



## A PLANNING & DEVELOPMENT GUIDE



The Alliance for Safe, Sustainable,  
& Resilient Environments (ASSURE)  
in collaboration with



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# INTRODUCTION

1

The provision of public open space is an essential component of community life. Public open space supports a broad spectrum of activities and interaction between people and nature, and sustains critical environmental functions for the health of communities. Along with other community services and infrastructure, public open spaces are important public assets that contribute to livable, safe and sustainable communities.

However, the Philippines is severely deficient in the supply of public parks and open spaces which has not been given by government the kind of attention that it deserves. While there are laws relating to parks and public open space, these are limited in requiring the provision of additional ones to increase the existing supply. Meanwhile, our unprecedented urban population growth and changing demographics are increasing the need for public open space to support a wide range of activities. Concurrently, our urban landscape is rapidly changing in keeping up with this growth while the potentials for providing for public open space before all lands are built up are not being pursued. Increasing densities, continuing urban population growth, climate change, and resource depletion are adding further importance on the provision of public open space.

Take the case of Metro Manila, which is one of the most dense and rapidly growing cities in the world. Because of the lack of planning, regulations and resources, Metro Manila is becoming increasingly congested and disconnected with nature. People are left with very little amount of open space. In fact, Metro Manila falls well below international standards.

The World Health Organization (WHO) recommends a minimum of 9 square meter of green open space per person.<sup>1</sup> According to the Green City Index, Metro Manila currently has 5 square meters per person.<sup>2</sup> To reach the WHO standard, Metro Manila will need to add 52 square kilometers of green open space, roughly the size of Manila and Makati combined.

This lack of open space is now felt in the country's other cities. In the past 50 years, the Philippines' urban population grew over 50 million people. By 2050, approximately 65 percent of the country's total population will be urban. In the face of this, the amount of open space is not increasing commensurately. In fact, the remaining ones are even being built upon in the name of progress.



Metro Manila Skyline

The idea of providing adequate of public open space is not new in the Philippines. For example, in 1969, the Philippine Institute of Architects (PIA), under the leadership of its President, Architect/ Environmental Planner Manuel T. Mañosa Jr., submitted to the Philippine Senate a recommendation on parks and open spaces for Metro Manila. They focused on the then controversial cutting up and development of the Quezon Memorial quadrangle (that 400-hectare parcel of land defined by East, West, North and Timog Avenues). That large space was supposed to be Metro Manila's Central Park to replace the loss of open space in central Manila.

The group's 32-page report outlined the history and current status of open space in the metro area and stressed that "For reasons of safety, convenience and general well-being of the citizens of Metro Manila, the development of parks and open spaces has to be undertaken immediately." Unfortunately, no action was taken on the group's recommendations. At that time, the proportion of open space to every 1,000 population in Metro Manila was 0.9. With the metro area's population now, the amount of open space to 1,000 population has fallen by 75% or 0.2.



There have been recent activities, however, that suggest change for the better. Most significant among these was the Conference of Public Space and the New Urban Agenda last February 2015, where 37 Philippine towns and cities together with 8 national agencies signed a Declaration on the Philippine Network for Public Space. This Declaration specifically mentions:

*“We urge cities to improve public space in long – term development plans and the development of city – wide strategies and action plans. As a foundation for these strategies, we need to establish guides and sets of standards for planning design and management of public spaces in our cities,”<sup>6</sup>*

Another important initiative is that of the National Academy of Science and Technology of the Philippines (NAST – PH), which proposes the formation of a National Commission for the Prevention and control of Non – Communicable Diseases. The proposed Commission will analyze current laws, policies and programs which may negatively impact the health of the public, and create strategies that will promote a healthy lifestyle, and recommend new policies if necessary. These will include policies on the provision of adequate open spaces to encourage greater physical activity. According to NAST – PH, more parks, sidewalks and bike lanes are better than fun runs.<sup>4</sup>

The success of open space provision is strongly influenced by sound strategic planning, good urban planning and design elements, and a good understanding of recreation and trends in community participation and public-private partnerships. It is in this context that this guide has been prepared.



# ABOUT THIS GUIDE

This guide is proposed to assist local communities, local government units (LGUs), real estate developers, and planners in both the private and public sectors in the planning, design and development of sustainable public open spaces that meet the leisure, recreation and sport needs of Philippine towns and cities. The guide:

1

focuses on the planning and provision of land that is publicly owned and/or managed for use by the community;

2

recognizes the social, environmental, cultural, and economic contribution of open space as an essential component of liveable towns and cities;

3

provides practical planning tools and implementation strategies adapted from “best practices” in a wide range of countries, as well as from relevant local traditions;

4

encourages collaboration across a wide range of fields of expertise including but not limited to open space planning, land management, recreation planning, land use and environmental planning, sports management, heritage conservation, community health and wellbeing, natural resources management, and landscape design; and

5

Discusses issues and challenges that will likely need to be addressed in the planning, design, development and management of public open space.

It is envisaged that this guide will catalyze an evolving resource that has the capacity to strengthen the ability of the open space community-of-practice to respond to emerging challenges and improve the planning, design and provision of public open space in the Philippines.

# PREVIOUS INITIATIVES

The need to provide Public Parks and Open Spaces is not new to the Philippines. There have been numerous efforts to create an effective system of parks in our country, which were driven by different needs, but failed because of various reasons.



## SPANISH ERA

During the **Spanish Colonial Era**, particularly in Spain and in greater part of Europe, there have been calls for better open spaces to correct the ills and congestion brought about by Industrial Revolution, which plagued the urban populace. Spain responded to these calls and initiated similar actions in the Philippines, only with a different purpose. An example of this is Jardin Botanico, a five hectare garden where plants were tested propagation. It also served as a park enjoyed by the locals, Spanish and Filipinos alike. Other open spaces have also thrived because of the clamor of people for open spaces, such as the Bagumbayan. It was formerly occupied by residential, religious and civic structures but

because these were used as cover by the British when they assaulted Intramuros, the Spaniards were prompted to raze the whole area to the ground, thus forming the open spaces we now know as Rizal Park or Luneta. This was soon utilized by the people for social gatherings, mimicking those in Europe. This made Rizal Park and Jardin Botanico the first de facto parks of the city. Further improvements for these parks have been pursued, like the fire trees in Padre Burgos Avenue. Unfortunately, with the onset of Philippine Revolution and the Spanish – American War, development of open spaces ended and Luneta was turned into an infamous execution ground.



Jardin Botánico in Plaza Arroceros during the Spanish Colonial Period.







Jonas Bridge/ Binondo Bridge under the Manila Burnham Plan of 1905 (Source: Public Domain)

# AMERICAN P

In the following **American period**, plans by Daniel Burnham for Manila and Baguio were realized. These created public open spaces in order to: a) provide a grand civic space, b) serve as a monument to the emerging global power, and c) offer a breathing space for their service men and ordinary people alike. In this period, Rizal Park was envisaged to be the central mall for the civic core. With it came the installation of the Rizal Monument, inspired by the Washington Monument in the National Mall in Washington D.C. (Mall here refers to a linear open space that is defined by trees and buildings.) Further, Burnham planned nine play fields and four large parks in the perimeter of the city, all connected by a park-way system. These four parks, which were

to be built in Harrison, Sta. Anna, Sampaloc and Tondo would have had an area of fifty hectares each, totaling two – hundred hectares. It was also envisioned to have a park-way from Rizal Park to Sangley Point in Cavite, parts of which we now know as Roxas Boulevard. These developments however, were slowed down by a sluggish Philippine economy at the onset of WWI. With the shelving of the grand civic core for Rizal Park, it became the venue of then Manila Carnival; an entertainment & commercial bazaar that became the prime social event of the city. This event placed Rizal Park as the premiere leisure space in the city for the second time, while paving the way for the cordial relations between Americans and Filipinos.

Greening of the city was a very important component to the Burnham plans. In charge of city greening in the American period was John C. Mehan, he was given the Spanish-era Jardin Botánico. He quickly developed the garden and it became popular and crowded, to the point that it needed to be expanded to areas with ample land and water. The cemeteries established in that era, the North and South cemetery were also placed in his care, of which one was

In the face of rapid urbanization in the 1930's the Burnham plan faced re-evaluation. Zoning was introduced in Manila and subsequently infused with the plan. In the re-evaluation that occurred, two out of four large parks for the city was lost, those in Sta. Ana and Tondo. Only the park in Harrison remained. While the Sampaloc Park, which was renamed Rizal Park was indicated in the map, but its street system seem to be cut up and was presumed to be for sale.

# ERIOD ERA

made to be both a cemetery and a nursery park (North cemetery.)

