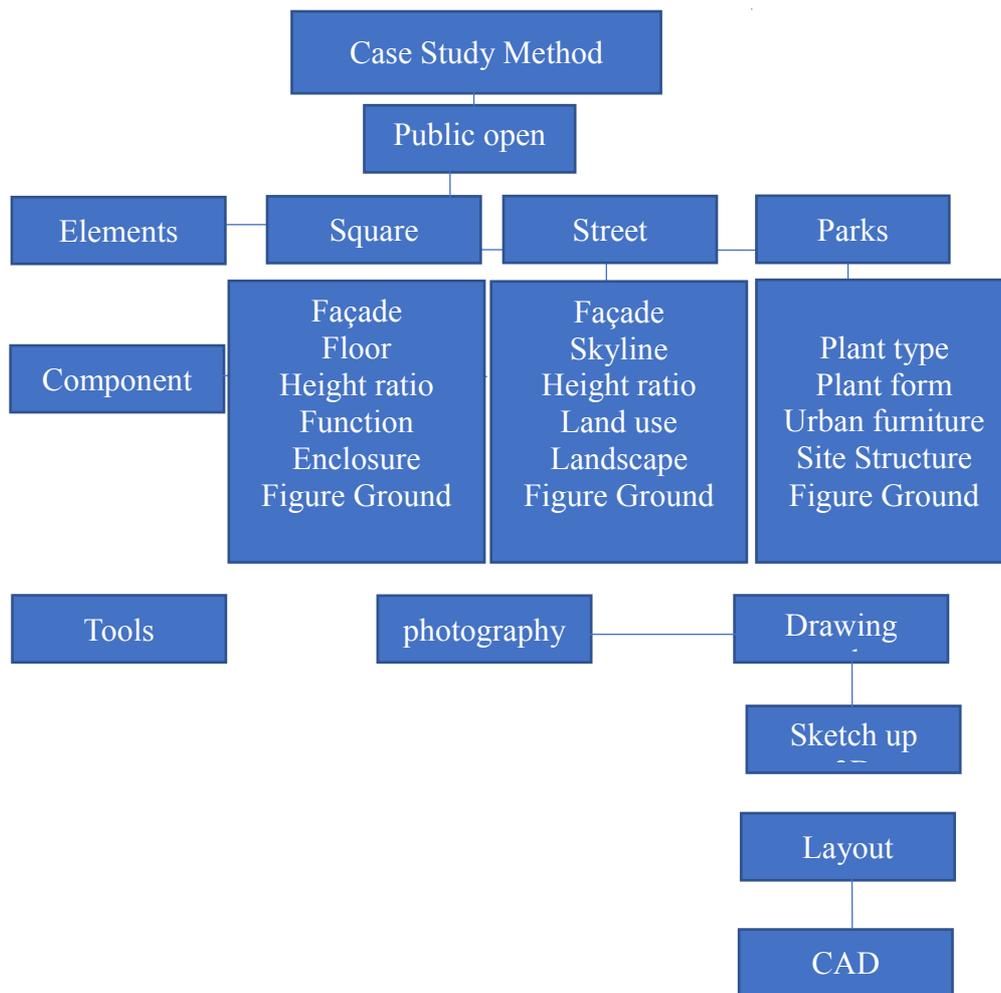


Figure 83: Case of study, draw by author

### 3.3 Analyzing and evaluating of the streets

#### 3.3.1 Baykal District

As shown on the map and according to the analyzed done, the neighborhood characteristic of Baykal area is complete development and relatively higher density and mixed building form which are apartments plus detached houses and mixed use with middle to high and low middle income. According to map they are four fundamental and essential streets in Baykal area, three important square which are have access to each other with main street which is Gazi Mustafa Kemal street and two Parks which are Kent park that is the second biggest park after the Anti park in Famagusta and the second one is Samsun Park which is a little park between the two-residential street and also three square which are Sivas, Ayhan Niyazi and Zafer Square. Street analysis has been assests under six-fold which are: Façade Floor, Height ratio, Function, Enclosure, Figure Ground and there are two parks located in the Baykal Area which are Kent park and Samsun park, the Kent park is the second biggest park in hole Famagusta and the Samsun park is located on residential neighborhood.

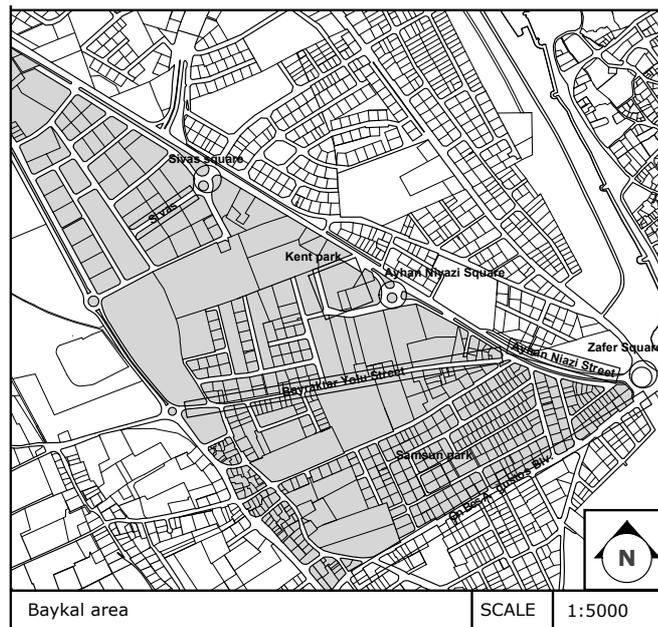


Figure 84: Baykal area, Draw by author

### 3.3.2 Analyzing and evaluating of On Bes Agustos Street

A single corridor can pass through multiple environments within the city, each with a different character and usage pattern. At right, a roadway passes through an auto-oriented commercial zone but has the same right-of-way as the two streets. Land use analysis shows that, the On Bes Agustos street which is the main commercial street in the Baykal area, it apparently has commercial strip character but within have some elements which are indeed for this type of street. According to the façade analysis the ratio of building start from 1:1 to 1:13 and the ratio between building with height of building are start from 1:1 to 1:10 and this analysis show that the building is not same in ratio with each other and the empty or lost spaces between these building is huge. According to the and use analysis the function of this street is commercial because most of the ground floor of building have a commercial function. The figure ground analysis shows the not well defined street with building line and the setbacks of building is not obeying with each other and it need to redesign.

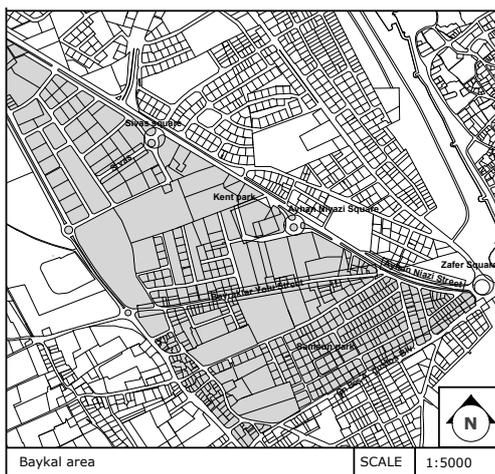


Figure 85: Baykal area, Draw by author



Figure 86: On Bes Agustos street, photo by author

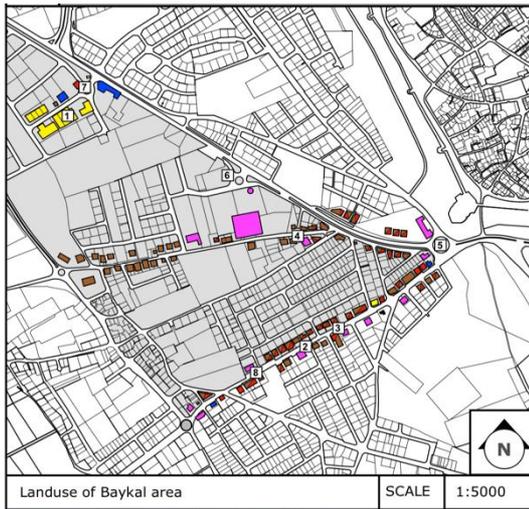


Figure 87: Land use of Baykal area,  
draw by author

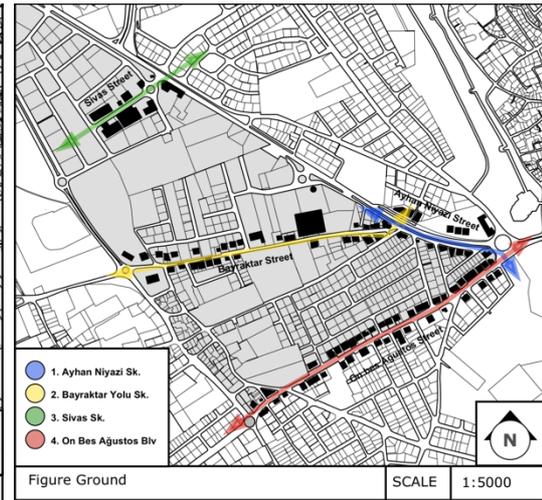


Figure 88: Figure ground of Baykal  
area, draw by author

Street design should both respond to and influence the desired character of the public realm. Rooted in city goals and policies, designers can work to enhance their surroundings by fulfilling the visions and desires of adjacent communities through street design. In an urban context, the street design must meet the needs of people walking, driving, cycling, and taking transit, all in a constrained space. The best street design also adds to the value of businesses, offices, and schools located along the roadway

### 3.3.3 Analyzing and evaluating of Bayraktar Street

The Bayraktar Yolu Sk is the low volume residential streets, especially in older cities, often have narrow or crumbling sidewalks. The Bayraktar street located on north of On Bes Agustos street. According to the façade and skyline analysis, the ratio of buildings starting from 1:1 to 1:9 and the ratio between buildings with height of buildings starting from 1:1 to 1:14 which show to us the a lot of spaces is exist in this area but actually the height of building from sild walk view is fair. According to the typology and cross section of this street, there are lack of some elements which indeed for street such as good sild walk, length of the street light. On the other hand, the figure ground analysis show the solid and empty spaces between the buildings and the set back of building according to the standards is not 3.5 meters and these buildings should be had setbacks, another problem with Baryraktar street, in the south east of the Persenbe Bazar there is a big lost space which need to redesign.



Figure 89: Bayraktar Street, photo by author



Figure 90: Bayraktar Street, photo by author

According to the land use analysis, the Bayraktar street is the residential street in the illustration above is traditional in neighborhoods with low traffic volumes. Here, the arrangement of the street network has formed a street section that functions naturally

as space for children to play and as a gathering place for residents.

Recommendation for Bayraktar street is to have setbacks in these streets to have better and wide street which are categorized by zoning street to have characteristic street which have good pedestrian, motor vehicle way, greenway and development zone. And considering the skyline which are not give better view to pedestrian and some façade which haven't any historical past and they are actually vacant should redesign.

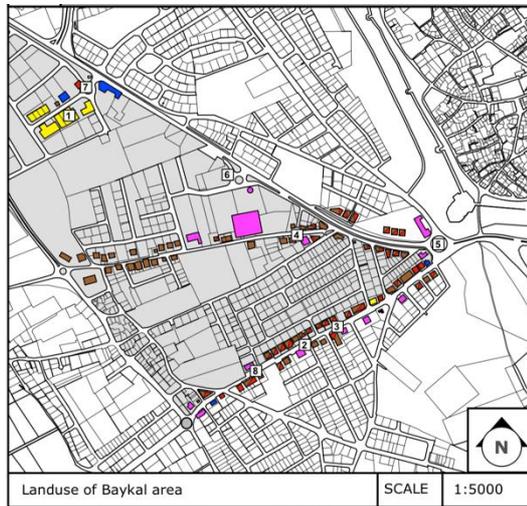


Figure 91: Land use of Baykal area, draw by author

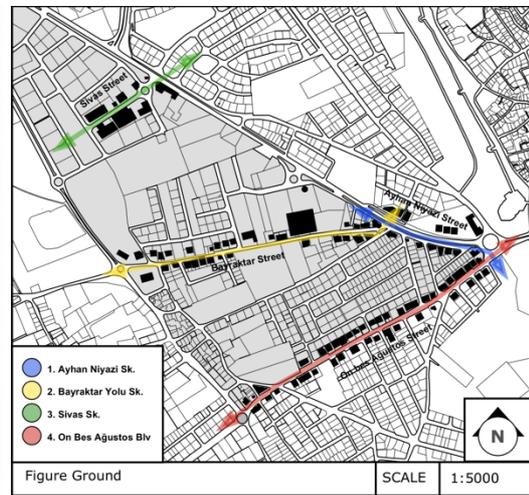


Figure 92: Figure ground of Baykal area, draw by author

### 3.3.4 Analyzing and evaluating of Ayhan Niyazi Street

Local streets in residential neighborhoods do usually underutilize as places for play and leisure. These streets should provide safe and inviting places to walk with direct access to local stores and schools. Design for local streets can combine storm water management features, curb extensions, vertical speed control elements, and bicycle facilities that encourage safe speeds and meter through traffic. According to the land use analysis, the function of Ayhan Niyazi Street is a Residential street because the most of building have a residential character and also in the figure ground analysis, the

buildings have a standard setback which is the 3.5 meters and because of the nice and same setbacks in all building this street have strong street line. According to the façade and skyline analysis, the ratio of buildings mostly is the same and the distance between places is acceptable. The most important problem of Ayhan Niyazi street is the height different between Ayhan Niyazi Street and Gazi Mustefa Kemal Street and there is no access to each other.



Figure 93: Ayhan Niyazi Street, photo by Author

### **3.3.5 Analyzing and evaluation of Sivas Street**

Many narrow or crowded downtown places serve informally as shared streets during rush hour or at lunchtime but are not classified as such. A commercial shared street environment should be considered in places where pedestrian activity is high, and vehicle volumes are either low or discouraged. Commercial shared streets can be designed for narrow or wide cross sections, but become increasingly complex and hard to maintain a shared area as width increases. According to the land use analysis, the Sivas Street has industrial character and in the typology analysis from Sivas street, it is obvious, this street hasn't designed and there is lack of street elements such as pedestrian way, the length of street isn't right, street furniture, there is no height

different between the street and sidewalk.

In the façade analysis, the ratio of buildings start from 1:2 to 1:6 and this shows this street is fully charged by buildings and in the figure ground analysis shows, there is no set back at all in hole street.