In general, landscape in Manila was kept simple and well maintained. Samples of great street planting are the former Acacia trees in Taft Avenue and Fire trees in P. Burgos St.

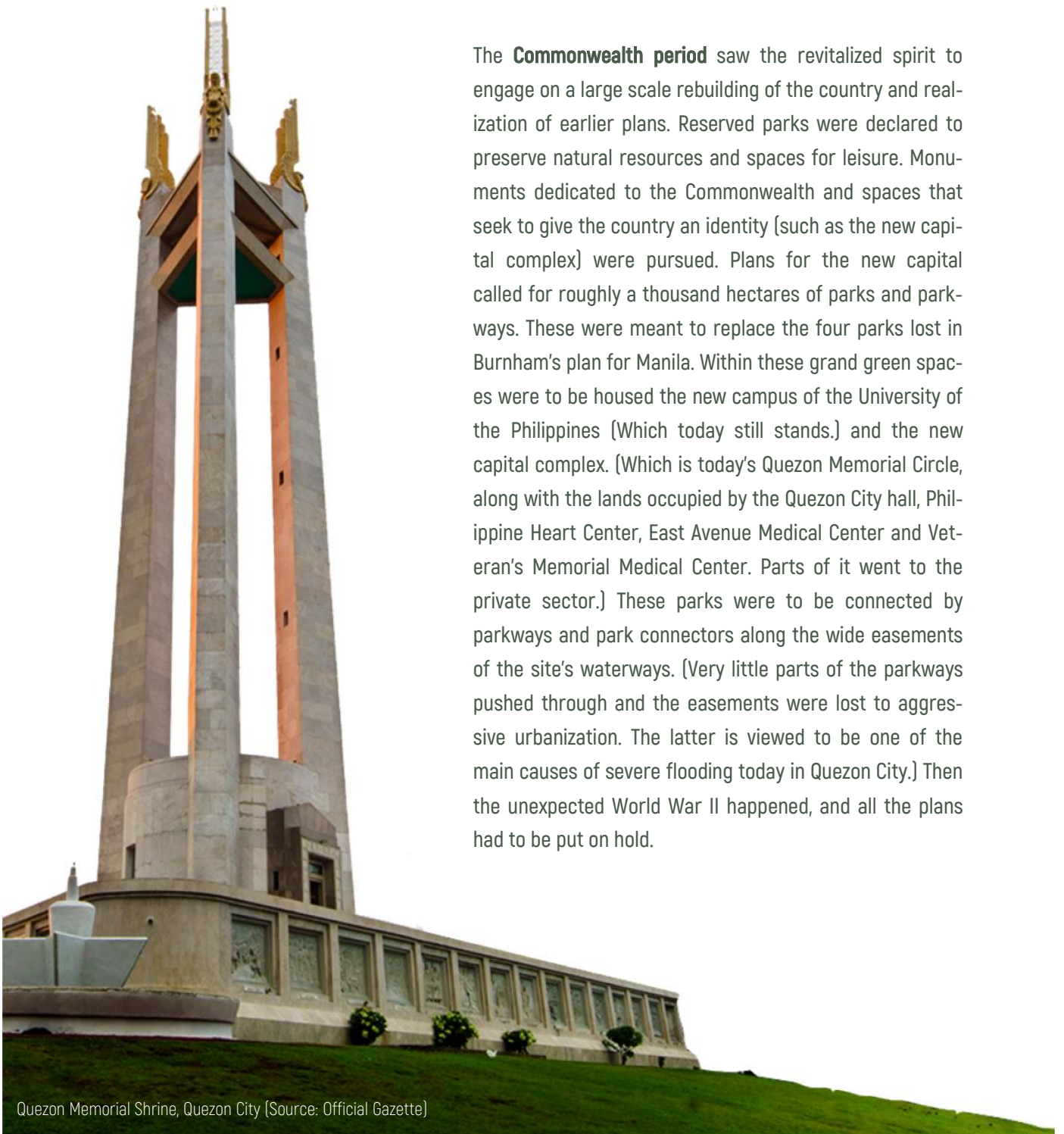
The other park created during this era was the Baguio Burnham Park. It contained a central lagoon surrounded by open and cleared land. It also has a skating rink and an enclosed pavilion. Another was the Pook ni Maria Makiling, which was declared as a national park to protect it from rapid urbanization.



The insular civil government led by Gov. Gen. James F. Smith (2nd from left) poses with visiting Secretary of War William H. Taft (3rd from left). Source: Ryerson & Burnham Archives, the Art Institute of Chicago)

# COMMONWEALTH PERIOD

The **Commonwealth period** saw the revitalized spirit to engage on a large scale rebuilding of the country and realization of earlier plans. Reserved parks were declared to preserve natural resources and spaces for leisure. Monuments dedicated to the Commonwealth and spaces that seek to give the country an identity (such as the new capital complex) were pursued. Plans for the new capital called for roughly a thousand hectares of parks and parkways. These were meant to replace the four parks lost in Burnham's plan for Manila. Within these grand green spaces were to be housed the new campus of the University of the Philippines (Which today still stands.) and the new capital complex. (Which is today's Quezon Memorial Circle, along with the lands occupied by the Quezon City hall, Philippine Heart Center, East Avenue Medical Center and Veteran's Memorial Medical Center. Parts of it went to the private sector.) These parks were to be connected by parkways and park connectors along the wide easements of the site's waterways. (Very little parts of the parkways pushed through and the easements were lost to aggressive urbanization. The latter is viewed to be one of the main causes of severe flooding today in Quezon City.) Then the unexpected World War II happened, and all the plans had to be put on hold.



Quezon Memorial Shrine, Quezon City [Source: Official Gazette]



# WORLD WAR II

During World War II, the country saw little to no progress in nation building. The Japanese never barred the utilization of parks for leisure, though they never advocated the construction of additional parks or the continuation of the plans of the new capital. In 1945, the liberation of Manila came. This battle destroyed most of the city. Fire trees in P. Burgos St. burned, craters from the bombing littered the fields. Most of Intramuros and the surrounding government buildings in Rizal Park were destroyed. After the war, the country was bent on building back. Louis Croft, a landscape architect and planner, advocated razing the ruins from

the Agricultural, Finance Building and the whole of Intramuros going to the coast to serve as Manila's de facto central park. Meanwhile, the plans for the new capital complex were abandoned owing to military advice that its flat terrain is hard to defend in case of attack. (After considering many other sites, the capital complex was decided to sit on where the Batasang Pambansa is now located.) Finally, Louis Croft drew up a new master plan which designates the central part (Rizal Park and outlying areas.) of Manila as its central park while Intramuros were to be preserved as a historical district.



Manila during World War II [Source: Flickr, John Tewell]

# THIRD REPUBLIC

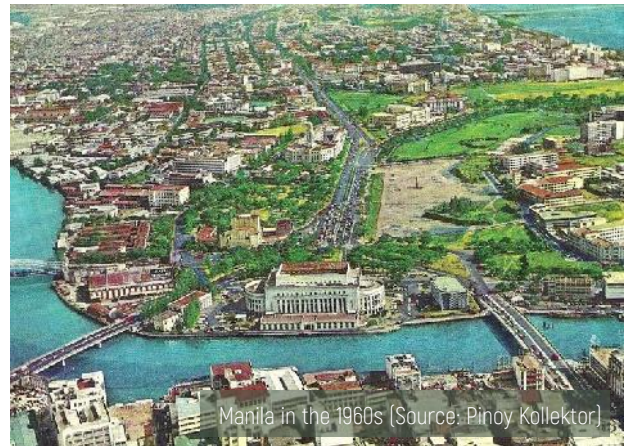
With the Americans granting the Philippines independence, the Third Republic worked on rebuilding the country. Plans delayed by the war were put to motion, while some were replaced based on the country's changing needs and existing situation. Open spaces created during this period were mostly dedicated to notable figures in the Philippines' road to independence, and also meant to showcase the same as a new country with a big potential. The most notable construction in this period is the Independence Grandstand, (A temporary structure built in front of the Rizal monument.) the Independence flagpole, (The same flagpole located in front of the Rizal Monument today.) and the Quirino Grandstand. (It was formerly named the independence grandstand.) Also in this period, another major event was held in Rizal Park, The Philippine International Fair of 1953. It was the first international world exposition held in Asia. It boasted of different



Miniature Garden, Luneta [Source: Pinoy Kolektor]

pavilions where at least 10 foreign countries and 27 Philippine provinces participated. It became a yearly event which transferred to another site in Quezon City. (That is now SM North Edsa.)

Meanwhile, new plans for the new capital complex were drawn up. The plan included a grand avenue 99 meters wide to be named "Avenue of the Republic" (Not to be confused with a street named "Republic Avenue." This plan was never realized and the Right of Way is currently being occupied by informal settlers.) And the government complex around what is now Batasang Pambansa. The grand avenue was to be lined of trees and parks and was to showcase the best the country has to offer. Of these, only the Batasan came to fruition.



Manila in the 1960s [Source: Pinoy Kolektor]

In Manila new projects started, such as the Manila zoo. (It still exists today, in the face of pressure from both animal rights and business groups to close it down.) Rizal Park saw the addition of the Aluminum Spire to the Rizal Monument (It came down because of strong public opposition.) and the National Library. Both were parts of the larger plan for the Rizal Cultural Center which never saw completion because of financial difficulties. (It also received strong opposition from conservation groups, but was still given a go ahead.)



Other parks established and improved in this era were the following: Fort Santiago in Intramuros became a historical public space after the Americans transferred to Subic and Clark. Special attention was given to the replica of the prison cell of Dr. Jose Rizal, as his centennial was fast approaching.

Paco Park also started to get attention; it was closed by the Americans during the colonial era and was used as a storage facility of the Japanese. After the war it was left to ruins but was subsequently rediscovered by tourists. It was renovated and today is a favorite venue for weddings and live performances.

The Pook ni Maria Makiling National Park also went through improvements, such as addition of some Cabanas due to increased local tourism.

The initial efforts to establish the Quezon Memorial Circle was made through president Quirino's proclamation to establish a memorial for his predecessor. Construction began shortly afterwards, but progress was slow because of budgetary concerns.

And finally, Ninoy Aquino Parks and Wildlife also emerged in this era. After the first planned Capitol

complex was cancelled after the war, President Quirino declared the land left unused as a national park.

This Era also saw the creation of the National Parks Development Committee, or NPDC. Along with it, Rizal Park has become Lunetas' official name. The NPDC saw through developments for Rizal Park such as; the Playground, parking, sculptures and Carabao shaped seats behind the Quirino Grandstand. The Burnham green was also improved ; it was provided a slope rolling down from Roxas Boulevard to the Quirino Grandstand to improve the views of events and parades held at the grandstand. Steps were given to the front of the area which faces the Rizal Monument, giving it good vantage points. These steps are then framed by the iconic Carabao and Tamaraw statues, which still exists today. The sides of the Burnham Green were improved to accommodate food kiosks and toilets. The area around the monument was also improved for promenading. The southern portion along with the contiguous area is developed as the Heidelberg fountain and the Magic fountain. The developments were completed in 1963, and went on to the next era.



The Children's Playground, Luneta Park in the 1960s [Source: Pinoy Kolektor]

# MARCOS ERA

The Marcos era was very aggressive in nation building; along with it was the beautification of public spaces headed by the First Lady. It built monuments and infrastructure dedicated to the “new society” and also to legitimize the long reigning regime. For Rizal park, the Marcos era ushered the creation of; The International Gardens section. This section is made up of the Chinese Garden and the Japanese Garden, both of which still stands today. There should have been a Malaysian Garden and other Gardens from Asia but attention and effort was turned to other sections of the park. The Chess Plaza, the Flower Clock and the relief map of the Philippines was also built in this era. The Gallery at the Park and Concert at the park are but some of the events held in the park. Other Amenities added are the park of the blind, the Open Air Auditorium, the globe fountain and the Maria Orosa Waterfalls.

Meanwhile, in this period Fort Santiago's Plaza de Moriones and Plaza de Armas was conserved. It also saw the addition of the Rajah Sulayman open-air theater. Also added later in this era are the Bronze footprints which traces Rizal's journey from the fort to Rizal Park. The progress of Quezon memorial circle was still

slow at this time, although great effort was placed to source funding from it, the only addition to it being the fountain. As with the past era, problems such as social unrest, economic crisis and the revolution have put the government's efforts to an end.

The beginning of the current era saw people use parks as a gathering place to mourn the loss of a political leader and to tell the past dictator that their dissatisfaction have reached the tipping point. It has also become the venue of celebration after the successful and peaceful revolution. After which, with the continuity of the Fifth republic, parks, most especially Rizal Park enjoyed hosting gatherings from small family picnics to large religious and political events.

Addition to the Rizal Park during the past four decades of this era includes: The Lights and Sound Complex, The Kanlungan ng Sining, The Orchidarium, the Busts of heroes in the central Lagoon, The Lapu – lapu statue (which replaced the globe fountain in Agrifina circle.) The Centennial clock aimed to replace the old flower clock. (It still exists only with a different engine.) And the Korean War memorial Sculptures along the western side of Roxas Boulevard.



Chinese Garden Entrance, Luneta (Source: Trip Advisor)



# 1986 TO PRESENT

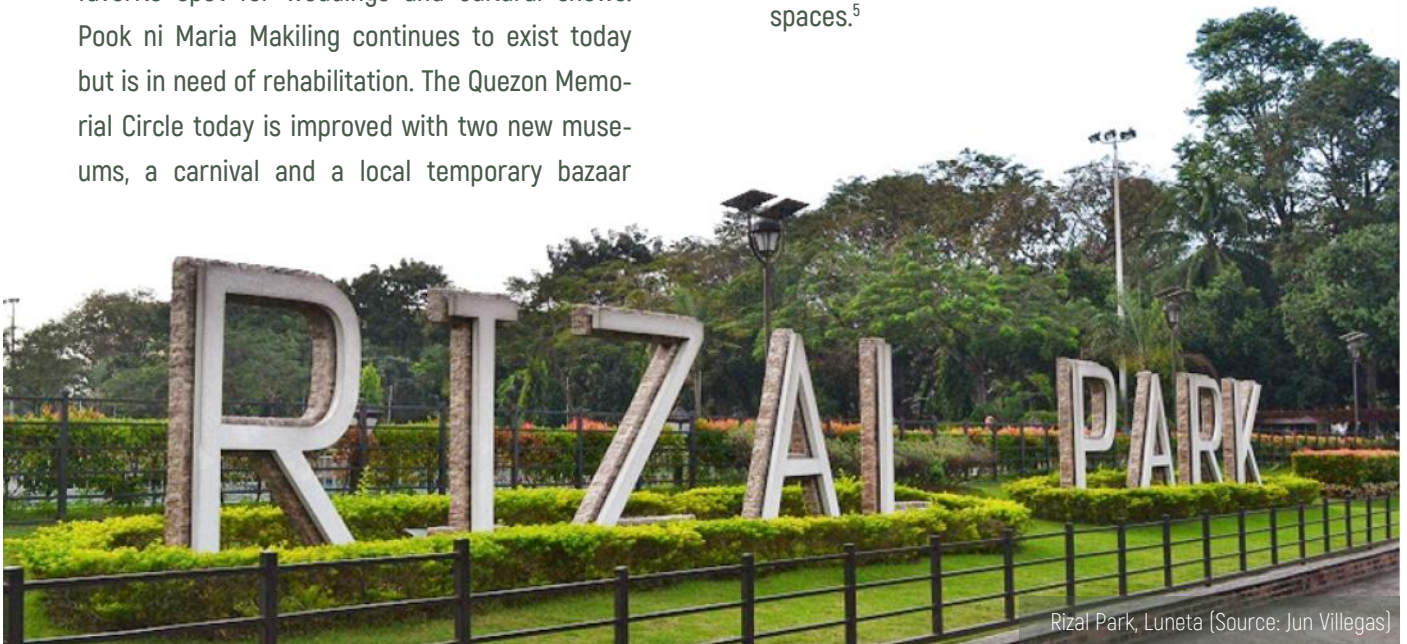
Many changes occurred through the years with Parks in our country. Most notably, some were overrun and worst, never saw implementation due to poor planning policies and rapid urbanization. As with Rizal Park, many amenities were lost through time. The sculptures (most especially those stolen from the Kanlungan ng Sining, Carabao shaped benches and playgrounds behind the Quirino Grandstand) was lost and consequently replaced by the Manila Ocean Park. Cindy's hamburger was allowed operations in a small portion of the Children's playground along Taft Avenue, it was replaced by a Wendy's and today this building has three commercial units. (One occupied by Wendy's, the other a tarpaulin printing shop and another vacant space.) The Park for the Blind fell to disrepair and was subsequently overtaken by what is now Jollibee in Maria Orosa Avenue.