Figure 96: Sivas Street, photo by Author

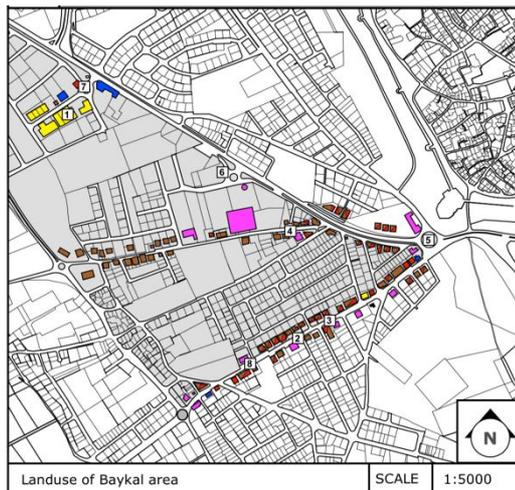


Figure 94: Land use of Baykal area, draw author

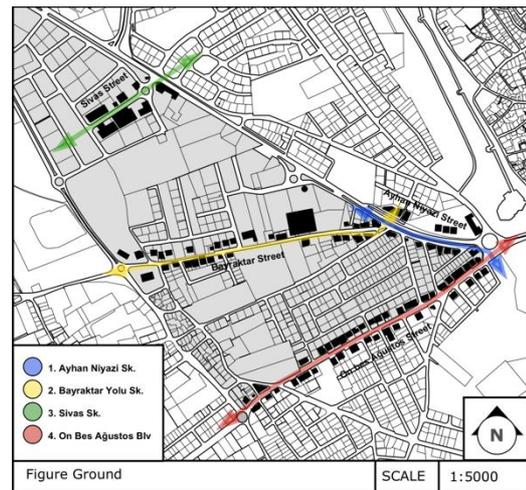


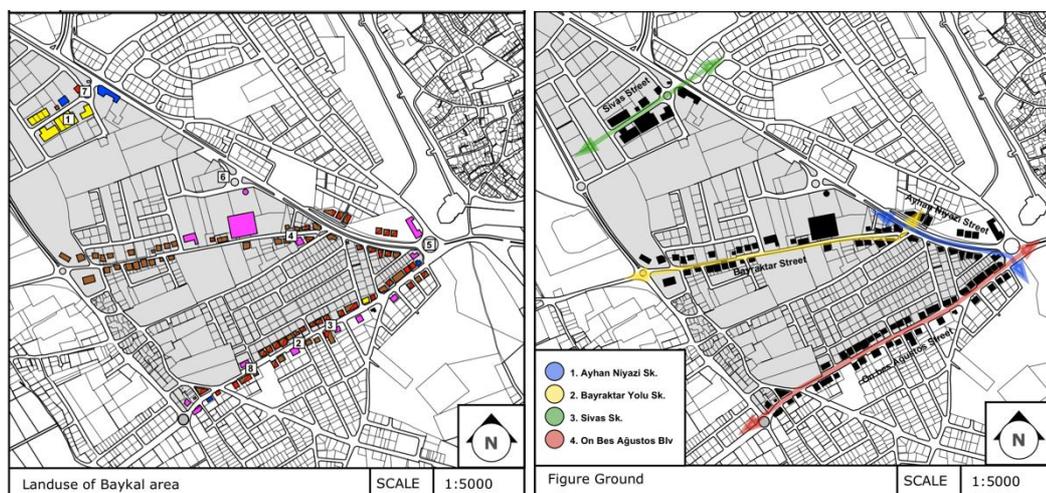
Figure 95: Figure ground of Baykal area, draw by author

### 3.4 Analyzing and evaluating the Squares

This chapter is going to analysis the square with consider of component of square witch author chose them from researches done such as enclosure, access, façade character, ground floor function, objects and elements which existed in this area.

#### 3.4.1 Analyzing and evaluating the Zafer Square

The Zafer square it can be the nucleus square because the main streets come together in this square. Zafer square is the biggest and important square in Famagusta which is located in the center of Famagusta. There is the natural boundary which is the old city support it with strength line. Also, there is lack of some elements and guidelines which are essential to this square to be nucleus squares such as firm boundary and accessible streets that come together in this square which was analyzed in the last chapter. According to the land use analysis, the function of this square is only for traffic but this square has a lot of potential to be a nucleus square with obeying guild lines such as Façade, floor, height ratio and enclosure. According to the floor analysis the material which used in this square are brick, tile, concrete, grass and asphalt and the element are, plants, floor, street, trees, buildings and big sculpture. Also, there are lack



of street furniture. The sculpture which are in the Zafer square is the Mustefa Kemal Ataturk and according to the enclosure square, there are three steps to calculation of enclosure: first: identification of the entire surface area occupied by a form of plan, second: identification of the vertical elements (usually buildings facades) which surround the form of plan and the centroid of the form of plan, thirdly the surface area of the sector projected from the centroid on the surrounding vertical barriers is calculation. Finally, the latter area is divided by the total area of the plan of square which is enclosure. As access map shows, there are four access street comes to this square, at the end and referring to the enclosure analysis done the Zafer square is enclosure square.



Figure 99: Zafer Square, photo by Author

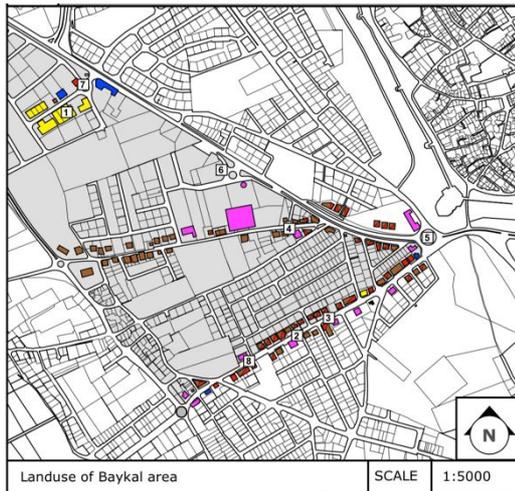


Figure 100: Land use of Baykal area,  
draw by author

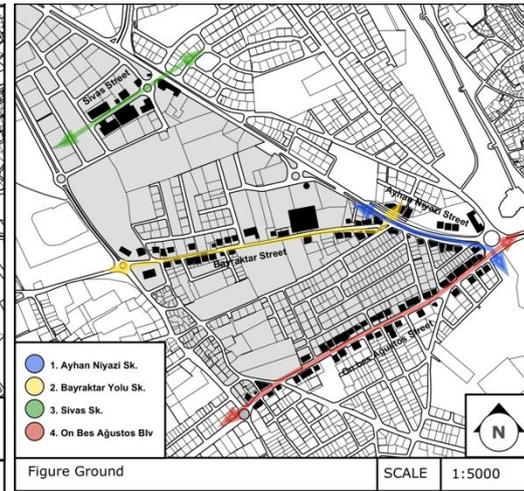


Figure 101: Figure ground of Baykal area,  
draw by author

### 3.4.2 Analyzing and evaluating the Ayhan Niyazi Square

The Ayhan Niyazi square it can be the associated function square because of the bazaar and people comes to this place to shopping but unfortunately, there is lack some elements such as street furniture and there isn't any good functional parking to park. The nucleus square is the most rudimentary of the three types. The activities for which it has evolved, or been established take place entirely upon the open space of the square without this activity having a dependence upon the land or building uses that adjoin the square. Its function, relative to the other types outlined below, is independent and self-centered, this is the earliest type of square. And actually, in Ayhan Niyzi square which there is no name on the map and it hasn't any characteristic of the square, but it has potential to be characteristically associated function square. According to the floor analysis the floor material to brick, asphalt, grass and concrete the figure ground analysis shows the buildings which surnamed the Ayhan Niyazi square and it is not well defined square with buildings. According to the enclosure analysis, there are three steps to calculation of enclosure: first: identification of the entire surface area occupied by a form of plan, second: identification of the vertical elements (usually buildings

facades) which surround the form of plan and the centroid of the form of plan, thirdly the surface area of the sector projected from the centroid on the surrounding vertical barriers is calculation. Finally, the latter area is divided by the total area of the plan of square which is not enclosure. As access map shows, there are four access street comes to this square and the Ayhan Niyazi square isn't enclosure square.



Figure 102: Ayhan Niyazi Square, photo by author

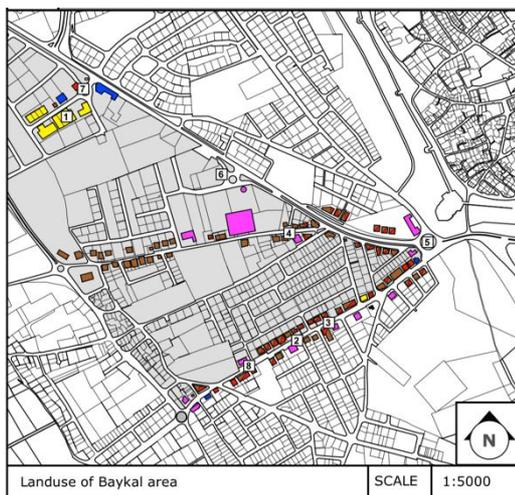


Figure 103: Land use of Baykal area, draw by author

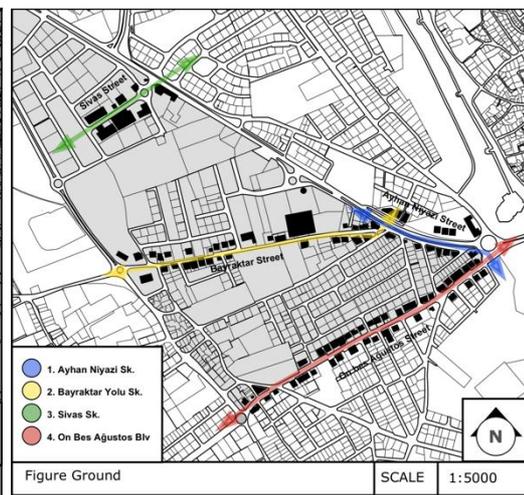


Figure 104: Figure ground of Baykal area, draw by author

### **3.4.3 Analyzing and evaluating the Sivas Square**

The Sivas square is the amorphous square. in order to clarify the meaning of the term "square" as used in this study this variation must be mentioned to indicate that many open spaces formally bear the title of "square" even though they are but a crossroads. Each square may not be easily categorized as closed, dominated, nuclear, or grouped; this question is often more complex and requires what may be termed as "multiple classification. In Sivas square which categorized to be amorphous square, it should to redesign some part of this square as like street furniture, give a stronger boundary and etc. Sivas square is the enclosure square and there are four access for this square but unfortunately these access is not too clear and it need to be redesign and also about the enclosure of this square the building which are built in this area haven't good defined line with streets and square. According to the Floor analysis, the floor materials categorized to: brick, grass, asphalt, tile and concrete. The Sivas square has four access and the elements classified to five part such as plants, floor, trees street and building but there are lack street furniture and good functional parking. According to the enclosure analysis, there are three steps to calculation of enclosure: first: identification of the entire surface area occupied by a form of plan, second: identification of the vertical elements (usually buildings facades) which surround the form of plan and the centroid of the form of plan, thirdly the surface area of the sector projected from the centroid on the surrounding vertical barriers is calculation.



Figure 105: Sivas square, Photo by author

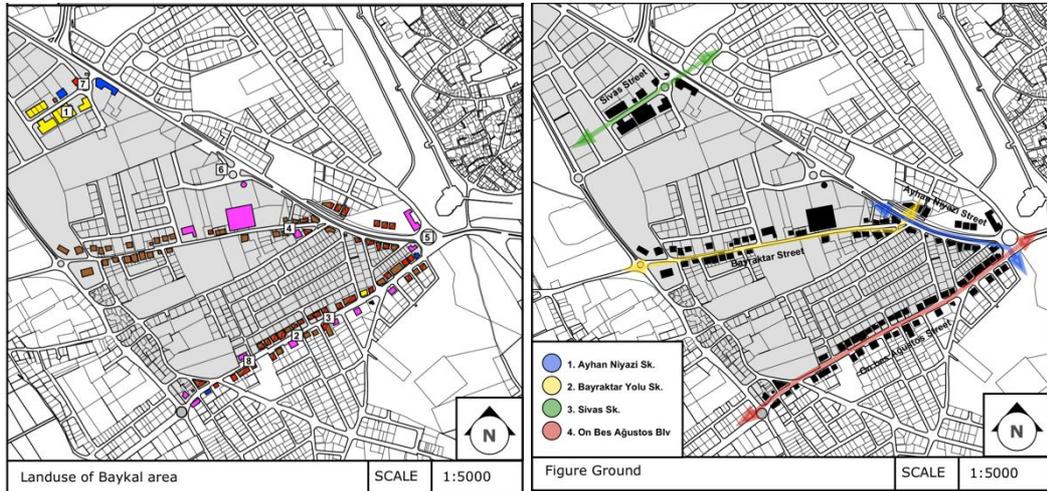


Figure 106: Land use of Baykal area, draw by author

Figure 107: Figure ground of Baykal area, draw by author

### 3.5 Analyzing and evaluating the Parks

The researcher analyzed these parks with this qualitative component which are such as, Functions, activates, type of landscape, type of vegetation, form of vegetation, access, street furniture and site structure.

#### 3.5.1 Analyzing and evaluating the Kent Park

Parks in urban design have most crucial physical role. They provide places for individuals to walk or jog, and many have specific facilities for sports, exercise, and

other vigorous activities, in other words, parks can play a character in promoting physical activity, but do not necessarily do so. The Kent Park is the most significant park after the Anit park in the Magusa. The Kent park has five access to entrance and a one of the well-designed park in the Famagusta which is located in the south west of the Magusa. The elements and guidelines of Parks existed in this park, but the location of parks have the problem such as street furniture, access to park neighborhood. The density of park is good, but the position of the park has a little problem.



Figure 108: Kent Park, photo by Author

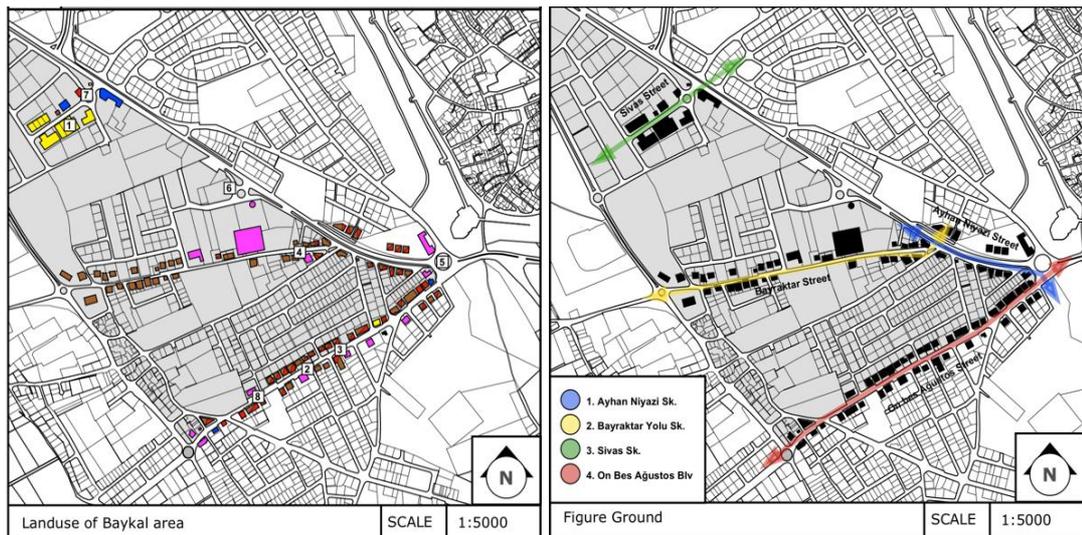


Figure 109: Land use of Baykal area, draw by author

Figure 110: Figure ground of Baykal area, draw by author

### 3.5.2 Analyzing and evaluating the Samsun Park

Samsun park is a small park in the residential neighborhood in Baykal area. It has a rectangular plan 1700 square meters, actually, this park used only for these residential neighborhoods which are used from the park for their children. Samsun Park is one of the unknown parks which hasn't any name and any characteristic and it's going to breakdown because or it can be redesign as a park school. To have change this place the park need to much more space and fortunately in the south west of this park there are a greenery space which hasn't any function and use. As shown in analysis from this park, Samsun park has three plant characteristics that are, Vase, pyramidal and Round. And trees are evergreen and deciduous. But there isn't good park furniture or good planning greenery. The Samsun park, essentially need to be redesign and get character.