Fort Santiago today is one of the sought after historical sites in the country. It still retained most of the attractions built to it, with some improved and or renovated. Paco Park continues to be a favorite spot for weddings and cultural shows. Pook ni Maria Makiling continues to exist today but is in need of rehabilitation. The Quezon Memorial Circle today is improved with two new museums, a carnival and a local temporary bazaar

(Which is controversial today because they seem to become permanent). The Ninoy Aquino Parks and wildlife still exists today but its area has shrunk to 22 hectares, most of which were due to other government establishments needed in the area.

Based on the above information, Rizal Park may be considered as an example of an effective public space. It stood through the different eras mentioned, and stands today as the country's premiere park, flocked by large numbers of visitors especially on weekends and holidays. The National Parks Development Committee, which grew with this park, is the one managing Rizal Park. It aims to turn Luneta into a model for different LGUs who also aspire to develop their own effective and resilient public parks and open space.

Today, environmental planners and other advocacy groups are still striving to revive public open spaces which were neglected by previous eras, coupled by current policy makers' unawareness of the importance of having public parks and open spaces.<sup>5</sup>



Rizal Park, Luneta (Source: Jun Villegas)

# 1.3

## THE BENEFITS OF PUBLIC OPEN SPACE

Open space provides a wide array of social, health, economic, and environmental benefits to individuals and to the community as a whole. It is an essential ingredient for enhancing the livability of an area and improving the quality of life of its residents. Easy access to well designed and diverse open spaces will assist in not only managing the negative impacts of rapid and massive urbanization and population growth, but also enhancing the benefits that open space provides.

There is a significant body of international research and knowledge of the wide ranging benefits of open space. These include:







## Social Benefits

Open spaces provide a range of social benefits which are increasingly being recognized as important drivers in shaping future communities. Open spaces:

- connect and build strong communities by providing opportunities for local people to come together for a range of leisure, recreational, cultural, and celebratory activities;
- enhance opportunities for social cohesion and inclusion; and
- improve livability in urban environments by offering affordable recreation opportunities for all sectors of the community, including low-income families.

## Environment Benefits

Green open spaces provide both aesthetic and environmental benefits including:

- protection of areas of conservation, biodiversity and cultural heritage value;
- reduction of air and noise pollution; and
- Managing climate change impacts by providing shade and cooling, contributing to urban heat abatement, contributing to storm-water management, and by serving as disaster evacuation centers.

## Health Benefits

Access to open space:

- encourages physical activity;
- enhances physical and mental health;
- helps reduce the risks of developing chronic diseases;
- assists in recovery from mental fatigue; and
- enhances children's development and wellbeing.

## Economic Benefits

Municipal, provincial and regional economies benefit significantly from various types of open spaces.

- Parks are a major attraction for recreation and tourism industries, and are significant sources for revenue and of employment for local communities;
- Active open spaces, especially sports fields, serve the same purpose by attracting participants and spectators beyond the local area and thus have significant contribution to the inflow of economic benefits.

**Chapter 1 References:**

- UN – Habitat 2015
- Siemens Asian Green City Index
- UN – Habitat Global Public Space Toolkit 2015
- National Academy of Science and Technology of the Philippines
- Parks for A Nation: The Rizal Park and the 50 years of the National Parks Development Committee.

# **THE CONTEXT FOR PUBLIC OPEN SPACE**

2

# WHAT IS PUBLIC OPEN SPACE?

There are varying definitions of public open space that are used by the private sector and government agencies. Some definitions focus on how the open space is used, while some focus on the type of land used for open space. The types of open space cover a wide range, from a small street-corner sitting area to a very large National Forest Reserve. They can also cover schoolyards and playgrounds as well as vacant or undeveloped lots.

For the purpose of this guide, the following definitions of public open space are proposed.

## PUBLIC OPEN SPACE

Land that is set aside for public recreation and leisure, or as parklands or for similar purposes. It includes both *passive* and *active* open space. Examples of these include Rizal Park in Manila, Burnham Park in Baguio, Ninoy Aquino Wildlife Park in Quezon City, Rainforest Park in Pasig City, People's Park in Davao, the parks that are normally found within residential subdivisions, and foreshore easements along beaches in coastal areas.

Land set aside for the primary purpose of formal out-



# ACTIVE OPEN SPACE

door sports by the community, such as city-owned basketball courts and playgrounds, the Amoranto Stadium in Quezon City, the Marikina Sports Complex, Panaad Sports Complex in Bacolod City, and other sports complexes found in Provincial capital cities which host the annual Palarong Pilipino.

Open space that is set aside for parks, gardens, linear corridors, conservation

# PASSIVE OPEN SPACE

areas, nature reserves, public squares, and community gardens that are made available for passive recreation, play and unstructured physical activity. Examples of these include town plazas, city parks, easements along rivers and creeks, and National Forest Reserves.

Throughout this guide, the use of the terms “public open space” and “open

space” are interchangeable. In general terms, open space often refer to the land that is provided by government. However, open space may also be privately owned but made available for use by the public. Referred to as *Privately-Owned Public Open Space (POPOS)*, these are publicly accessible open space in the form of plazas, pedestrian promenade, small parks, and even sitting areas which are provided and maintained by private developers. Example of these include the green strip of Bonifacio High Street in Bonifacio Global City in Taguig, the plaza in Alabang Town Center in Muntinlupa, Salcedo Park in Makati, and the landscaped promenade and amphitheater in UP Town Center in Quezon City. These have been provided voluntarily by developers in line with their business philosophy of building complete communities and not just real

estate products. There is presently no law or policy in the Philippines that requires developers to provide POPOS except in residential subdivision projects.

San Francisco city in California, USA, promulgated in 1985 a “Downtown Plan” that created such a systematic requirement for the provision of POPOS specifically as part of projects in high intensity commercial districts. The goal was to “provide in the downtown quality open space in sufficient quantity and variety to meet the needs of downtown workers, residents and visitors” (San Francisco Planning Code, Sections 135 and 138). This guide is applicable to both government-provided and privately-owned public open space.

## 2.2

# WHAT ARE THE DIFFERENT SETTINGS WHERE OPEN SPACE IS NECESSARY?

The planning and design of open spaces requires an understanding of individual cities or municipalities as a whole, and of the actual location and setting that the proposed open space is to be located within. Most of our cities and municipalities have different types of settlements or settings, each with distinctive characteristics that influence what type of open spaces are required and how these may be provided. Different settings require different types of open space. For instance, in the built-up areas (eg, Poblacions) of Highly Urbanized Cities, there is likely very little opportunity to develop large public open space, while this may be possible in areas farther away from the city center.

The settings may be classified according to their geographic location relative to the city/municipal boundary, and to their distinctive characteristics, as follows:

## URBAN BUILT-UP AREAS

These are well established areas in the traditional “center” of the city or municipality. They are usually traversed by major inter-city roads, and are the areas where the “downtown” or “central business district” is located. (e.g. Poblacion or urban barangays)

## GROWTH AREAS

These are areas at the fringe of the Urban Built-Up Areas where further urban growth and expansion is expected or already taking place. They include lands that may be occupied by large industries or commercial farms, but may no longer be relevant for such uses because of urbanization and commercial development.

## PERI- URBAN AREAS

These are lands that are non-urban but are close to cities’ and towns’ growth areas. They have a relationship to the urban areas they surround as well as the hinterlands in which they are located.

## REGIONAL AREAS

These include a cluster of cities and municipalities that focus on their collective economy, employment, and the management of their natural resources and environmental assets. They include urban built-up areas, growth areas, and peri-urban areas.

## RURAL AREAS

These include smaller municipalities and farming communities. These areas include peri-urban areas where some residential communities already exist and the growth boundary expands into the rural countryside.

Coastal communities may be found in each of these settlement types, which have their own distinctive characteristics and needs.

It is important to note that while these settlement types may contain similar types of development and supporting infrastructure (eg, activity/commercial centers, industrial sites, office/employment hubs, residential communities, community and leisure facilities, utilities, etc), each face different challenges and opportunities that influence the provision of public open space.

An understanding of how the following factors present in each of the settlement types will assist in determining the quantity, distribution and type of open spaces that may be required:

A consistent and clear approach to defining and classifying open space is important throughout the entire planning and design process. Various approaches that are used to classify open space have tended to focus on the following:



**Population  
Growth or Decline**



**Demographic  
Profile**



**Housing Densities**  
including access to  
private open spaces



**Access to essential  
infrastructure**  
ie, public transport, employ-  
ment, & commercial hubs



**Access to natural assets  
and/or physical landmarks**  
ie, natural parks, forest reserves,  
coastal resorts & foreshores,  
major rivers & lakes, etc.