Figure 111: Samsun Park, photo by Author

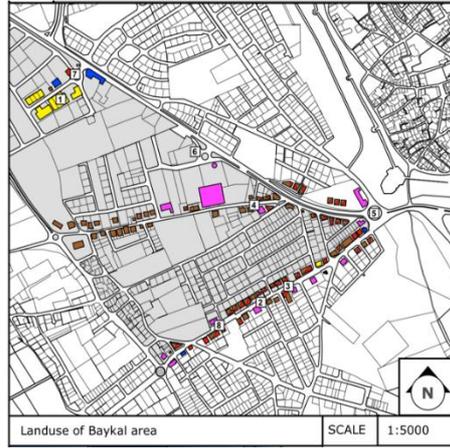


Figure 112: Land use of Baykal area, draw by author

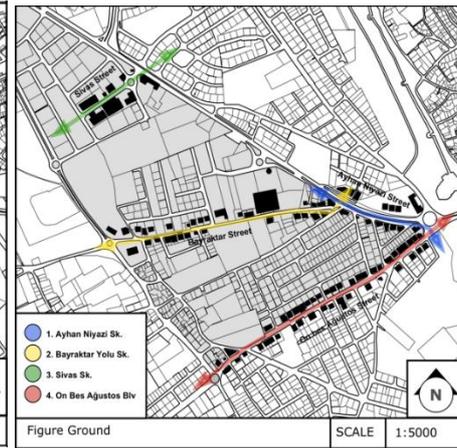


Figure 113: Figure ground of Baykal area, draw by author

Table 4: Analyzing of street, square and park

| <b>Street</b> | <b>Name</b>                  | <b>Type</b>            | <b>Function</b>  | <b>Building ratio</b>                                 | <b>Ratio between buildings</b> |
|---------------|------------------------------|------------------------|--|---|--------------------------------|
| <b>1</b>      | <b>Sivas Street</b>          | Parkway                | Transit corridor   | 1.1 to 1.4  | 1.1 to 1.7                     |
| <b>2</b>      | <b>Bayraktar Street</b>      | Local subdivision      | Neighborhood street  | 1.2 to 1.13   | 1.1 to 1.11                    |
| <b>3</b>      | <b>On Bes Agostus Street</b> | Great street           | Commercial street  | 1.1 to 1.5  | 1.1 to 1.16                    |
| <b>4</b>      | <b>Ayhan Niyazi Street</b>   | Local subdivision      | Residential street   | 1.1 to 1.7  | 1.1 to 1.7                     |
| <b>Square</b> | <b>Name</b>                  | <b>Enclosure</b>       | <b>Floor Material</b>  | <b>Elements</b>                                       |                                |
| <b>1</b>      | <b>Zafer square</b>          | Yes                    | Brick, asphalt, grass, concrete, tile  | Plants, floor, trees, street, big sculpture, building |                                |
| <b>2</b>      | <b>Sivas Square</b>          | No                     | Asphalt, grass, concrete   | Plants, floor, trees, streets, buildings              |                                |
| <b>3</b>      | <b>Ayhan Niyazi Street</b>   | No                     | Asphalt, grass, concrete   | Plants, floor, trees, street, parking, buildings      |                                |
| <b>Parks</b>  | <b>Name</b>                  | <b>Plant character</b> | <b>Elements</b>  | <b>Type</b>   | <b>Access</b>                  |
| <b>1</b>      | <b>Samsun park</b>           | Vase, pyramidal, round | Playground, connection with local system, open maintain green space, basketball yard, tennis yard, park furniture  | Park school   | Open access                    |
| <b>2</b>      | <b>Kent Park</b>             | Oval, vase, round      | Playground, access trail loop internal to the park, connection with local system, open maintain green space, basketball yard, volleyball yard, tennis yard, park furniture, ornamental landscape planting, parking | Neighborhood park                                     | 3 sub access<br>1 main access  |

## Chapter 4

### CONCLUSION AND RECOMMENDATION

#### 4.1 Evaluation of the Baykal District

Streets, parks, and square are the important urban space, which is on assigning urban design as a new approach to deamination of new designs and criteria concerning physical characteristic to provide the fabric and attractive neighborhood to increase life quality. The essential question here is in which ways urban design can be used as a tool for improving the function and quality of Baykal's public spaces which are classifying to street, square and parks.

In Famagusta one of the most remarkable places is the Baykal area, which is known as a commercial, residential and industrial area. There are too many places which have potential to be a typical urban public space such as the On Bes Agustos Street to be commercial shared street, but this street needs to redesigned and consider the lack of street elements such as street furniture, appropriate access. the On Bes Agustos street which is the main commercial street in the Baykal Area, it apparently has commercial strip character but within have some elements which are indeed for this type of street. According to the façade analysis the ratio of building start from 1:1 to 1:13 and the ratio between building with height of building are start from 1:1 to 1:10 and this analysis show that the building is not same in ratio with each other and the empty or lost spaces between these building is huge. According to the land use analysis the function of this street is commercial because most of the ground floor of building have

a commercial function.

In the Bayraktar street which is the residential street and also should be mentioned and redesigned some part of this street, Problems of Bayraktar Street can be mentioned such as lack of pedestrian way, lack of zebra line, lack of real facade, problems with setbacks, skyline issue. The Bayraktar Yolu Street is the low volume residential streets, especially in older cities, often have narrow or crumbling sidewalks. The Bayraktar street located on north of On Bes Agusos street. According to the façade and skyline analysis, the ratio of buildings starting from 1:1 to 1:9 and the ratio between buildings with height of buildings starting from 1:1 to 1:14 which show to us a lot of spaces is exist in this area but actually the height of building from sild walk view is fair. According to the typology and cross section of this street, there are lack of some elements which indeed for street such as good sidewalk, length of the street light. On the other hand, the figure ground analysis show the solid and empty spaces between the buildings and the set back of building according to the standards is not 3.5 meters and these buildings should be have setbacks, another problem with Baryraktar street, in the south east of the Persenbe Bazar there is a big lost space which need to redesign.

The Ayhan Niazi Street that connected to the Bayraktar Street and it's also a local residential street. The most important problem in Ayhan Niyazi Street is the connection of this street with parallel street. There is no access between the Ayhan Niyazi Street and Gazi Mustafa Kemal street. Mustafa Kemal street is different from height in Ayhan Niyazi and lack of street furniture. There isn't well pedestrian way and car way, lack of parking. In the last part, Sivas street is the industrial street which only there are only two restaurants and the rest of those building are industrial. Actually, in this street there is no pedestrian way, parking or stop area to trucks and

cars. According to the land use analysis, the function of Ayhan Niyazi Street is a residential street because the most of building have a residential character and also in the figure ground analysis, the buildings have a standard setback which is the 3.5 meters and because of the nice and same setbacks in all building this street have strong street line. According to the façade and skyline analysis, the ratio of buildings mostly is the same and the distance between places is acceptable. The most important problem of Ayhan Niyazi street is the height different between Ayhan Niyazi Street and Gazi Mustafa Kemal Street and there is no access to each other.

In the second part of analysis, there is the square, which are classified in the Baykal area to three Square, the Zafer Square, Ayhan Niyazi Square and Sivas square. These squares have well location in Baykal area but they are not designed well, actually some of these problems comes from organic planning of Famagusta. But in this area, this answer cannot be correct, in the Zafer Square it can be the nucleus square because the main streets come together in this square. Zafer Square is the biggest and important square in Famagusta which is located in the center of Famagusta. There is the natural boundary which is the old city support it with strength line. Also, there is lack of some elements and guidelines which are essential to this square to be nucleus squares such as firm boundary and accessible streets that come together in this square which was analyzed in the last chapter. According to the land use analysis, the function of this square is only for traffic but this square has a lot of potential to be a nucleus square with obeying guild lines such as Façade, floor, height ratio and enclosure. According to the floor analysis the material which used in this square are brick, tile, concrete, grass and asphalt and the element are, plants, floor, street, trees, buildings and big sculpture. Also, there are lack of street furniture.

In Ayhan Niyzi square which there is no name on the map and it hasn't any characteristic of the square, but it has potential to be characteristically associated function square. According to the floor analysis the floor material to brick, asphalt, grass and concrete the figure ground analysis shows the buildings which surnamed the Ayhan Niyazi square and it is not well defined square with buildings. According to the enclosure analysis, there are three steps to calculation of enclosure: first: identification of the entire surface area occupied by a form of plan, second: identification of the vertical elements (usually buildings facades) which surround the form of plan and the centroid of the form of plan, thirdly the surface area of the sector projected from the centroid on the surrounding vertical barriers is calculation. Finally, the latter area is divided by the total area of the plan of square which is not enclosure. As access map shows, there are four access street comes to this square and the Ayhan Niyazi square isn't enclosure square.

The Sivas Square is the enclosure square and there are four access for this square but unfortunately these access is not too clear and it need to be redesign and also about the enclosure of this square the building which are built in this area haven't good defined line with streets and square. According to the floor analysis, the floor materials categorized to: brick, grass, asphalt, tile and concrete. The Sivas Square has four access and the elements classified to five part such as plants, floor, trees street and building but there are lack street furniture and good functional parking. According to the enclosure analysis, there are three steps to calculation of enclosure: first: identification of the entire surface area occupied by a form of plan, second: identification of the vertical elements (usually buildings facades) which surround the form of plan and the centroid of the form of plan, thirdly the surface area of the sector projected from the centroid on the surrounding vertical barriers is calculation. Finally, the latter area is

divided by the total area of the plan of square which is not enclosure and in these squares, there are lack of street furniture, pedestrian way, controlled greenery, access. The form of these squares is circle but the streets which comes to this street, they haven't well access. The character of the Square was something beyond a physical shape. It had a representative viewpoint. All these spots were placed for social consideration and experience. They were astounding and incentive for the explorers and guests. The way that adolescents and guardians with youngsters visited the square meant the real feeling of urban space which was utilized among minority and also the metropolitan region wasn't putting forth a place for action for the kids. The downtown zone has a few focal points that all other human correspondences way can ever happen, from the physical, mental and physiological point of view. City spaces had a movement which attracted clients of assorted types and offered more than what online net-workings were occurring. For this matter to be proficient, the experts needed to take particular measures of rejuvenating the urban squares. Each component of imperative must be progressed. The urban spaces had a capacity to fit a clarification of the requirement of the present age. The antiquated engineers and architects of the previous hundreds of years got time to build up the square in both stylish and usefulness as indicated by the errand and way of life of the general public they served. Accordingly, today urban and scene fashioners must play it safe and measure for the plan and rebuilding ventures. In this discussion, assessing the imperatives of open spaces and perceiving the way it could be moved forward. With a specific end goal to accomplish, the importance of open spaces, in this examination initially was analyzed. Second, in view of a few researchers, the part of open spaces was characterized. Third, the investigation in various point characterized squares. The components of essentials

out in the open spaces were called attention to the long last addressed with the assistance of examining devices and strategies.

In the third part of analysis, there is the two parks, which are Samsun Park and Kent park. Parks in urban design have most crucial physical role. They provide places for individuals to walk or jog, and many have specific facilities for sports, exercise, and other vigorous activities, in other words, parks can play a character in promoting physical activity, but do not necessarily do so. The Kent Park is the most significant park after the Anit Park in the Magusa. The Kent park has five access to entrance and a one of the well-designed park in the Famagusta which is located in the in the south west of the Magusa. The elements and guidelines of Parks existed in this park, but the location of parks have the problem such as street furniture, access to park neighborhood.

The Samsun Park is a small park in the residential neighborhood in Baykal area. It has a rectangular plan 1700 square meters, actually, this park used only for these residential neighborhoods which are used from the park for their children. Samsun Park is one of the unknown parks which hasn't any name and any characteristic and it's going to breakdown because or it can be redesign as a park school. To have change this place the park need to much more space and fortunately in the south west of this park there are a greenery space which hasn't any function and use. As shown in analysis from this park, Samsun park has three plant characteristics that are, Vase, pyramidal and Round. And trees are evergreen and deciduous. But there isn't good park furniture or good planning greenery. The Samsun Park, essentially need to be redesign and get character. The Kent park is bigger than Samsun park and actually the Samsun Park hasn't any character but it has a potential to improve and redesign some

part of this park such as increase the density of park to the east between two streets to get more space to get have redesign this area. Samsun Park need to new playground for basketball or etc. sport furniture, managed greenery, fans, access, shelter and after all of these it can be Park school.

For politicians and local decision makers it provides insight into: way of looking at the types, form and functions of urban open space and the needs of users, ways to achieve the goal of vital urban open spaces and checklists for concrete steps to be taken as part of the planning, implementation and management processes.

## **4.2 Future recommendations**

This thesis suggests for other researcher, local government for analyzing and recommending the other dimension of public open space such as social dimensions, functional dimensions or perceptive dimension.

## RREFERENCES

Abhas K. Jha, T. W. (2008). Urban street design guidelines Pune. Pune, 78-90.

Absher, M. (2012). On street parking guidelines. The city of bowling green, 10-26.

Ageing, A. g. (2009). Park and open space. Design principle - parks and open space, 3-8.

Appleyard, D. (1981). Livable streets. London: University of Colifornia Press.

Bishop, I. G. (1995). Autonomous agents and virtual reality. Countryside commission, 423-435.

Bulter, F. S. (2007). Planning and urban design standards. New Jersey: John Willey and sons, Inc.

Carmona, M. (2008). Public space. USA: Routledge.

Carr, s. M. (1992). Public place. Cambridge University Press, 21.

Chansellor, E. B. (1907). The history of square of london. London: kegan Paul & co.

Charles A. Flink, K. O. (2001). Trails for the twenty first century. Washington, Covelo and London: Island Press.

corporation, P. m. (2008). Urban street design guidelines Pune. Pune, 78-90.

Corraliza. (2000). Landscape and social identity: the construction of territorial identity. Proceedings of the 16th conference of the international association for people environment studies (p. 12). Paris: international association.

Edward O'Donnell, A. K. (2007). Sidewalk and shared use path: safety, security, and maintenance. Summary report, 58.

Ela, A. E. (2003). Cultural globalization and changes in the urban form of metropolis Cities , ( The Case of Cairo ). 39 th ISoCaRP Congress, 10.

Elizabeth, M. L. (2007). The urban design reader . rodriguez, 223.

Fabos, J. G. (1995). Greenways: the beginning of an international movement. London: elsevier press.

Francaviglia, R. V. (1996). Main street. Iowa: university of Iowa Press.

Frederick R. Steiner, k. b. (2007). Planning and urban design standards. New Jersey: John Willy and sons, Inc.

Furness, Z. (2010). One less car. Philadelphia: Temple university Press.

Giedion, S. (1963). Space, time and architecture. London: Harvard university press.

Greed, M. R. (2001). Approaching urban design. New York: Routledge.

Group, P. T. (2003). Relationship between lane width and speed. Columbia pike street space planning task force, 1-5.

Group, P. T. (2003). Relationship between lane width and speed. Columbia pike street space planning task force, 1-5.

Jacobs, J. (2009). The death and life of great American cities. USA: Random house.

John. (2000). Socio economy in urban design. Rodriguez, 45.

Kaplan, R. K. (1989). Experience of nature: psychological perspective. New York: Cambridge University press.

Kellet, C. G. (2005). Skinny street and green neighborhoods. Washington, Covelo and London: Island Press.

Kitto, H. (1951). 'The polis', in R.T. LeGates and F. Stout (eds) the city reader, 2nd edn. London: Routledge.

Kostof, S. (1999). The city assembled of urban form through history. Routledge, 146-153.

Lian Borden, J. K. (2002). The unknown. United State: MIT Press.

LLAN B. Jacobs, E. M. (1959). Design of multiway boulevard. United State: Massachussettes Inistitute of Thechnology.

Lynch, K. (1960). *The image of the city*. UK: Technology Press.

M. K. Jha, P. S.-C. (2006). *Intelligent road design*. USA: WIT press.

Macdonald, M. A. (2007). *The urban design reader*. USA: Routledge.

Marshal, S. (2005). *Street and patterns*. London and New York: Spon Press.

Matthew Carmona, T. H. (2003). *Public places - urban space*. New York: architectural press.

Mazzette, A. (2009). *Estranee in città. A casa, nelle strade, nei luoghi di studio e di lavoro*. Milan: FrancoAngeli Milan.

Mazzette, A. E. (2007). *La metropoli consumata. Antropologie, architetture, politiche, cittadinanze*. Milan: FrancoAnge.

Meredith, M. V. (2012). *The city at eye level*. Netherlands: Eburon Press.