Roxas Boulevard running along the shores of Manila Bay



# WHAT ARE THE DIFFERENT TYPES OF OPEN SPACE?

- Land ownership (public land, national government-owned land, provincial government-owned land, city/municipality-owned land, privately owned land);
- Use or function (sports field, conservation or protection land, heritage conservation, drainage, utility easement);
- Vegetation or topography (floodplain, river basin, forestland, ridgeline); or
- Visitor or user catchment area (national, regional, district, local)

The table below categorizes open space by its broad primary land use, and highlights that some open space can serve many different primary and secondary functions, thus addressing a broader range of community needs. It also shows that open space that are not primarily for recreation may have the capacity to meet important recreation needs. This highlights that open space planning cannot be undertaken in isolation from the broader land use planning processes.



CATEGORIES/ DESCRIPTORS	PRIMARY USE	EXAMPLES OF POTENTIAL SECONDARY USE
<h2>Conservation &amp; Heritage</h2> <p>Land primarily set aside to protect and enhance areas with significant biodiversity, environmental, disaster management, and cultural value</p>	<p>Conservation, protection or enhancement of a highly valuable biodiversity, environmental, disaster management and/or cultural value.</p> <p>Examples include: Protected Areas, Disaster Danger Zones, Cultural Heritage Conservation Sites, National Forests/Parks</p>	<ul style="list-style-type: none"> <li>- Unstructured recreational activities may be accommodated provided there is no impact on environmentally sensitive or heritage conservation areas, such as walking and cycling.</li> <li>- Nature/heritage appreciation</li> <li>- Scientific study</li> </ul>
<h2>Natural &amp; Semi-Natural Landscapes &amp; Amenity</h2> <p>Land set aside to add or protect the character of an area, including areas with environmental and/or heritage value</p>	<p>Enhancement or protection of the natural or semi-natural character or attractiveness of an area.</p> <p>Examples include: Wetlands, Mangroves, Historic Sites, Ridgelines, Public Beaches</p>	<ul style="list-style-type: none"> <li>- Recreational activities compatible with the natural, semi-natural or landscape values may be accommodated, such as walking, cycling, nature appreciation.</li> <li>- Nature conservation, protection and enhancement</li> <li>- Nature/scientific study and educational activities</li> <li>- Water management</li> </ul>
<h2>Parklands &amp; Gardens</h2> <p>Land which may have some modifications to support community social interactions, unstructured recreation and wellbeing uses, including for nature appreciation and reflection</p>	<p>Established for a range of structured and unstructured activities, community recreation and cultural activities.</p> <p>Examples include: Landscaped parklands and gardens, formal lawn areas, open lawns, pocket parks, playgrounds, botanical gardens, meditation nodes</p>	<ul style="list-style-type: none"> <li>- Community events</li> <li>- Community gardens</li> <li>- Picnics</li> <li>- Weddings / celebrations</li> <li>- Play</li> </ul>

## CATEGORIES/ DESCRIPTIONS

## PRIMARY USE

## EXAMPLES OF POTENTIAL SECONDARY USE

### Linear Parks and Open Space

Linear reserves are usually on or alongside rivers and creeks, drainage easements, foreshores, and some utility easements (ie pipelines, power lines, railway reserves)

Primarily provided to ensure effective functioning of natural processes such as drainage, and access to utility lines.

Linear open space may also provide links to broader open space network, community or activity hubs and/or other areas of interest.

- Walking and cycling trains
- Horseback riding / bridle trails
- Informal recreation
- Nature appreciation

### Active Open Spaces

Land which has been modified to support structured sports and recreation

Established primarily for structured team sports and active recreation in an outdoor setting, including training and competition. Generally includes built infrastructure to support competition.

Examples include: soccer pitch, baseball field, athletics tracks, open basketball courts, open tennis courts

May accommodate unstructured community or individual use when not required for primary use.

May include informal lawns, play, picnic and other facilities in the peripheral areas.

- Community and cultural events
- Emergency evacuation areas
- Buffering areas

### Civic Spaces

Land which has been modified to support a range of formal and informal activities.

Examples include: Plazas, civic squares, outdoor promenades

Established primarily to provide for family and community activities, gatherings and events.

City / town fiestas / festivals  
Outdoor concerts  
Community gatherings  
Passive use by people

Al fresco dining

Entertainment shows

Public expositions



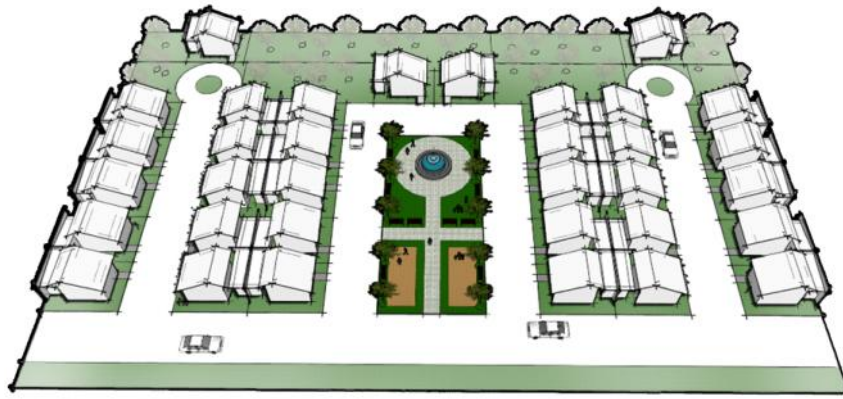
CATEGORIES/ DESCRIPTIONS	PRIMARY USE	EXAMPLES OF POTENTIAL SECONDARY USE
<h2>Utilities and Services</h2> <p>Land reserved for urban and non-urban infrastructure for utilities and services.</p>	<p>Reserved primarily for infrastructure utilities and services.</p> <p>Examples include: main water pipelines, power line easements, easements along rivers and creeks, cemeteries/memorial areas, railway line buffer</p>	<p>In some instances, such land may be available for community recreation use when not being used for its primary purpose.</p> <ul style="list-style-type: none"> <li>- Linear parks / trails</li> <li>- Habitat corridors / refuge</li> <li>- Sports fields</li> </ul>
<h2>Coastal Areas and Beaches</h2> <p>Open space areas that form part of a foreshore, or parkland</p>	<p>Conservation of natural areas and coastal systems</p> <p>Beach-related activities</p> <p>Protection from storm surge and tsunamis</p>	

### Visitor or User Catchment Area

Catchment is a term used to determine the distribution of public open space and can be effectively used in conjunction with the categories, hierarchy and sizes of open space sites. It refers to a “sphere of influence” of open space in terms of travel, use and its role within the open space system. Catchment can be explained using distance (eg, walkability distance), travel time, role of the site, scale, quality and level of service, and in some cases even subsequent maintenance and resourcing required for effective asset management.

In the following table, catchment has been used in conjunction with hierarchy, size and category. The result is an integrated definition of open space that considers a range of factors and provides a helpful planning tool for local government units as well as private developers of large mixed-use real estate developments to establish a successful open space system and to develop individual open space sites.

# SMALL OR LOCAL PARKS



- **Open space** serving a small catchment area such that users are within safe walking distance. This could be in the range of **150m to 300m**, depending on the population density and the presence of barriers.
- Site may be less **0.50 hectares** and can be quite small. A **minimum width of 30m** would be preferred to achieve a reasonably proportioned open space.
- **Examples include parklands, gardens, plazas and civic spaces.**

# NEIGHBORHOOD PARKS



- **Open space** serving an area generally with a walking distance of **400m to 500m** from houses.
- Size would generally be from **0.75 to 1.00 hectare**, with a **minimum width of 50m** to achieve a reasonably proportioned open space.
- **Examples include parklands, gardens, plazas and civic areas.**

# SUB-DISTRICT PARKS



- **Open space** serving three neighborhoods, generally with a size of **5-6 hectares**.
- Generally provide **several recreation nodes** offering a wide range of opportunities including sporting facilities.
- **Passive recreation provision** is important either as the primary function or to compliment a sporting use.

# DISTRICT PARKS



- **Open space** of around **10 hectares**, serving around six neighborhoods or a population catchment area of 15,000 to 25,000 people.
- Generally provide for a wide range of **formal and informal recreational activities** including facilities for organized sports and passive use of open space.
- Accessible to residents by safe walking and cycling routes. Where provided beyond 1km from residences, can also be accessed by public transport or motor vehicle.
- **Examples include sports fields and conservation reserves.**

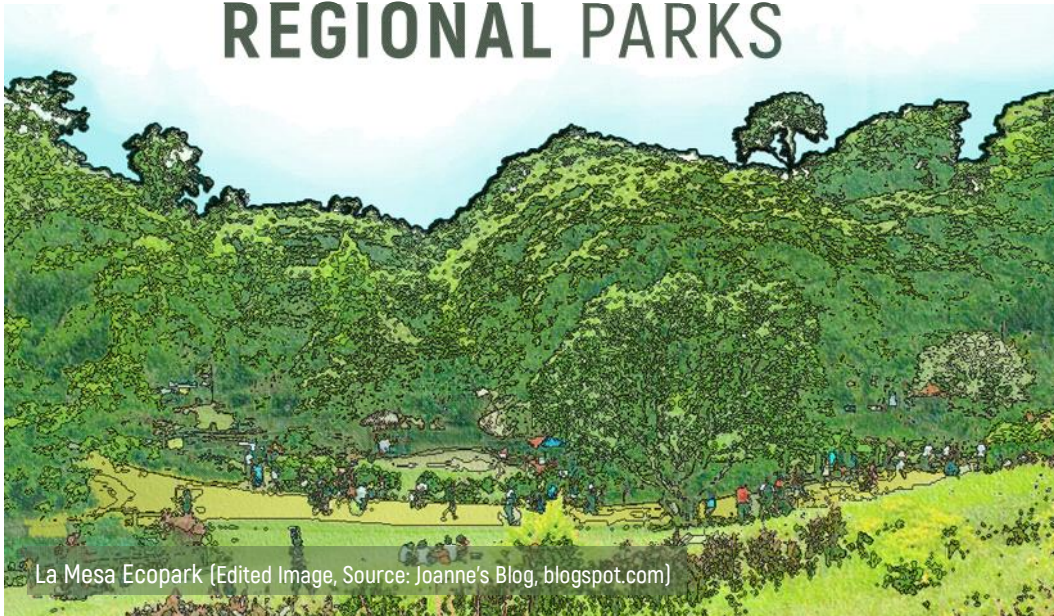


# MUNICIPAL PARKS



- **Open space** providing for the needs of the **whole city or municipality**. Ideally located at a **minimum of 2km from residences**. Will require access by public transport or motor vehicle, and provision of parking.
- **Minimum of 3 hectares** would be reasonable for a municipal open space.
- Open space at a municipal level may be specialized for specific sporting infrastructure. It will be important to ensure that **informal recreation and passive activities** are well provided for.

# REGIONAL PARKS

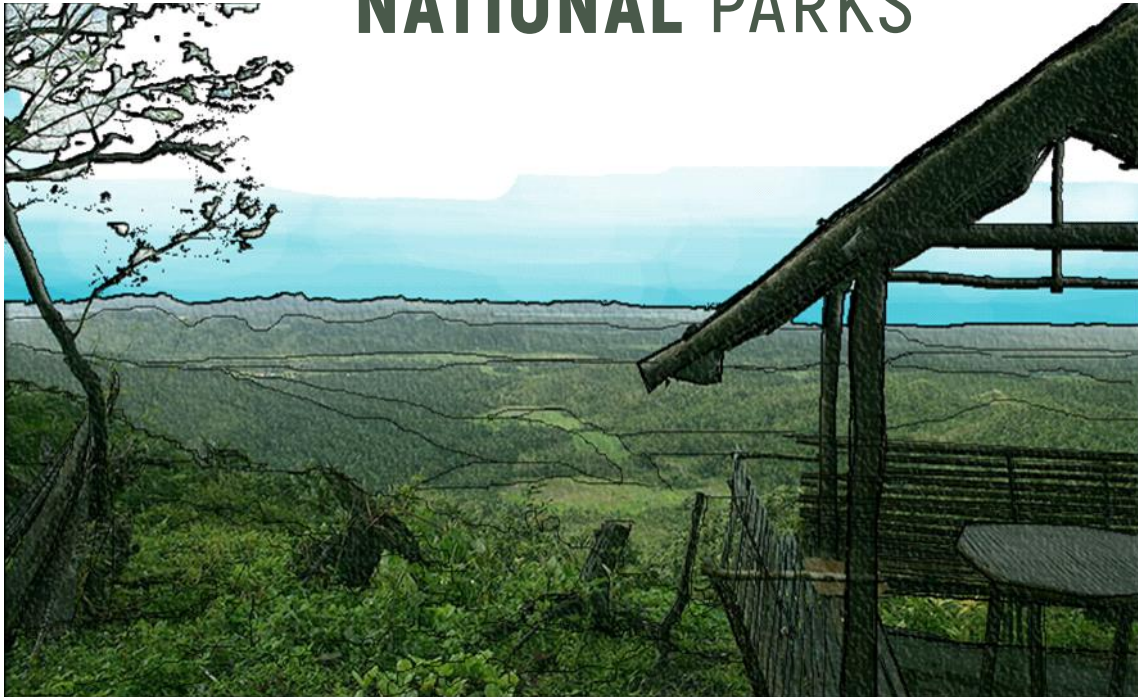


La Mesa Ecopark (Edited Image, Source: Joanne's Blog, [blogspot.com](http://blogspot.com))

- **Open space** serving the catchment **including and beyond the municipality**, including neighboring municipalities.
- Size generally **10 to 30 hectares**.
- Also includes important sites of historical, cultural or environmental significance.



# NATIONAL PARKS



Quezon National Forest Park (Edited Image, Source: worldwidetrails.com)

- **Open space** serving **intra-region catchment** or the **entire country**.
- Usually associated with site-specific environmental, cultural or landscape values.
- Usually **managed by the national government**, in some cases in partnership with the host local government unit.
- **Examples include National Parks and National Forest Reserves.**

The open space planning and design process needs to consider the full range of open space types and catchments to ensure that land is fit for the purpose. This will ensure that a mix of opportunities is provided for community use and that the full range of social, environmental and economic benefits can be achieved.

## 2.4

# WHERE CAN PUBLIC SPACE BE IMPLEMENTED?

Because land is a limited resource and the competition between land use alternatives is complex, knowledge of physical constraints identified from a land capability assessment is a major consideration in not only open space planning but in any planning process. Building a solution to these constraints or potential problems in the planning phase of a project provides a better longer term outcome. Land capability should not be confused with land suitability. **Land suitability is the assessment of how suitable a particular site is for a particular use, and depends on land capability** and a range of other factors such as proximity to centers of population, land tenure, attractiveness of landscape, heritage, cultural value, and consumer demand.



Albay Park and Wildlife (Source: Marbleplaty, flickr.com)



# Land Capability

**Land capability assessment** is necessary when one or more of the following are involved:

- The site is **more than 5 hectares** and a significant proportion of the site will be developed;
- Road construction is involved; and
- The average slope of the site is over 10 degrees and a significant proportion of the site will be developed.

For all these situations, an initial assessment is necessary which will involve determining the erosion risk and general limitations of the

slope and soil characteristics. A further or full assessment will also be necessary, which involves:

- Determining the engineering risks the proposed development may encounter;
- Determining the mitigation measures to contain any problems;
- Assessing the cost, required land or other limitations arising from the mitigation measures; and
- Reviewing the appropriateness of the proposed land use in the light of the preceding analysis.

# Land Suitability

Some existing laws, regulations and standards provide some guidelines about the type of land that should be provided as open space. These require that public open space be:

- Provided along foreshores, rivers, creeks and permanent water bodies.
- **Be linked to existing or proposed** future public open spaces where possible.
- Be integrated with floodways and unencumbered land that is accessible for public recreation.

- **Be suitable** for the intended use.
- Be of an area and dimensions to allow easy adaptation to different uses in response to changing community active and passive recreation preferences.
- Maximize **passive surveillance**.
- Be integrated with urban water management systems, waterways and other water bodies.
- Incorporate natural and cultural features where appropriate.

# Land Suitability

When considering land for suitability as open space, it is important to consider whether the land is **'fit for the purpose'** of the intended open space use. As this is not a 'black-and-white' assessment, careful consideration will need to be given to what the intended public open space would be used for both now and the future. The defined categories of open space will be useful in helping to identify the likely uses of an open space site.

The provision of suitable land for the establishment of open space is prescribed by national laws and is an important requirement that many local government units face in the assessment of development applications. However, in a number of cases, many open space areas have been developed on sites that are not suitable for residential or other productive developments. Rather, it is often the 'left-over' land that a developer will hand over to local government, which is often unsuitable for the purpose of active or passive recreation.

In other countries, it is required that **unencumbered land** that is suitable for open space development be provided in addition to **encumbered land** (that may also be donated to the local government for ownership and management).