Mohammad mehdi sadeghian, Z. V. (2015). *A brief review on urban park history, classification and function*. International journal of scientific and technology research volume 4, 1-4.

Moughtin, C. (1992). *Urban design, street and square*. London: Architecture press.

Mumford, L. (1961). *The city in history: Its origins, its transformation, and its Prospects*. New York: Harcourt Brace Jovanovich.

Official, N. a. (2003). Global street design guide. London: Island Press.

Official, N. A. (2003). Transit street design guild. London: Island Press.

officials, N. a. (2000). Street design guide. Washington: Island press.

Paul, Z. (1955). The space volume relation in history of town planning. *Aesthetics*, 439-455.

Paul. f. (2009, 3 1). What is a great civic space. Retrieved from [www.pps.org](http://www.pps.org):  
[https://www.pps.org/reference/benefits\\_public\\_spaces/](https://www.pps.org/reference/benefits_public_spaces/)

Peers, F. a. (2012). Bicycle facilities design manual guidelines for the city of redmond. *Miarai*, 33-50.

Pencic, D. (2010). Revival of City . City square and public space, 5-10.

Peter, G. m. (1963). Public square. *community and regional planning*, 34.

Peter, G. M. (1963). Public square. *Community and regional planning* , 50-90.

Pirenne, H. (2000). 'City origins', in R.T. LeGates and F. Stout (eds) *The City Reader*.  
London: Routledge.

Pratelli, A. (2014). Urban street design and planning. Italy: WIT Press.

Schuyler, D. (1986). Green network: the state of the art. Vienna: Stadplanung Wien.

- Sideris, A. L. (2009). *Sildewalks, conflict And negotionation over public space*.  
London: MIT press.
- Skiena, S. S. (2012). *The algorithm design manual*. New york: Springer.
- Stanley, B. W. (2012). *Urban open spaces in historical perpective: a transdisciplinary typology and analysis*.*Urban Geography*, 20.
- Thompson, W. (1996). *landscape design*. Thompson, 254, 26-31.
- Traks, K. K. (2011). *The square in space and time. Part 1/classification and typologies*, 3.
- Tseira Maruani, I. A. (2007). *Open space planning models: a review of approaches and methods*. Elsevier, 2.
- Tumlin, J. (2012). *Sustainable transportation planning*. New York: Wiley Press.
- Varna, G. (2016). *Measuring public space: The star model*. UK: Routledge .
- Walker, J. R. (2010). *Key design consideration for neighborhood*. Texas A & M Agrilife extension, 1-2.
- Wallstrom, M. (2012). *Reclaiming city, Streets for people chaos or quality of life*. European commission, 13.

URL 1: <http://aharon.varady.net/omphalos/2008/09/urban-parks-08-opening-session>

URL 2:

<http://www.lasprovincias.es/noticias/201306/18/Media/plaza-virgen--647x300.jpg>

URL 3: [http://www.elcivics.com/washington\\_dc\\_mall.html](http://www.elcivics.com/washington_dc_mall.html)

URL 4: <http://adelaide.kidtown.com.au/images/bonython-park-playgrounds-adelaide-parks-adelaide-playgrunds-fun-for-kids-kids-in-adelaide.jpg>

URL 5: [http://www.iranreview.org/file/cms/images/stories/872\\_2.jpg](http://www.iranreview.org/file/cms/images/stories/872_2.jpg)

URL 6:

<https://www.freewheelingfrance.com/assets/components/phpthumbof/cache/canal%20du%20Midi%20Belle%20France.dba230e09c7b16f528006bdf80890808805.jpg>

URL 7:

<https://media-cdn.tripadvisor.com/media/photo-s/03/0a/f7/99/ridge-on-the-pink-trail.jpg>

URL 8: <http://photos.longjaunt.com/2008/05/12/howbazaar/026.jpg>

URL 9: <http://www.preservenet.com/freeways/PompidouPlage6.jpg>

URL 10: [https://commons.wikimedia.org/wiki/File:VENTURA\\_SECO\\_1738.jpg](https://commons.wikimedia.org/wiki/File:VENTURA_SECO_1738.jpg)

URL 11: <https://www.yyshtools.com/photo/1129749/learn-spanish-in-madrid-study-language-and-culture-at.jpg>

URL 12: <https://imgur.com/Rr30rVN>

URL 13: <https://tr.pinterest.com/pin/209698926377498712/?lp=true>

URL 14:

[https://www.allposters.com/-sp/Touristes-sur-le-parvis-de-la-cathedrale-Notre-Dame-de-Paris-Posters\\_i13172366\\_.htm?UPI=Q10UP3Z0&PODConfigID=14258397](https://www.allposters.com/-sp/Touristes-sur-le-parvis-de-la-cathedrale-Notre-Dame-de-Paris-Posters_i13172366_.htm?UPI=Q10UP3Z0&PODConfigID=14258397)

URL 15:

<https://i.pining.com/originals/77/d1/52/77d1526c8dff375bd84f93f6bc6fe02f.jpg>

URL 16: <https://en.wikipedia.org/wiki/London>

URL 17: [https://en.wikipedia.org/wiki/Place\\_Charles\\_de\\_Gaulle](https://en.wikipedia.org/wiki/Place_Charles_de_Gaulle)

URL 18: <https://www.flickr.com/photos/quadralectics/4345983188>

URL 19: [https://en.wikipedia.org/wiki/Imperial\\_fora](https://en.wikipedia.org/wiki/Imperial_fora)

URL 20: <http://www.legionxxiv.org/lrgforumplan/>

URL 21: <http://www.learn.columbia.edu/treasuresofheaven/shrines/Venice/Piazza-San-Marco-1831-circle.jpg>

URL 22: [https://en.wikipedia.org/wiki/Piazza\\_San\\_Marco](https://en.wikipedia.org/wiki/Piazza_San_Marco)

URL 23:

[https://moon.com/wp-content/uploads/2014/09/01\\_04\\_Old-Town-Square.jpg](https://moon.com/wp-content/uploads/2014/09/01_04_Old-Town-Square.jpg)

URL 24: <https://www.commonlit.org/texts/excerpts-from-leviathan>

URL 25:

[https://commons.wikimedia.org/wiki/File:Napoli,\\_Mercato\\_di\\_Monteoliveto\\_\(distretto\),\\_piazza.jpg](https://commons.wikimedia.org/wiki/File:Napoli,_Mercato_di_Monteoliveto_(distretto),_piazza.jpg)

URL 26: <http://poznan.naszemiasto.pl/tag/bezrobocie-poznan.html>

URL 27: <http://traveltamed.com/places-to-visit-in-greece/>

URL 28: [https://en.wikipedia.org/wiki/%C3%8Ele\\_de\\_la\\_Cit%C3%A9](https://en.wikipedia.org/wiki/%C3%8Ele_de_la_Cit%C3%A9)

URL 29: <https://prezi.com/hjc5uf7sf1kg/catedral-de-notre-dame/>

URL 30: <http://historyczno-sztucznie.blogspot.com.cy/2013/11/9-bernardo-i-antonio-rossellino.html>

URL 31:

[http://m.eurobike.kr/bbs.php?act=view&table=tongsin&gr=1&gcd=3970&page=1&T\\_CON=IT](http://m.eurobike.kr/bbs.php?act=view&table=tongsin&gr=1&gcd=3970&page=1&T_CON=IT)

URL 32: <https://i.pinimg.com/736x/08/b0/c1/08b0c13d2137cc99155764a18d27202d-vosges-victor-hugo.jpg>

URL 33: <http://paryskiespacery.pl/znacie-paryskie-place/>

URL 34:

[https://webpages.uidaho.edu/larc389/italy\\_files/images/PIAZZA/R420%20P%20signoria.JPG](https://webpages.uidaho.edu/larc389/italy_files/images/PIAZZA/R420%20P%20signoria.JPG)

URL 35: [https://en.wikipedia.org/wiki/Piazza\\_della\\_Signoria](https://en.wikipedia.org/wiki/Piazza_della_Signoria)

URL 36: <https://i.pinimg.com/736x/bb/6c/07/bb6c07050842a58f213c32390574e5b3-classic-architecture-travel-europe.jpg>

URL 37: <https://www.hexapolis.com/2014/10/11/8-incredible-facts-about-st-peters-basilica/>

URL 38: [https://issuu.com/mrkextreme/docs/design\\_street\\_and\\_square\\_-by\\_j.\\_c.\\_](https://issuu.com/mrkextreme/docs/design_street_and_square_-by_j._c._)

URL 39: <http://www.ipreferparis.net/partiesnightlifeopenings/page/2/>

URL 40: <https://www.urbanplanet.org/forums/topic/53464-the-carolina-theatres/>

URL 41: <https://en.wikipedia.org/wiki/Sidewalk>

URL 42: [https://en.wikipedia.org/wiki/Des\\_Plaines\\_River\\_Trail](https://en.wikipedia.org/wiki/Des_Plaines_River_Trail)

URL 43:

[https://www.yelp.com/biz\\_photos/walgreens-stockton-5?select=SYhtbolXMSOVsbmBLqZ9Cw](https://www.yelp.com/biz_photos/walgreens-stockton-5?select=SYhtbolXMSOVsbmBLqZ9Cw)

URL 44: <https://www.shutterstock.com/video/clip-28368604-stock-footage-aerial-bird-view-car-lot-with-vehicles-ready-for-transportation-to-dealers-for-united-states-car.html?src=rel/23469865:8>

URL 45:

<http://www.dbarchitect.com/us/writings/94/HOW-TO%3A%20Bicycle%20Toolbox.html>

URL 46: <https://tr.pinterest.com/pin/496521927641021602/?lp=true>

URL 47: [http://www.ci.lino-lakes.mn.us/index.asp?SEC=67FBFAB1-0B78-448F-85B7-AFF5C3B73FEF&Type=B\\_BASIC](http://www.ci.lino-lakes.mn.us/index.asp?SEC=67FBFAB1-0B78-448F-85B7-AFF5C3B73FEF&Type=B_BASIC)

URL 48: <https://eminnetonka.com/parks-trails/58-parks/906-lone-lake-park>

URL 49: <https://www.minneapolisparcs.org/>

URL 50:

<http://www.startribune.com/mppls-park-board-now-balks-at-yard-park-downtown/269634571/>

URL 51: <https://tr.pinterest.com/pin/496521927641021602/?lp=true>

## **APPENDIX**

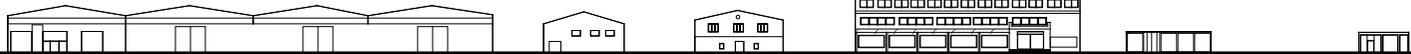




Assessment of the Quality of Urban Public Spaces residential in neighborhoods: as a case of Famagusta

Facade and skyline of Sivas Sk.

scale: 1/1000



Ratio high to width  
North West section

Ratio: 1/13

Ratio: 1/3

Ratio: 1/3

Ratio: 1/4

Ratio: 1/4

Ratio: 1/2

South east section

Ratio: 1/13

Ratio: 1/4

North West section

Ratio between the buildings

Ratio: 1/1

Ratio: 1/2

Ratio: 1/2

Ratio: 2/1

Ratio: 1/7

South east section

Ratio between the buildings

Ratio: 1/7



Assessment of the Quality of Urban Public Spaces residential in neighborhoods: as a case of Famagusta

Facade and skyline of Ayhan Niyazi Sk.

scale: 1/1000



Ratio high to width  
North section

Ratio: 1/2

Ratio: 1/2

Ratio: 1/1

Ratio: 1/2

Ratio: 1/1

Ratio: 1/4

Ratio: 1/3

South section



Ratio: 1/2

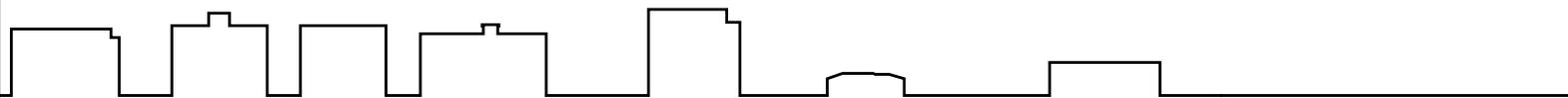


Ratio: 1/2

Ratio: 1/1

Ratio: 1/2

South section



Ratio: 1/1

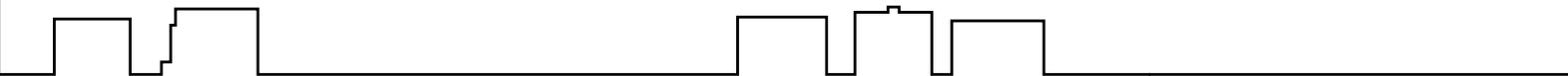
Ratio: 2.1

Ratio: 1/2

Ratio: 1/1

Ratio: 1/4

South section



Ratio: 2.1

Ratio: 1.7

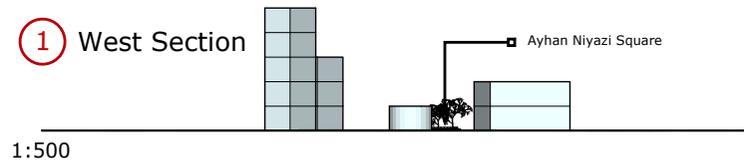
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Ratio: 3.1

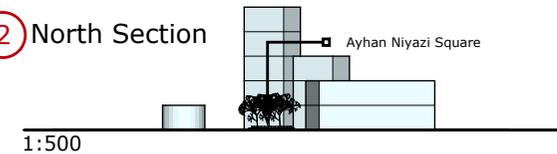


## Assessment of the Quality of Urban Public Spaces residential in neighborhoods: as a case of Famagusta

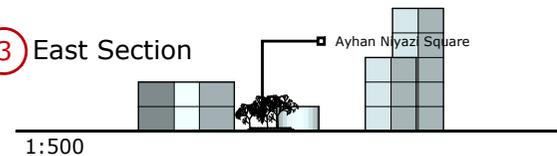
① West Section



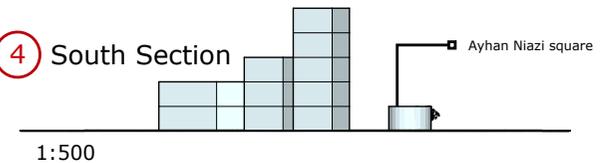
② North Section



③ East Section



④ South Section



### Floor Material

|          |  |
|----------|--|
| Brick    |  |
| Asphalt  |  |
| grass    |  |
| concrete |  |
| block    |  |
| Tile     |  |
| Stone    |  |

### Elements

|                  |  |
|------------------|--|
| Plants           |  |
| Street furniture |  |
| Floor            |  |
| Trees            |  |
| Streets          |  |
| Big sculpture    |  |
| Buildings        |  |

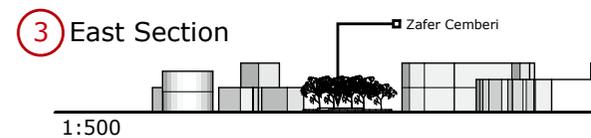
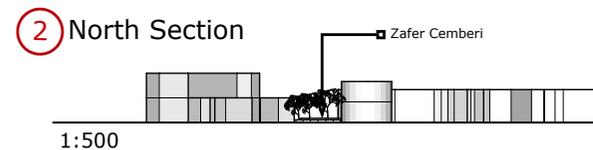
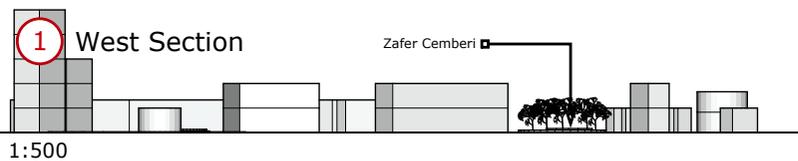
Typology of Sivas Square

SCALE 1:5000

The Ayhan Niyazi square it can be the nucleus square because the main streets come together in this square as like the Trafalgar Square in London. There is the natural boundary which is the old city support it with strength line. Also, there is lack of some elements and guidelines which are essential to this square to be nucleus squares such as firm boundary and accessible streets that come together in this square which was analyzed in the last chapter. but the main function of this square is traffic.



## Assessment of the Quality of Urban Public Spaces residential in neighborhoods: as a case of Famagusta

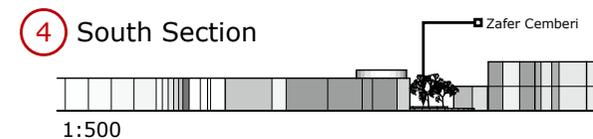


### Floor Material

|          |   |
|----------|---|
| Brick    | ■ |
| Asphalt  | ■ |
| grass    | ■ |
| concrete | ■ |
| block    | ■ |
| Tile     | ■ |
| Stone    | ■ |

### Elements

|                  |   |
|------------------|---|
| Plants           | ■ |
| Street furniture | ■ |
| Floor            | ■ |
| Trees            | ■ |
| Streets          | ■ |
| Big sculpture    | ■ |
| Buildings        | ■ |



Typology of Zafer Square

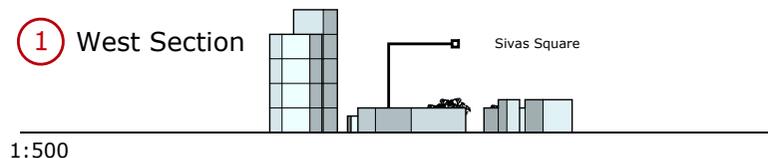
SCALE 1:5000

The Zafer square it can be the nucleus square because the main streets come together in this square as like the Trafalgar Square in London. There is the natural boundary which is the old city support it with strength line. Also, there is lack of some elements and guidelines which are essential to this square to be nucleus squares such as firm boundary and accessible streets that come together in this square which was analyzed in the last chapter.

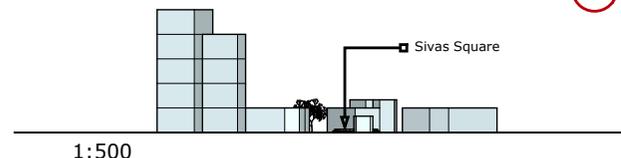


## Assessment of the Quality of Urban Public Spaces residential in neighborhoods: as a case of Famagusta

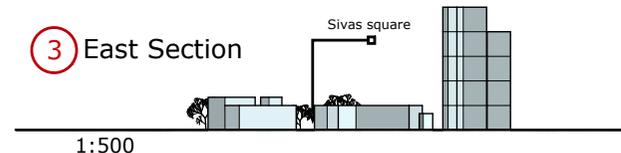
① West Section



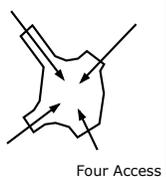
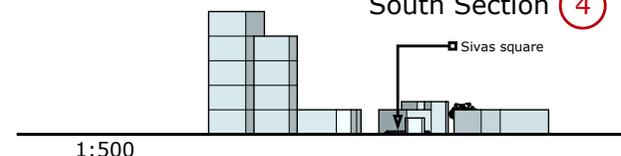
North Section ②



③ East Section



South Section ④



### Floor Material

|          |  |
|----------|--|
| Brick    |  |
| Asphalt  |  |
| grass    |  |
| concrete |  |
| block    |  |
| Tile     |  |
| Stone    |  |

### Elements

|                  |  |
|------------------|--|
| Plants           |  |
| Street furniture |  |
| Floor            |  |
| Trees            |  |
| Streets          |  |
| Parking          |  |
| Buildings        |  |

Typology of Sivas Square

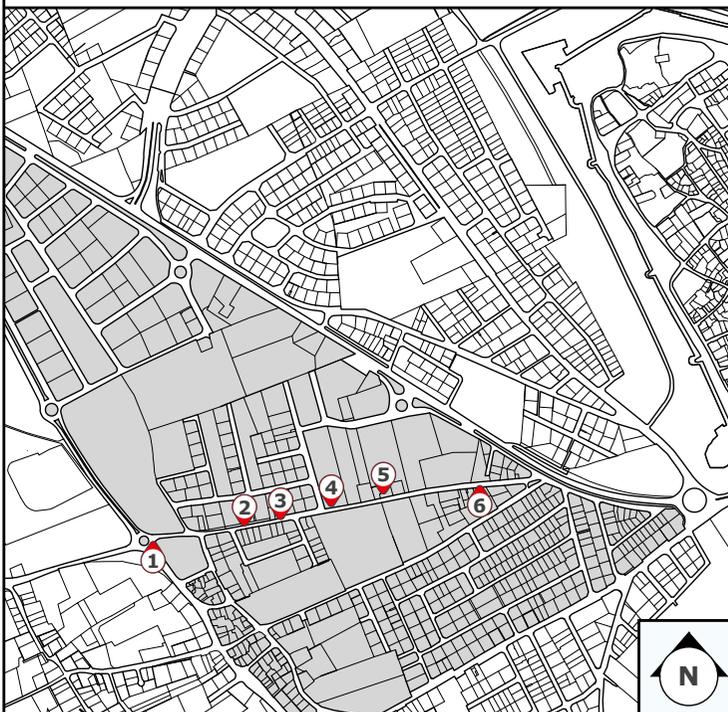
SCALE 1:5000

The Sivas square is the amorphous square. in order to clarify the meaning of the term "square" as used in this study this variation must be mentioned to indicate that many open spaces formally bear the title of "square" even though they are but a crossroads such as New York's "Times Square," Boston's \* "Scollay Square". Each square may not be easily categorized as closed, dominated, nuclear, or grouped; this question is often more complex and requires •what may be termed as "multiple classification." Consider the case of the Piazza San Pietro. The etching by Piranesi shows how the Piazza may reasonably be classified as each of: closed, nuclear, dominated, and grouped.



## Assessment of the Quality of Urban Public Spaces residential in neighborhoods: as a case of Famagusta

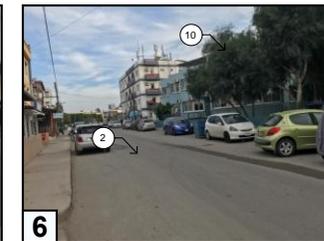
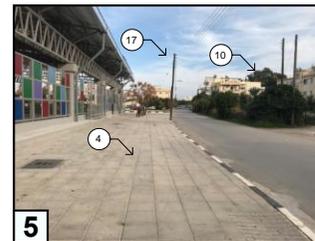
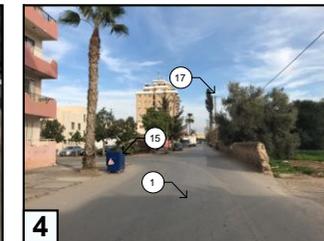
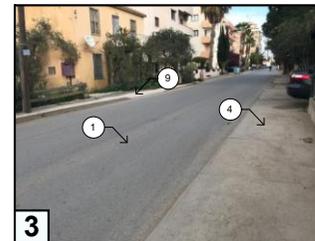
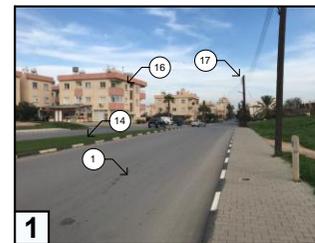
As pictures and map shows, there are some elements exist in this street which gives character to the street as shown on the pictures, the On Bayraktar yolu is the rural road street but there are some problems with putting these elements in wrong places without considering the impact of these elements on surrounding area or lack of some elements which is essential to street but also there are so many opportunities to improve and fix these problems, because as you are seeing in this pictures, this area has a lot of potentials to improve.



Baykal area, Bayraktar yolu Sk.

SCALE

1:5000

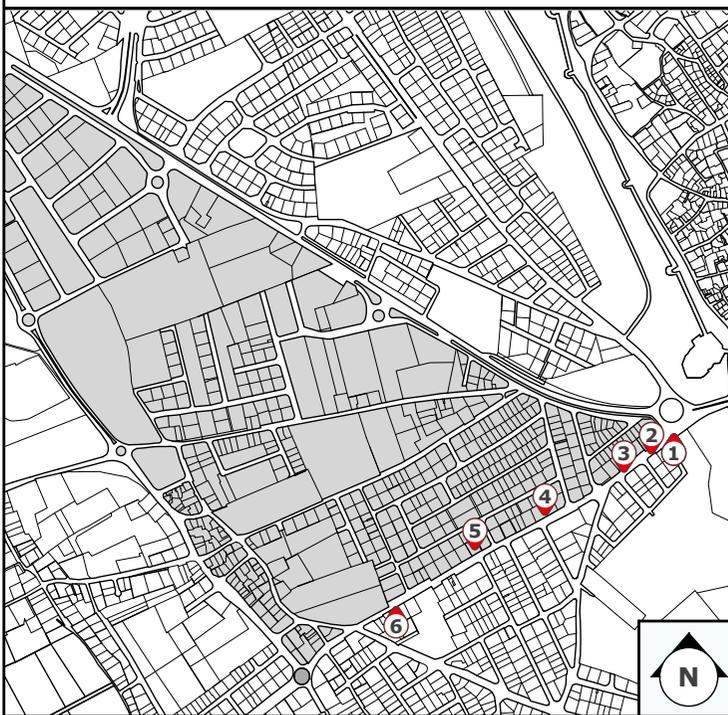


| Material   | Elements   | Component  |
|------------|--|--|
| 1- Asphalt | 2- Street 2 line<br>4- Sidewalk<br>6- Zebra crossroad<br>8- Parking<br>16- Building<br>18- Frontage road | 3- Street lightening<br>5- Bios wales<br>7- Street sewage<br>10- Trees<br>11- Canoe<br>12- Lighting bulb<br>13- Sinkhole<br>14- Contra flow<br>15- The waste container<br>17- power line |



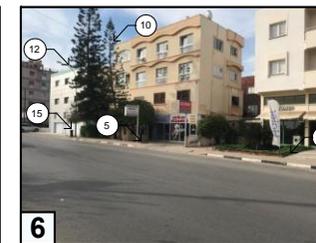
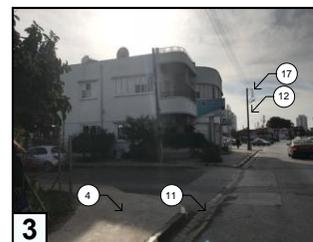
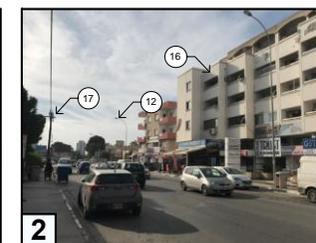
## Assessment of the Quality of Urban Public Spaces residential in neighborhoods: as a case of Famagusta

As pictures and map shows, there are some elements exist in this street which gives character to the street as shown on the pictures, the On Bes Agustos is the boulevard street and it has all elements of boulevard but there are some problems with putting these elements in wrong places without considering the impact of these elements on surrounding area, but also there are so many opportunities to improve and fix these problems, because as you are seeing in this pictures, this area has a lot of potentials to improve.



On best Agustos Blv, Baykal Area

SCALE 1:5000

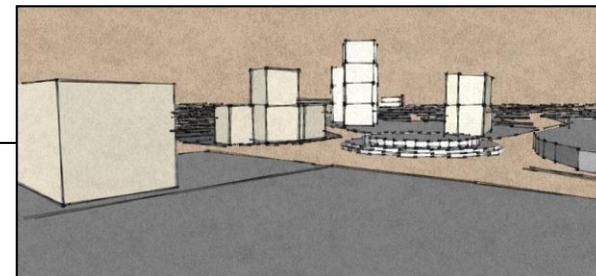
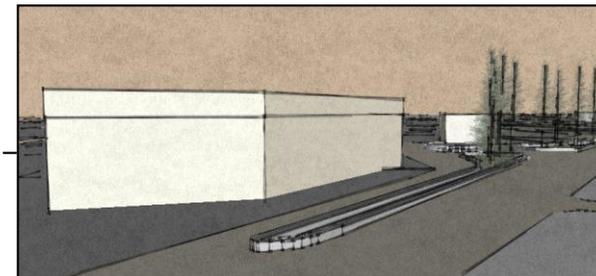
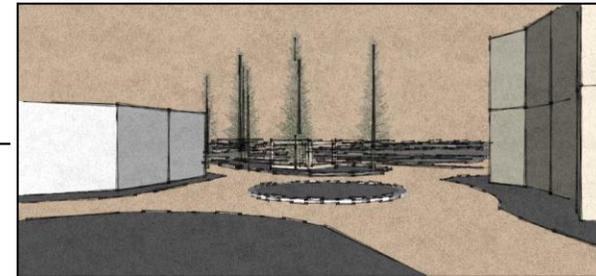


| Material   | Elements   | Component   |
|------------|--|---|
| 1- Asphalt | 2- Street 2 line<br>4- Sidewalk<br>6- Zebra crossroad<br>8- Parking<br>16- Building<br>18- Frontage road | 3- Street lightening<br>5- Bios wales<br>7- Street sewage<br>9- Ramp<br>10- Trees<br>11- Canoe<br>12- Lighting bulb<br>13- Sinkhole<br>14- Contra flow<br>15- The waste container<br>17- power line |



## Assessment of the Quality of Urban Public Spaces residential in neighborhoods: as a case of Famagusta

As mentioned on the map, in this part there are three essential from physical view in this area. In the classifying these square from importance, Zafer Cemberi, Ayhan Niyazi Cemberi and Sivas Cemberi. From the type of square classification, the Zafer Cemberi is the nucleus square, but there is lack of some square elements such as street furniture, having good ratio from hight, floor and pedestrian way. The Ayhan Niyazi square can be the associated function square because of which mentions in the literature review in the squares function but also there is lack of some elements in this square which will be mention in this chapter. The Sivas Cemberi can be amorphous square.



Famagusta, Baykal area, Square Analysis

SCALE 1:5000



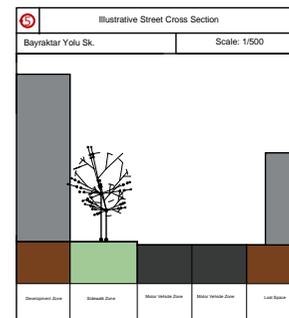
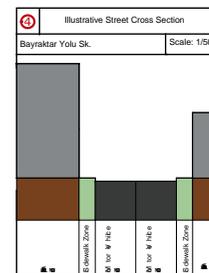
## Assessment of the Quality of Urban Public Spaces residential in neighborhoods: as a case of Famagusta

As shown on the map, there are some elements exist in this street which gives character to the street. Bayraktar and Niyazi yolu sk is the rural road street. Also, there is some significant problem with skylines, pedestrian ways, street length and bios valves which are not helpful and successful for this area and they need to be the alternative plan. But there are some problems with putting these elements in wrong places whiteout considering the impact of these aspects on surrounding area or lack of some features which is essential to a street. But also there are so many opportunities to improve and fix these problems because as you see in this pictures, this area has a lot of potentials to improve.



Street Typology, Baykal area, Bayraktar Yolu Sk.