**Encumbered land** is land that is not suited for development purposes. It includes easements for powerlines, waterways/drainage, floodwater retention ponds, wetlands, landfill, conservation and heritage areas. However, this land may be used for a range of activities such as walking trails and sports fields, but this is not provided as a substitute for public open space requirements. Further to this definition, a more comprehensive list of encumbered land sites could include the following:

- Easement /location of transformer and/or control boxes of utilities
- Drainage-ways
- Flood /inundation land /floodwater retention ponds
- Land subject to overlays within local government CLUPs (eg, heritage, forests, coastal areas, disaster danger zones, etc.)
- Powerlines /transmission lines
- Conservation /biodiversity areas
- Erosion /landslide-prone slopes / escarpment /gullies
- Road reserves
- Waterways and permanent water bodies
- Earthquake fault zones /liquefaction areas
- Disaster danger zones



In considering the use of encumbered land, it is important to identify appropriate primary and secondary functions for the site, while also pursuing unencumbered sites elsewhere for a broader range of functions. In this sense, encumbered land should be seen as an adjunct to unencumbered open space, and it should be planned and designed to be integrated with it.

Some examples of how land may be assessed for open space provision when encumbrances exist are shown in the following table.

Type of Encumbrance	Open space uses that might be suitable
<b>Flood-prone land / Disaster danger zone</b>	<ul style="list-style-type: none"> <li>- Could be part of linear reserve or easement along rivers and creeks.</li> <li>- Could be informal active recreation and/or sport training ground.</li> </ul>
<b>Drainage basin</b>	<ul style="list-style-type: none"> <li>- Depending on flooding frequency, could be informal active recreation and/or sport training ground.</li> <li>- Often not suitable for children's play.</li> </ul>
<b>Road reserve</b>	May provide temporary additional green spaces and/or for the purpose of linkages and pathways.
<b>Easements</b>	<ul style="list-style-type: none"> <li>- Where infrastructure exists (eg, power transmission towers, transformers, control boxes) – NOT suitable for open space.</li> <li>- Where open spaces under transmission lines or over underground pipes, may be suitable for linear corridors or pathways.</li> </ul>
<b>Waterways</b>	Water component NOT suitable as open space.

While conservation and environmentally sensitive land may be considered encumbered as it may restrict recreational use and access, it is important to recognize the significant value of the land in protecting biodiversity, vegetation, natural habitat as well as cultural and historical values.





Marikina River Park



Davao People's Park





Photo: Enrique Bendicho



Photo: Jojie Alcantara

## Chapter 2 References:

- ACT Legislation Register (1999). Land capability assessment guidelines. Retrieved from: <http://www.legislation.act.gove.au/ni/2002-242/20020404-2968/pdf/2002-242pdf>
- Greater London Authority (2011). London's living places and spaces. In the London Plan (Chapter 7). Retrieved from: [http://www.london.gov.uk/sites/default/files/lp2011\\_chapter\\_7.pdf](http://www.london.gov.uk/sites/default/files/lp2011_chapter_7.pdf)
- Natural Resources Management and Environment Department. (n.d.). Land suitability classification. Retrieved from: <http://www.fao.org/docrep/X5310E/X5310e04.htm#3.4> the results of land suitability evaluation
- NSW Department of Industry, (n.d.). Land capability. Retrieved from: <http://www.lis.nsw.gov.au/agriculture/land-capability>
- Parks & Leisure Australia. (2013). Open space planning and design guide. Retrieved from: <http://www.parksleisure.com.au/documents/item/2091>
- United States Environment Protection Agency, (n.d.). What is Open Space/Green Space? Retrieved from: <http://www3.epa.gov/region1/eco/uep/openspace.html#main-content>

# **POLICY & GOVERNANCE**

## **FRAMEWORK FOR THE PROVISION OF PUBLIC OPEN SPACE**

3



## Ninoy Aquino Parks and Wildlife Center



# INTRODUCTION

While the concept and practice of sustainable urban development has been widely accepted worldwide, public parks and open space have not been given the attention it deserves in the Philippines. Yet there is a growing body of principles and sound practices for improving access to good public open space in cities, as well as a growing number of good practices from different cities around the world.

Presently, there are just a few laws and government policies in the Philippines relating to public open space. However, these are mainly policy statements acknowledging the need and advocating the provision of public open space, but do not specify how these are to be supplied, distributed, developed and managed. The existing laws do suggest, however, that government – at the national, provincial, and city/municipal level – plays a critical role in the provision of open space.

# THE ROLE OF GOVERNMENT

## National Government

The national government is mainly associated with national parks and reserves established to protect areas of environmental, biodiversity or cultural significance. There are a number of national legislations dealing with a wide range of open space concerns. These include the following:

RA  
826

An Act Creating the Commission on Parks and Wildlife, Defining its Powers, Functions and Duties

RA  
10066

An Act Providing for the Protection and Conservation of the National Cultural Heritage

PD  
1559

Revised Forestry Code of the Philippines (refers to National Parks that are considered forest lands)

RA  
7160

The Local Government Code of the Philippines (requires all local government units to provide parks, greenbelts, forests, public open spaces, and playgrounds for their constituents)

PD  
1096

The National Building Code (specifies a percentage of measurement for site occupancy with regards to open space)

PD  
957

Subdivision and Condominium Buyers' Protective Decree (specifies the required amount of open space as a percentage of the total subdivision area, specifically for Open Market Housing)

PD  
1216

Defining Open Space for PD 975

BP  
220

Housing and Subdivision Standards for Socialized and Economic Housing

In addition to these, there are a number of administrative orders and other regulations that deal with special concerns relating to open space, such as those relating to heritage sites, strategic agricultural and fisheries development zones, and environmentally sensitive protected areas.

### **Provincial Government**

The Local Government Code (R.A. No. 7160) specifically mandates that LGUs, including Provinces, should provide services to its constituents including parks, greenbelts, forests, public parks and playgrounds. Provincial governments are also expected to enforce national laws within their territories. In many instances, a number of provinces have taken the initiative to develop sports complexes to cater to the recreation and sports requirements of their constituent cities and municipalities. The large ones often host regional and national sports competitions, such as the annual Palarong Pilipino.

### **City / Municipal Government**

City/municipal governments are the 'planning authority' and the 'responsible authority' for strategic land use planning and implementing planning and development of open space at the city / municipal level through their Comprehen-

sive Land Use Plan (CLUP) as mandated by the Local Government Code. As such, they are in effect the key provider and manager of open spaces in their communities.

However, only a few of the affluent highly urbanized cities have developed specific sites as public open space outside of the open spaces required by law in private residential developments. In these cases, the approach has largely been one-off projects and often not based on any needs assessment. In many instances, public open space projects are personal initiatives of Mayors (or their spouses). To this date, there has hardly been any report of a city or municipality that has initiated any City/ Municipal Open Space Plan or City/Municipal Sport and Recreation Plan.

This is largely due to the fact that the provisions of the Local Government Code and the CLUP Guidelines requiring cities and municipalities to provide parks, greenbelts, forests, and public open space, for their constituents this requirement is not strictly enforced. Besides, there are no explicit guidelines that cities and municipalities can use for the supply, distribution, implementation and management of open space.



Rizal Park or "Luneta Park", Manila





# 3.3

## THE EXISTING PLANNING SYSTEM

The three existing policy issuances that serve as the primary foundation for the planning and provision of public open space are:

### RA 7160


This requires LGUs to formulate Comprehensive Land Use Plans (CLUP) and Zoning Ordinances (ZO) where parks and open space can be provided for. Parks and Open Spaces are part of the package of “services” that LGUs are required to provide in line with their public welfare mandate;

### PD 1096

This sets measurements and standards for built-up areas in cities and municipalities, which include Parks and Open Spaces; and

### HLURB'S CLUP GUIDELINES

These provide for a Land Use Plan with an accompanying Zoning Ordinance within which LGUs can incorporate Parks and Open Spaces.



The Local Government Code requires LGUs to prepare CLUPs and Zoning Ordinances, which includes parks and open space as one of the land uses. The CLUP Guidelines provides more specific directions and steps in preparing the CLUP and Zoning Ordinance. However, neither the Local Government Code nor the CLUP Guidelines contain explicit guidelines on how to actually plan, design, implement and manage parks and open spaces. The National Building Code is more explicit, but focuses mainly in prescribing standards for the planning and design of parks and open space. It also does not provide for how these are to be implemented.

The existing planning system for parks and open space, therefore, is limited mainly to regulating their provision in residential subdivisions through the enforcement of P.D. 957 and B.P. 220, and through the National Building Code for all other types of development. The system is

more regulatory than planning since the standards are integral to the permitting system. P.D. 957 and B.P. 220 require landowners and/or private developers to allocate a minimum of 30 percent of the entire subdivision project for roads and open space. In almost all cases, if the project plans provide such percentage, then the project gets approved and a development permit is granted to the landowner or developer. Similarly, if the standards prescribed in the National Building Code are adopted, the proposed development projects are issued their Building Permit.