SCALE 1:5000



### Type

- Great Street
- Avenue
- Boulevard
- Parkway
- Rural road
- Local subdivision

### Function

- Comercial strip
- Residential boulevard
- Downtown Street
- Downtown 1way
- Downtown 2way
- Downtown thoroughfare
- Neighborhood main street
- Neighborhood street
- Yield street
- Residential boulevard
- Residential boulevard
- Residential boulevard
- Transit corridor
- Green alley
- Commercial alley
- Residential shared street
- Commercial shared street

### Residential Street



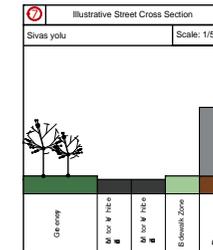
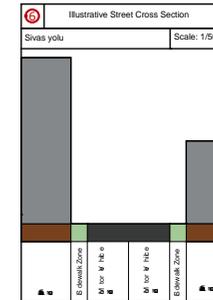
## Assessment of the Quality of Urban Public Spaces residential in neighborhoods: as a case of Famagusta

As landscape and map show, there are some elements exist in this street which gives character to the street. Sivas is Parkway . Also, there is some significant problem with skylines, pedestrian ways, street length and bios valves which are not helpful and successful for this area and they need to be the alternative plan. But there are some problems with putting these elements and component designed whiteout considering the impact of these aspects on surrounding area or lack of some features which is essential to a street. But also there are so many opportunities to improve and fix these problems because as you see in this pictures, this area has a lot of potentials to improve.



Street Typology, Baykal area, Sivas

SCALE 1:5000



### Type

- Great Street
- Avenue
- Boulevard
- Parkway
- Rural road
- Local subdivision

### Function

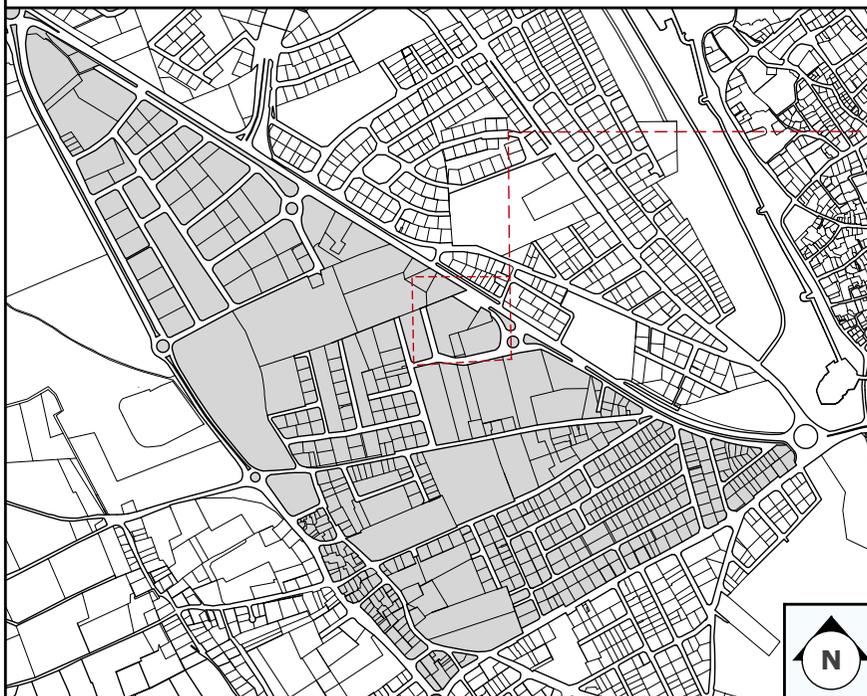
- Commercial strip
- Residential boulevard
- Downtown Street
- Downtown 1 way
- Downtown 2way
- Downtown thoroughfare
- Neighborhood main street
- Neighborhood street
- Yield street
- Residential boulevard
- Residential boulevard
- Residential boulevard
- Transit corridor
- Green alley
- Commercial alley
- Residential shared street
- Commercial shared street

### Industrial street



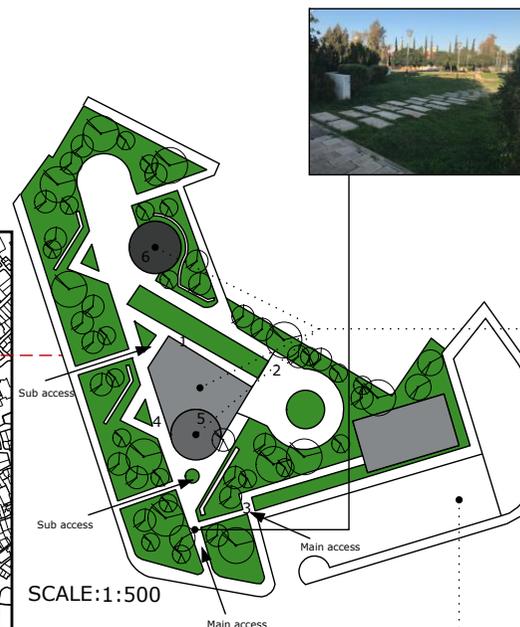
## Assessment of the Quality of Urban Public Spaces residential in neighborhoods: as a case of Famagusta

The Kent Park is the most significant park after the Anit park in the Magusa. The Kent park has five access to entrance and a one of the well-designed park in the Famagusta which is located in the in the south west of the Magusa. The elements and guidelines of Parks existed in this park, but the location of parks a little have the problem because of the around streets which hasn't any character and because of this street, this park going to lose integrity. and round trees in around of the park Block views into park, using hence to keep people from cutting across the grass, park for year round color



Analysis of Kent Park

SCALE 1:5000



| Plant characteristic |           |
|----------------------|-----------|
|                      | Columnar  |
|                      | Oval      |
|                      | Vase      |
|                      | Weeping   |
|                      | Pyramidal |
|                      | Round     |

| Elements |  |
|----------|--|
|          | Play ground                            |
|          | Access trail loop internal to the park |
|          | connection with local system           |
|          | open maintain green space              |
|          | basketball yard                        |
|          | Volleyball yard                        |
|          | Tennis yard                            |
|          | Park furniture                         |
|          | Picnic shelter                         |
|          | natural landscape planting             |
|          | Ornamental landscape planning          |
|          | Parking                                |
|          | controlled glare security              |

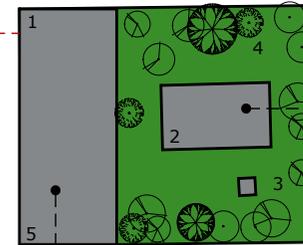
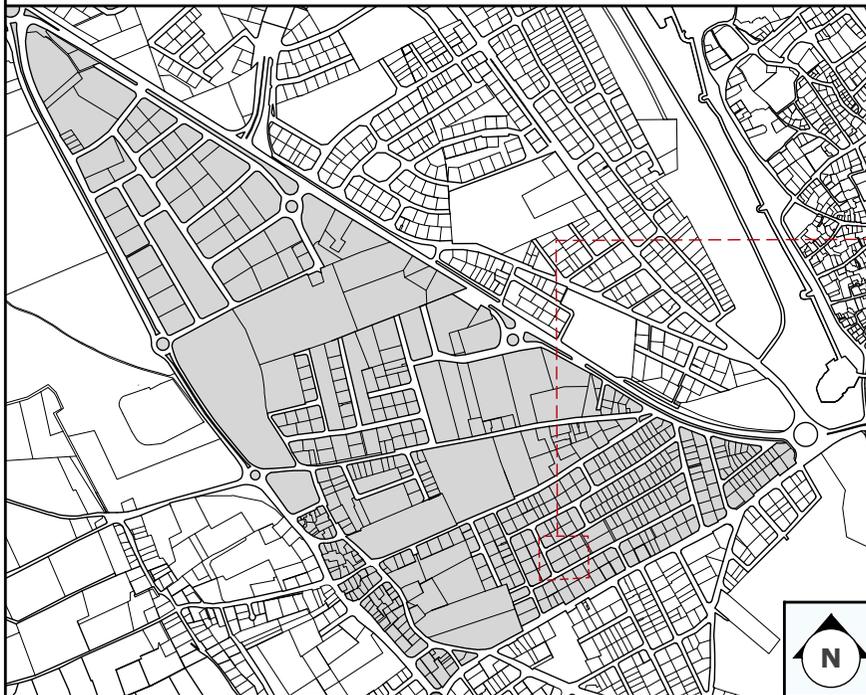
  

| Types of parks |                   |
|----------------|-------------------|
|                | park school       |
|                | Private park      |
|                | Neighborhood Park |
|                | Community Park    |
|                | Greenway          |
|                | Parkway           |
|                | Special use       |
|                | Regional Park     |

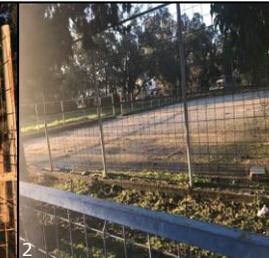


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SCALE:1:500



### Plant characteristic

- Columnar
- Oval
- Vase
- Weeping
- Pyramidal
- Round

### Elements

- Play ground
- Access trail loop internal to the park
- connection with local system
- open maintain green space
- basketball yard
- Volleyball yard
- Tennis yard
- Park furniture
- Picnic shelter
- natural landscape planting
- Ornamental landscape planning
- Parking
- controlled glare security

### Types of parks

- park school
- Private park
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- Community Park
- Greenway
- Parkway
- Special use
- Regional Park

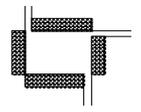
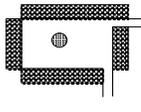
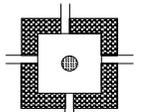
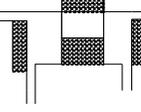
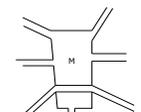
Analysis of Samsun Park

SCALE 1:5000





| <b>Street</b> | <b>Name</b>                  | <b>Type</b>            | <b>Function</b>  | <b>Building ratio</b>                                 | <b>Ratio between buildings</b> |
|---------------|------------------------------|------------------------|--|---|--------------------------------|
| <b>1</b>      | <b>Sivas Street</b>          | Parkway                | Transit corridor   | 1.1 to 1.4  | 1.1 to 1.7                     |
| <b>2</b>      | <b>Bayraktar Street</b>      | Local subdivision      | Neighborhood street  | 1.2 to 1.13   | 1.1 to 1.11                    |
| <b>3</b>      | <b>On Bes Agostus Street</b> | Great street           | Commercial street  | 1.1 to 1.5  | 1.1 to 1.16                    |
| <b>4</b>      | <b>Ayhan Niyazi Street</b>   | Local subdivision      | Residential street   | 1.1 to 1.7  | 1.1 to 1.7                     |
| <b>Square</b> | <b>Name</b>                  | <b>Enclosure</b>       | <b>Floor Material</b>  | <b>Elements</b>                                       |                                |
| <b>1</b>      | <b>Zafer square</b>          | Yes                    | Brick, asphalt, grass, concrete, tile  | Plants, floor, trees, street, big sculpture, building |                                |
| <b>2</b>      | <b>Sivas Square</b>          | No                     | Asphalt, grass, concrete   | Plants, floor, trees, streets, buildings              |                                |
| <b>3</b>      | <b>Ayhan Niyazi Street</b>   | No                     | Asphalt, grass, concrete   | Plants, floor, trees, street, parking, buildings      |                                |
| <b>Parks</b>  | <b>Name</b>                  | <b>Plant character</b> | <b>Elements</b>  | <b>Type</b>   | <b>Access</b>                  |
| <b>1</b>      | <b>Samsun park</b>           | Vase, pyramidal, round | Playground, connection with local system, open maintain green space, basketball yard, tennis yard, park furniture  | Park school   | Open access                    |
| <b>2</b>      | <b>Kent Park</b>             | Oval, vase, round      | Playground, access trail loop internal to the park, connection with local system, open maintain green space, basketball yard, volleyball yard, tennis yard, park furniture, ornamental landscape planting, parking | Neighborhood park                                     | 3 sub access<br>1 main access  |

| square | Types                | Form  | Elements  | General Characteristic of square   |
|--------|----------------------|---|---|--|
| 1      | The closed square    |    | <ul style="list-style-type: none"> <li>- Walls</li> <li>- Buildings</li> <li>- Street and sky</li> <li>- Floor</li> <li>- Decorative sculpture</li> <li>- Street furniture</li> <li>- Planted areas</li> <li>- Pavement</li> </ul>                                  | <p>Space self-contained</p> <ul style="list-style-type: none"> <li>- Enclosure interrupted only by the streets leading to it.</li> <li>- Regular geometrical form layout.</li> <li>- The repetition of identical houses, facing the enclosed area.</li> <li>- Spatial balance of the square will always be achieved by the equation of horizontal &amp; vertical forces.</li> <li>- Each façade fulfills a dual function.</li> <li>- Continuity and context of the farming structure.</li> </ul>   |
| 2      | The dominated square |    | <ul style="list-style-type: none"> <li>- Floor</li> <li>- Trees</li> <li>- Parking</li> <li>- Building</li> <li>- Large sculpture</li> <li>- Colonnade</li> <li>- Bollards</li> <li>- Stairways</li> <li>- Dominator</li> <li>- Leader</li> <li>- Street</li> </ul> | <p>Space directed</p> <ul style="list-style-type: none"> <li>- Characterized by one individual structure or buildings towards which the open space is directed.</li> <li>- Surrounding structures are related to them.</li> <li>- Dominated building may be a church, palace, a town hall, theatre.</li> <li>- Direction of a main street which opens into the square establishes the axis toward the dominant building.</li> <li>- Compels the spectator to move toward and look at the focal architecture.</li> <li>- Dominant square produces a directive of motion</li> <li>- The dominant structure need not necessarily be voluminous</li> <li>- Very often it is merely a gate or an arch which may dominate a whole square.</li> <li>- A fountain may also dominant a square it if constitutes an entire front in with architecture, sculpture and water.</li> </ul> |
| 3      | The nuclear square   |    | <ul style="list-style-type: none"> <li>- plant</li> <li>- street furniture</li> <li>- Floor</li> <li>- trees</li> <li>- planted area</li> <li>- Streets</li> <li>- Big sculpture</li> <li>- Building</li> </ul>   | <p>Space formed around a center</p> <ul style="list-style-type: none"> <li>- Nuclear Square consists of a nucleus, a strong vertical accent – a monument, a fountain, an obelisk.</li> <li>- It is powerful enough to charge the space around with a tension that the impression of the square will be evoked.</li> <li>- It will tie the heterogeneous elements of the periphery into one visual unit.</li> <li>- Dimensions of nuclear square are restricted as the visual effect of the central monument is naturally limited.</li> <li>-</li> </ul>  |
| 4      | grouped square       |   | <ul style="list-style-type: none"> <li>- Connection</li> <li>- Pathway</li> <li>- Floor</li> <li>- Buildings</li> <li>- Floor</li> </ul>  | <p>Space unit combined</p> <ul style="list-style-type: none"> <li>- Individual squares may be fused organically and aesthetically into one comprehensive whole.</li> <li>- Each unit - the individual square, represents an entity, aesthetically self-sufficient and yet part of a comprehensive higher order.</li> <li>- A sequence of squares, different in size and form, develops in only one direction, thus establishing a straight axis.</li> <li>- Group of three or more squares of different shapes and proportions surround one dominant building.</li> <li>- Two individual squares fall into a coherent pattern although they are separated from each other by blocks of houses, thoroughfares</li> </ul>  |
| 5      | The amorphous square |  | <ul style="list-style-type: none"> <li>- Street</li> <li>- Sculpture</li> <li>- Street furniture</li> <li>- Planted area</li> <li>- building</li> <li>- Floor</li> <li>- Dominator</li> <li>- Crossroad</li> </ul>  | <p>Space unlimited</p> <ul style="list-style-type: none"> <li>- Amorphous is formless, unorganized, having no specific shape</li> <li>- It does not represent aesthetic qualities or artistic possibilities</li> <li>- However, if it shares some elements with the previously analyzed squares it may appear like one of them</li> <li>- Proportions of many of its surrounding structures are so heterogeneous, so irregular, even contradictory</li> <li>- Location and size of the small triumph arch are so dissimilar to all the other given factors</li> <li>- Unified impression cannot result</li> <li>- Disproportion in scale destroys all aesthetic possibilities</li> </ul>   |

| street | Types             | Primary users  | Road user  | Flow Characteristic   | Adjacent Land Uses   |
|--------|-------------------|--|--|---|--|
| 1      | Great street      | <ul style="list-style-type: none"> <li>- Walking</li> <li>- Socializing</li> <li>- Gathering</li> <li>- Shopping</li> <li>- Cycling</li> <li>- Access to properties</li> <li>- Parking</li> <li>- Loading circulation</li> </ul>                             | <ul style="list-style-type: none"> <li>- Pedestrian</li> <li>- Buses</li> <li>- cars</li> <li>- truck</li> </ul>                             | <ul style="list-style-type: none"> <li>- Main-street design should limit traffic speeds and create a narrower profile with frequent, high-quality pedestrian crossings.</li> <li>- The illustration above depicts a main street with 4 lanes of traffic.</li> </ul>   | <ul style="list-style-type: none"> <li>- High density residential</li> <li>- Retail</li> <li>- Commercial</li> <li>- mixed use</li> <li>- civic space</li> <li>- office</li> </ul> |
| 2      | Avenue            | <ul style="list-style-type: none"> <li>- Access to Properties</li> <li>- Socializing</li> <li>- Parking and loading</li> <li>- Walking</li> <li>- Cycling</li> <li>- circulation</li> </ul>  | <ul style="list-style-type: none"> <li>- Pedestrian</li> <li>- Cyclists</li> <li>- Buses</li> <li>- Cars</li> <li>- Trucks</li> </ul>        | <ul style="list-style-type: none"> <li>- Straight route with a line of trees or large shrubs running along</li> <li>- Traffic</li> </ul>  | <ul style="list-style-type: none"> <li>- High density residential</li> <li>- Retail/ commercial</li> <li>- Mixed use</li> </ul>  |
| 3      | Boulevard         | <ul style="list-style-type: none"> <li>- Walking</li> <li>- Socializing</li> <li>- Gathering</li> <li>- Shopping</li> <li>- Cycling</li> <li>- Access to properties</li> <li>- Parking</li> <li>- Loading circulation</li> <li>- Freight movement</li> </ul> | <ul style="list-style-type: none"> <li>- Bike ride</li> <li>- Bus stop</li> <li>- Bios wales</li> <li>-</li> </ul>                           | <ul style="list-style-type: none"> <li>- Multilane arterial thoroughfare</li> <li>- Divided with median down the center and perhaps roadway</li> <li>- Parking lanes for bicycle</li> <li>- Designed for slow travel</li> <li>- Pedestrian usage</li> <li>- Above average quality of landscaping and scenery</li> <li>- Usually running through a city</li> </ul> | <ul style="list-style-type: none"> <li>- High density residential</li> <li>- Office</li> <li>- Mixed use</li> <li>- Commercial</li> </ul>  |
| 4      | parkway           | <ul style="list-style-type: none"> <li>- access to properties</li> <li>- walking</li> <li>- cycling</li> </ul>   | <ul style="list-style-type: none"> <li>- Bus stop</li> <li>- Street furniture</li> <li>- Bios wales</li> <li>- Buildings or trees</li> </ul> | <ul style="list-style-type: none"> <li>- Function as high speed thoroughfares</li> <li>- though their adjacent land uses may be primarily residential in nature.</li> <li>- Excess width</li> <li>- Underutilized on street parking</li> <li>- Too many travel lanes</li> </ul>   | <ul style="list-style-type: none"> <li>- Mixed use</li> <li>- Civic space</li> </ul>   |
| 5      | Rural road        | <ul style="list-style-type: none"> <li>- Cycling</li> <li>- Access to properties</li> <li>- Freight movement</li> <li>- Travel circulation</li> </ul>  | <ul style="list-style-type: none"> <li>- Cars</li> <li>- Trucks</li> <li>- Cyclists</li> </ul>   | <ul style="list-style-type: none"> <li>- Shared use path adjacent to the main roadway as substitute for sidewalk</li> <li>- The shared use path should meet the general criteria to serve adequately as a sidewalk or pathway</li> </ul>  | <ul style="list-style-type: none"> <li>- High density residential</li> <li>- retail or commercial</li> <li>- Office</li> <li>- Mixed use</li> </ul>                                |
| 6      | Local subdivision | <ul style="list-style-type: none"> <li>- Access to properties</li> <li>- Socialized</li> <li>- Parking and loading</li> <li>- Walking</li> </ul>   | <ul style="list-style-type: none"> <li>- Pedestrian</li> <li>- Cyclists</li> <li>- Buses</li> <li>- Cars</li> <li>- Trucks</li> </ul>        | <ul style="list-style-type: none"> <li>- Local streets in residential neighborhoods are often underutilized as space for play a leisure</li> <li>- Should provide safe and inviting places to walk with direct access to local stores and schools</li> </ul>  | <ul style="list-style-type: none"> <li>- Commercial</li> <li>- Office</li> <li>- Mixed use</li> </ul>  |

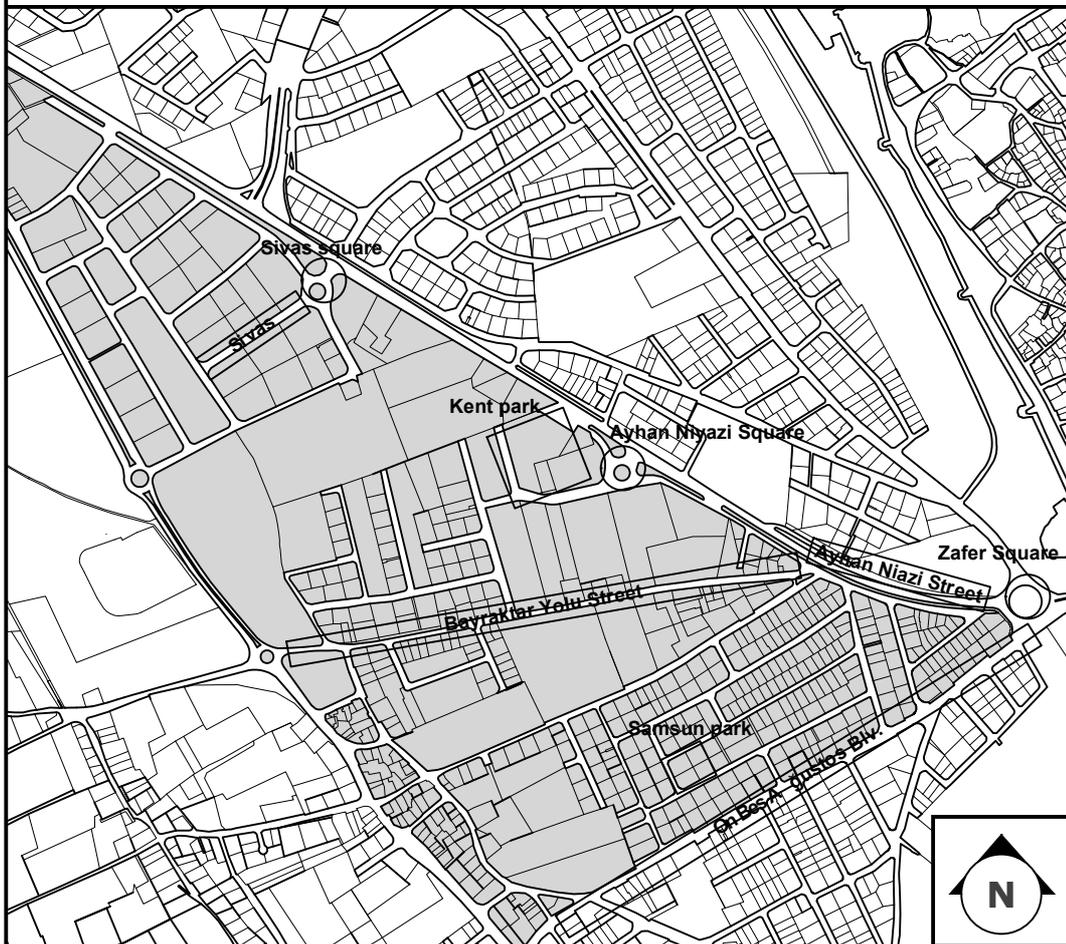
| Park | Types                             | function  |   | General characteristic  |
|------|-----------------------------------|---|---|---|
| 1    | Park school                       | <ul style="list-style-type: none"> <li>- Tennis court</li> <li>- Picnic tables</li> <li>- Parking</li> <li>- Trees</li> <li>- Plant</li> <li>- Play ground</li> <li>- Park furniture</li> <li>- Pond</li> <li>- Accessible Trail loop</li> <li>- Local street</li> <li>- Basketball court</li> <li>- Half court</li> <li>- Volleyball court</li> <li>- Benches</li> <li>- Picnic tables</li> <li>- Trash containers</li> <li>- Security lighting</li> </ul>   | <ul style="list-style-type: none"> <li>• Neighborhood parks are the basic unit of the park system and serve a recreational and social purpose. Development focuses on informal recreation</li> <li>• Programmed activities are typically limited to youth sports practices and occasionally games.</li> </ul> | <ul style="list-style-type: none"> <li>• Varies, depending on specific site opportunities.</li> <li>• Service area radius of between one-fourth and one-half mile (0.4 to 0.8 kilometers) and uninterrupted by major roads or physical barriers, such as wet-lands and lakes. A reasonable walking distance is critical to a person's propensity to use the park.</li> <li>• Centrally located within the neighborhood it serves. • Site exhibits suitable physical and aesthetic characteristic, with a balance between developable open space and natural areas. Lowlands and other lands not suitable for development are also not suitable for a neighborhood park.</li> <li>• Connected to neighborhoods via trails or side-walks. The less convenient the access, the less use a park is likely to receive.</li> </ul>  |
| 2    | Private park/ recreation facility | <ul style="list-style-type: none"> <li>- recreation facilities</li> <li>- golf courses</li> <li>- fitness club</li> <li>- museum</li> <li>- private courtyard</li> <li>- amphitheaters</li> <li>- horse riding stables</li> <li>- water parks</li> <li>- golf courses</li> </ul>  | <ul style="list-style-type: none"> <li>- The development of private parks and recreation facilities is driven by local demand and business opportunities.</li> </ul>  | <ul style="list-style-type: none"> <li>• Varies.</li> </ul>   |
| 3    | Neighborhood park                 | <ul style="list-style-type: none"> <li>- Play ground</li> <li>- Accessible trail loop internal to the park</li> <li>- Connection with local system</li> <li>- Open maintained green space for informal use (2 to 3 acres optimal)</li> <li>- Basketball half court</li> <li>- Volleyball court</li> <li>- Hardcourt area or tennis court</li> <li>- Ice skating (limited time)</li> <li>- General site amenities, such as benches, picnic table, trash container and security light.</li> <li>- Picnic shelter</li> <li>- Architectural elements</li> <li>- Natural landscape planting</li> <li>- Ornamental landscape planting</li> <li>- Parking, on a limited-on demand</li> <li>- Controlled glare security lighting</li> </ul> |   | <ul style="list-style-type: none"> <li>- Typically, 5 acres or more; 8 to 10 acres preferred, with 3 acres the desired minimum size. Service area is one-fourth to one-half mile uninterrupted by major roads and other physical barriers.</li> <li>- Service area radius of between one-fourth and one-half mile (0.4 to 0.8 kilometers) and uninterrupted by major roads or physical barriers, such as wet-lands and lakes. A reasonable walking distance is critical to a person's propensity to use the park.</li> <li>- Centrally located within the neighborhood it serves. • Site exhibits suitable physical and aesthetic characteristics, with a balance between developable open space and natural areas. Lowlands and other lands not suitable for development are also not suitable for a neighborhood park.</li> <li>- Connected to neighborhoods via trails or sidewalks. The less convenient the access, the less use a park is likely to receive.</li> <li>- Where feasible, connected to a greenway or open-space system to expand the sense of open space at the neighborhood level.</li> </ul> |
| 4    | Community and large urban parks   | <ul style="list-style-type: none"> <li>- Grouped picnic facilities</li> <li>- Amenities common to neighborhood park</li> <li>- Extensive looped internal trail</li> <li>- Large open space for passive and active use</li> <li>- Modest level of athletic facilities</li> </ul>   |   | <ul style="list-style-type: none"> <li>• Varies, depending on function. A minimum of 20 acres is preferred, with 40 or more acres optimal. Service area can be communitywide or several neighborhoods in given area of the community.</li> <li>• Service area ranges from numerous strategic locations throughout a large metropolitan area to one centrally located complex that serves an entire community.</li> <li>• A relatively flat, open parcel of property is most desirable. The</li> </ul>   |

|   |                          |  |  |   |
|---|--------------------------|--|--|---|
|   |                          | <ul style="list-style-type: none"> <li>- Green space</li> <li>- Winter activity</li> <li>- Adequate parking</li> <li>- Special use facilities that serve a specific</li> <li>- Pedestrian path</li> <li>- Garden</li> <li>- Playground</li> <li>- pool</li> </ul>  |  | <p>topography across the site should be adequate for field drainage and stormwater management.</p> <ul style="list-style-type: none"> <li>• Access from major thoroughfares is important.</li> <li>• Connection to the larger community and neighborhoods via trails or sidewalks is desirable.</li> <li>• Adequate buffering of residential areas from lighting, noise, traffic, parking, and other impacts should be designed.</li> </ul> |
| 5 | <b>Greenway</b>          | <ul style="list-style-type: none"> <li>- Sitting area</li> <li>- Trail</li> <li>- Observation area</li> <li>- Interpretive/ direction signage</li> </ul>   | <ul style="list-style-type: none"> <li>• A combination of multiuse hard-surfaced trails for biking, walking, and in-line skating and nature trails for hiking are found within most greenway systems. In select instances, no development is allowed and the site is set aside for wildlife and community viewing from the periphery.</li> </ul>   | <ul style="list-style-type: none"> <li>• Varies, depending on opportunity and general character of natural systems within the community.</li> </ul>   |
| 6 | <b>Parkway</b>           | <ul style="list-style-type: none"> <li>- Roadway trails</li> <li>- Pedestrian trails</li> <li>- Sitting area</li> <li>- Overlooks often augment trail to view</li> <li>- Landscape planting</li> <li>- Ornamental site amenities</li> <li>- Provide the visual cues</li> <li>- Tree lined boulevard is common image</li> <li>- A liner park near the river</li> <li>- Heavy traffic</li> <li>- Picnic shelter</li> </ul> | <ul style="list-style-type: none"> <li>• Nature and cultural/performing arts centers</li> <li>• Historic sites: downtowns, plazas, cemeteries, historic landscapes, churches, and monuments</li> <li>• Recreation facilities: aquatic centers, campgrounds, ice arenas, fitness centers, community centers, skateboard parks, and stadiums</li> <li>• Public gathering areas: amphitheaters, community commons, town centers, and urban squares</li> </ul> | <ul style="list-style-type: none"> <li>• Varies. The length of a parkway ranges from less than a mile to a complete loop around a major metropolitan area. Their width can vary considerably, with 200 feet being the practical minimum, and widths of 1,000 feet or more being common along major parkways.</li> </ul>   |
| 7 | <b>Special use parks</b> | <ul style="list-style-type: none"> <li>• The development of special-use facilities is driven by local demand and specific circumstances.</li> </ul>  | <ul style="list-style-type: none"> <li>• In some systems, certain types of special uses are defined under their own classifications when those occurrences are frequent enough to warrant doing so</li> </ul>  | <ul style="list-style-type: none"> <li>• Varies, depending on need.</li> </ul>  |
| 8 | <b>Regional parks</b>    | <ul style="list-style-type: none"> <li>- Civic center</li> <li>- Baseball</li> <li>- Basketball</li> <li>- Volleyball</li> <li>- Tennis</li> <li>- Plant</li> <li>- Shuffle board</li> <li>- Horseshoe</li> </ul>  | <ul style="list-style-type: none"> <li>• Restroom</li> <li>• Amphitheater</li> <li>• Concession</li> <li>• Picnic area</li> <li>• Playground</li> <li>• Dog park</li> <li>• Skateboard</li> <li>• Park furniture</li> </ul>  | <ul style="list-style-type: none"> <li>• Typically, a minimum of 500 acres (202.3 hectares) and up to several thousand acres or several hundred hectares. Service area is regional, which generally encompasses several cities.</li> </ul>  |



**Assessment of the Quality of Urban Public Spaces residential in neighborhoods:  
as a case of Famagusta**

As shown on the map and according to the analyzed done, the neighborhood characteristic of Baykal area is complete development and relatively higher density and mixed building form which are apartments plus detached houses and mixed use with middle to high and low middle income. according to map they are four fundamental and essential street in Baykal area, three important square which are have access to each other with main street which is Gazi Mustafa Kemal street and two Parks which are Kent park that is the second biggest park after the Anti park in Famagusta and the second one is Samsun Park which is a little park between the two residential street



Baykal area

SCALE

1:5000



## Assessment of the Quality of Urban Public Spaces residential in neighborhoods: as a case of Famagusta

There is no definite line to show divided part, which are the plots or buildings from the street, as figure-ground shows, there are a lot of lost spaces in this area which they haven't any character and takes the character an physical view from the street. In the On bes Agustos Blv there is a strength building line and it separable street from plots, buildings build in the street line, but in the Ayhan Niyazi Street, there are some problems between accessing between the Gazi Mustafa Kemal street and Ayhan Niazi street which has high different. In the Bayraktar Street As shows in the figure-ground, the length of the street is very low, and some buildings haven't any setback, and there is a lot of lost space in south east of the Persenbe bazar. In the Sivas street, there isn't any setback, and it isn't any good functional street.

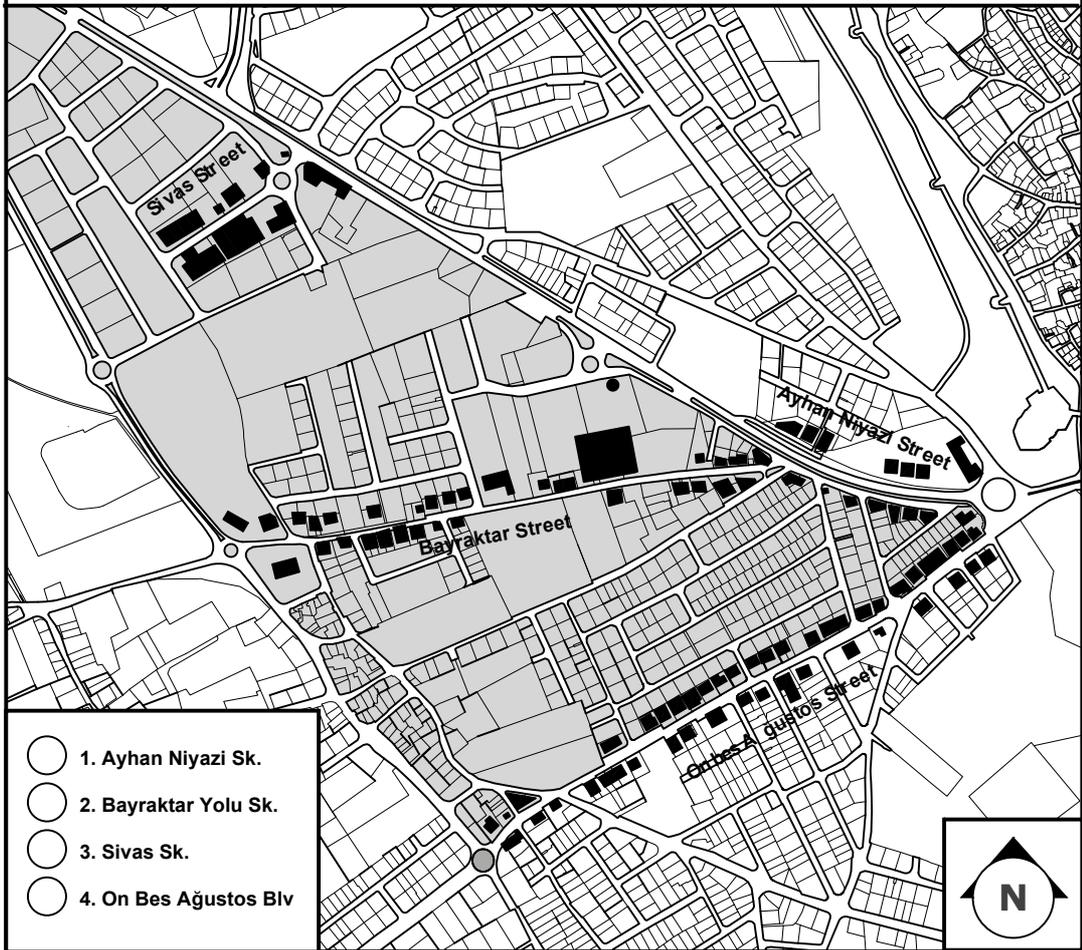


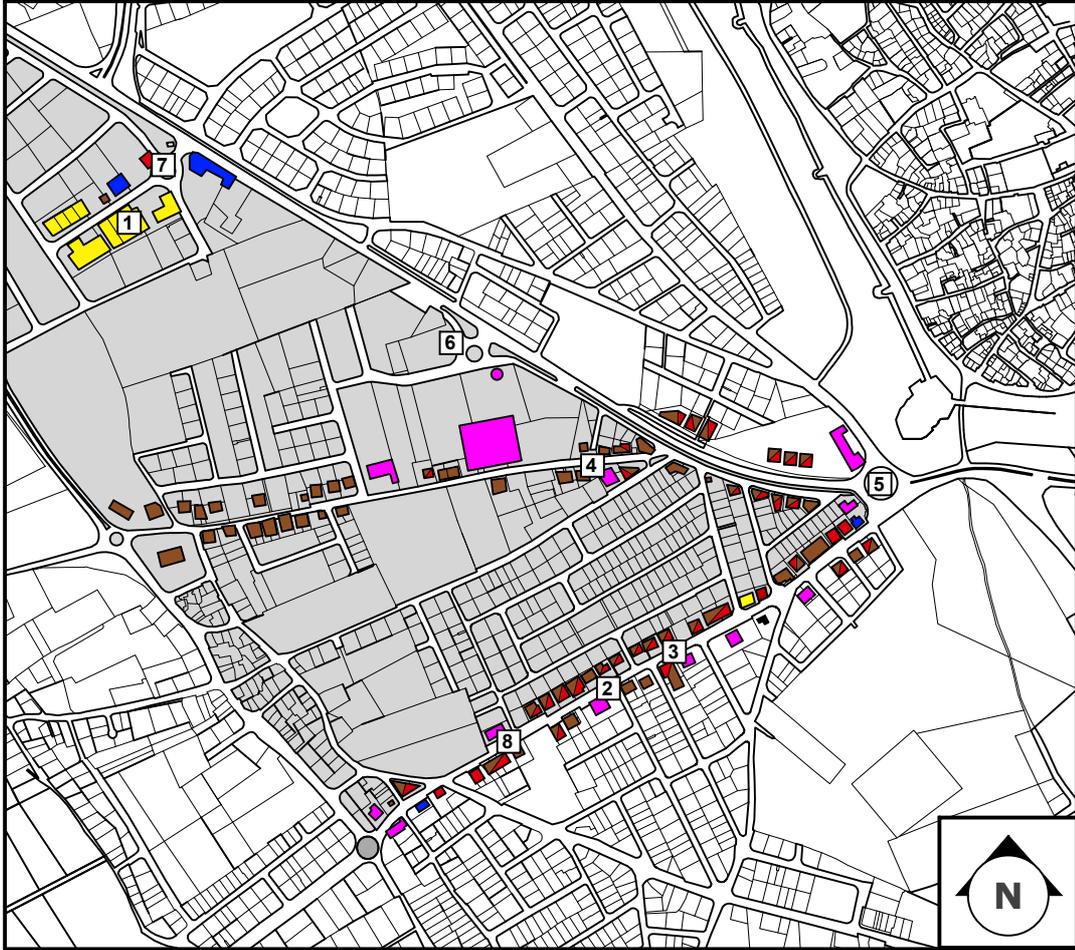
Figure Ground

SCALE

1:5000



# Assessment of the Quality of Urban Public Spaces residential in neighborhoods: as a case of Famagusta



Landuse of Baykal area

SCALE

1:5000

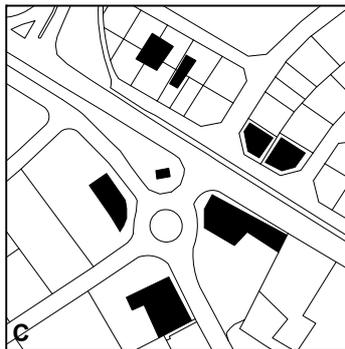
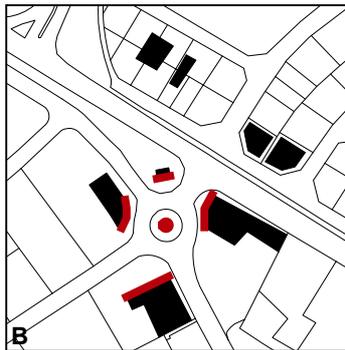
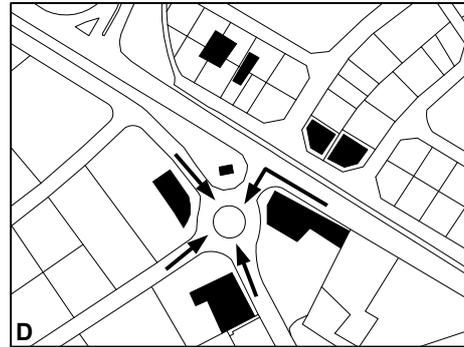
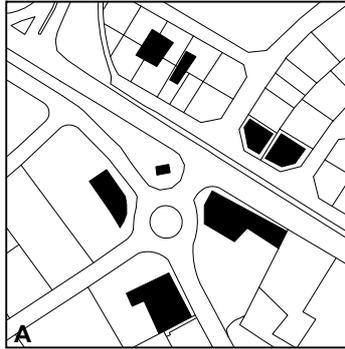


### Legend

-  Commercial
-  Residential
-  Industrial
-  Community service
-  Office
-  Baykal Area
-  Buildings



## Assessment of the Quality of Urban Public Spaces residential in neighborhoods: as a case of Famagusta



Enclosure Analysis of Sivas Niyazi

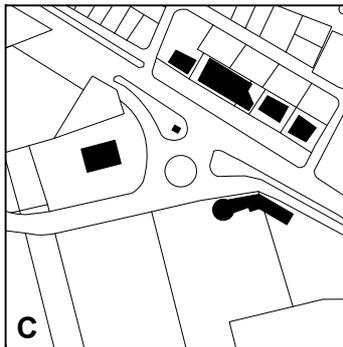
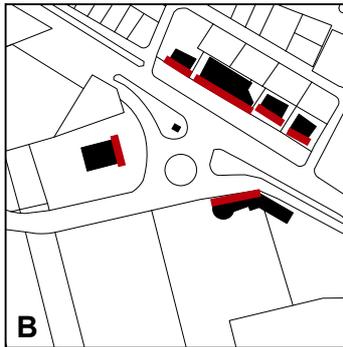
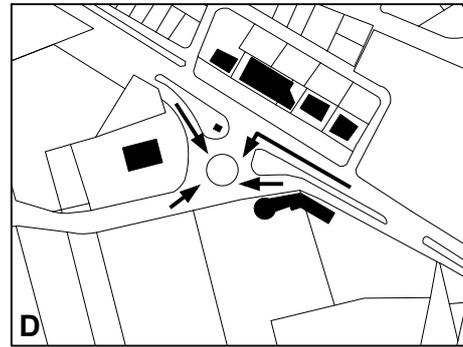
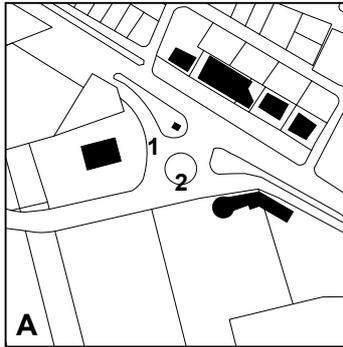
SCALE

1:1000

Three steps of enclosure calculation: first, Identification of the entire surface area occupied by a form of Plan (shown in green). second Identification of the vertical elements (usually building facades) which surround the form of plan and the centroid of the form of plan (shown as thick red lines and a red dot, respectively). Thirdly the surface area of the sectors projected from the centroid on the surrounding vertical barriers is calculated. Finally, the latter area is divided by the total area of the Plan of square which is enclosure and as shows in the access map, there are four access to this square.



## Assessment of the Quality of Urban Public Spaces residential in neighborhoods: as a case of Famagusta



Enclosure Analysis of Ayhan Niyazi

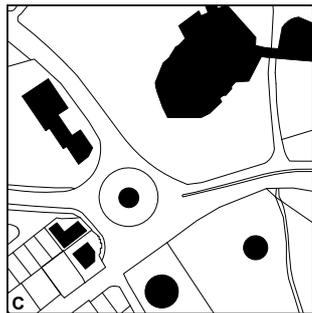
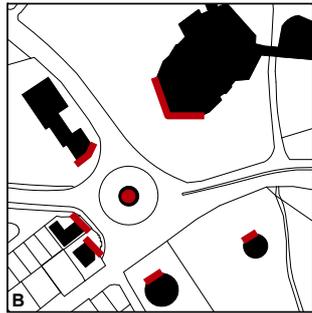
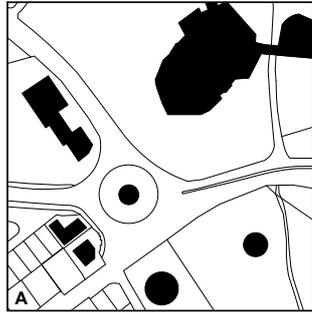
SCALE

1:1000

Three steps of enclosure calculation: first, Identification of the entire surface area occupied by a form of Plan (shown in green). second Identification of the vertical elements (usually building facades) which surround the form of plan and the centroid of the form of plan (shown as thick red lines and a red dot, respectively). Thirdly the surface area of the sectors projected from the centroid on the surrounding vertical barriers is calculated. Finally, the latter area is divided by the total area of the Plan of square which is not enclosure and as shoes the access map, there are four access to this square.



# Assessment of the Quality of Urban Public Spaces residential in neighborhoods: as a case of Famagusta



Enclosure Analysis of Zafer Square

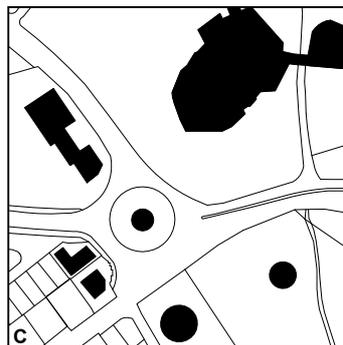
SCALE

1:1000

Three steps of enclosure calculation: first, Identification of the entire surface area occupied by a form of Plan (shown in green). second Identification of the vertical elements (usually building facades) which surround the form of plan and the centroid of the form of plan (shown as thick red lines and a red dot, respectively). Thirdly the surface area of the sectors projected from the centroid on the surrounding vertical barriers is calculated. Finally, the latter area is divided by the total area of the Plan of square which is enclosure.



## Assessment of the Quality of Urban Public Spaces residential in neighborhoods: as a case of Famagusta



Enclosure Analysis of Zafer Square

SCALE

1:1000

Three steps of enclosure calculation: first, Identification of the entire surface area occupied by a form of Plan (shown in green). second Identification of the vertical elements (usually building facades) which surround the form of plan and the centroid of the form of plan (shown as thick red lines and a red dot, respectively). Thirdly the surface area of the sectors projected from the centroid on the surrounding vertical barriers is calculated. Finally, the latter area is divided by the total area of the Plan of square which is enclosure.