There are no laws or policies that prescribe where parks and open space should be developed, how much land area they should have, how large a population they should serve, and how they should be designed, implemented and managed.

# RECOMMENDED IMPROVEMENTS TO THE EXISTING PLANNING SYSTEM

Based on these limitations as well as the increasing need for the provision of adequate open space in our rapidly growing cities, it makes sense to craft new laws to facilitate their implementation. The experience and practices of other countries are good references, particularly Australia, Canada, United Kingdom, and the United States.

But because the adoption of new laws involves a tedious and time-consuming process, it is recommended that a directive to all LGUs be issued by HLURB that specifically focuses on the provision of public open space. This should be consistent with relevant national laws, and establish the basic objectives and strategies for open space planning in urban settings that LGUs can either integrate with their CLUPs or adopt as a complementary policy. At the minimum, it must have the following basic contents:

## DEVELOPMENT FRAMEWORK

1

focuses on facilitating the orderly development of urban areas and, among other things, includes a strategy to identify the location of open space for recreation, biodiversity, protection and/or flood risk reduction purposes.

## OPEN SPACE PLANNING

2

focuses on the creation and protection of a diverse and integrated network of public open space for recreation and conservation of natural and cultural environments.

## OPEN SPACE MANAGEMENT

3

focuses on the management and protection of public open space.

## OPEN SPACE NETWORK AT THE PROVINCIAL LEVEL

4

supports the growth and development of the province's other settlements by creating opportunities to enhance open space networks within and between settlements.

## ENVIRONMENTAL AND LANDSCAPE VALUES

5

acknowledges that planning must implement ecologically sustainable development, and adopts principles established by national and international agreements. The element focus on the strategic planning, protection and management of areas with significant environmental and landscape values, including:

- Biodiversity values (including native plants and animals)
- Native vegetation
- Coastal areas and bays
- Other environmentally sensitive areas



## ENVIRONMENTAL RISKS

6

provides guidance on environmental management and disaster risk management approaches that could be adopted to avoid environmental degradation and hazards.

## NATURAL RESOURCES MANAGEMENT

7

sets out strategies and guidelines to assist in the conservation and wise use of natural resources to support both environmental quality and sustainable development.

## BUILT ENVIRONMENT AND HERITAGE

8

sets out strategies for ensuring that planning a new land use and development appropriately responds to its landscape, valued built form and cultural context and protects places and sites with significant heritage, cultural and other values.

It would be very helpful to LGUs to also look into the experiences of our own cities who have taken the initiative to implement open space projects strictly on their own. They include Pasig City, Iloilo City, San Fernando City (La Union), Angeles City, Valenzuela City, Mandaue City, and Davao City.

For cities and towns wishing to undertake open space development projects, it is suggested that they formally adopt a local ordinance or resolution stating their policy objectives and principles. Below is an example of the basic contents of such a document.

# Public Open Space Provision

## Objectives:

- To provide a network of quality, well-distributed, multi-functional and cost-effective public open space that includes local parks, active open space, linear parks and trails, and links to national parks and open space;
- To provide a network of public open space that caters to a broad range of users;
- To encourage healthy and active communities;
- To ensure land provided for public open space can be managed in an environmentally sustainable way and contributes to the development of sustainable neighborhoods.

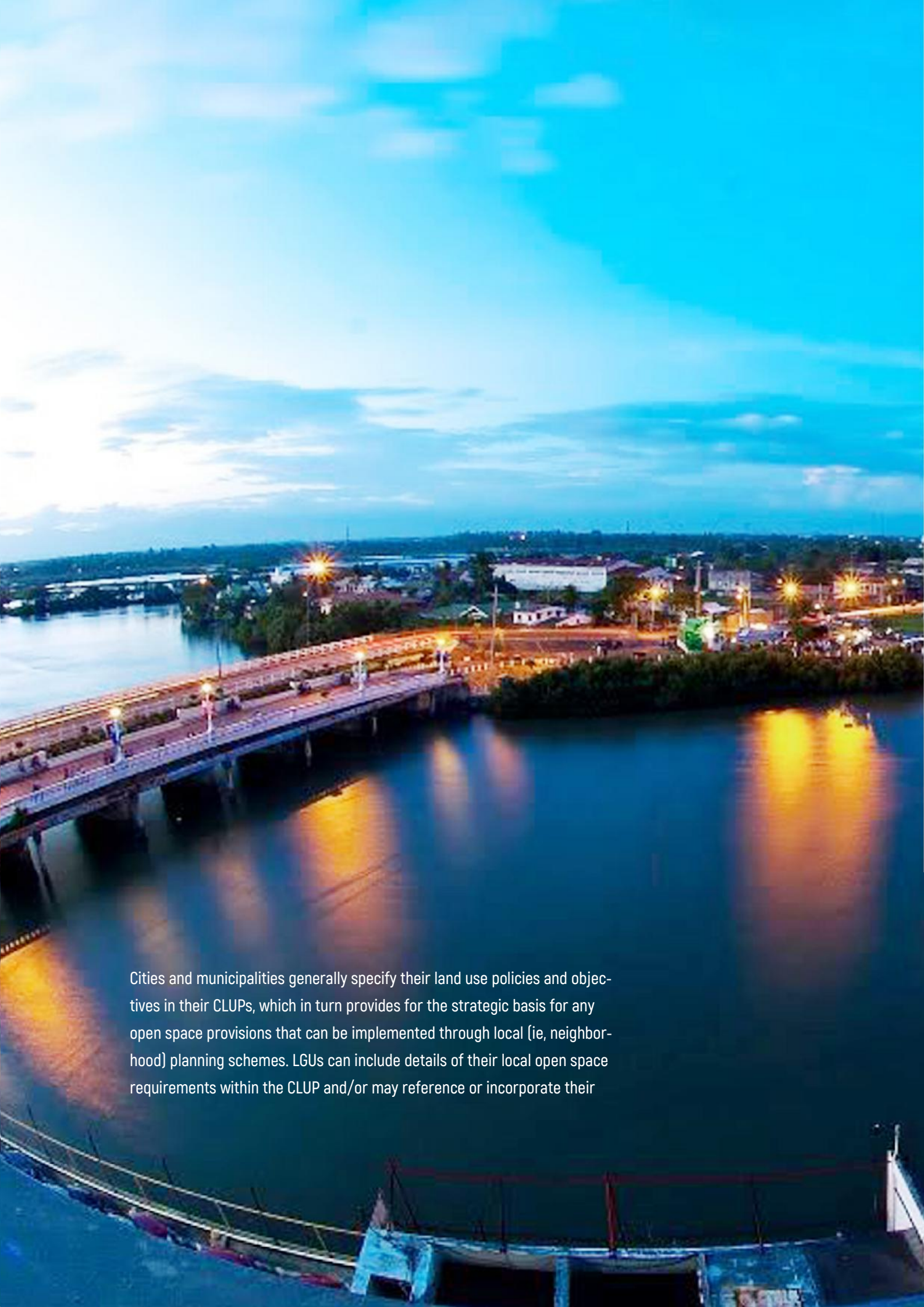
## Public open space should:

- Be provided along foreshores, streams and permanent water bodies.
- Be linked to existing or proposed future public open spaces where appropriate.
- Be integrated with floodways and other danger zones that is accessible for public recreation.
- Be suitable for the intended use.
- Be of an area and dimensions to allow easy adaptation to different uses in response to changing community active and passive recreational preferences.
- Maximize passive surveillance.
- Be integrated with urban water management systems, waterways and other water bodies
- Incorporate natural and cultural features where appropriate.

## The provision of public open space should:

- Implement any relevant objective, policy, strategy or plan for open space set out in the Comprehensive Land Use Plan (CLUP) and Comprehensive Development Plan (CDP);
- Provide a network of well-distributed neighborhood public open space that includes:
- Local parks within 400 meters safe walking distance of at least 95 percent of all dwellings, generally 1 hectare (if it does not include active open space) in area and suitably dimensioned and designed for their intended use and to allow easy adaptation in response to changing community preferences;
- Additional local parks, plazas or public squares in activity centers and higher density residential areas;
- Active open space of at least 5 hectares in area within 1 kilometer of 95 percent of all dwelling that is: a) suitably dimensioned and designed to provide for the intended use, buffer areas around sports fields and passive open space; b) appropriate for the intended use in terms of quality and orientation; c) located on flat land; d) located with access to, or making provisions for, a sustainable water supply; e) adjoin schools and other community facilities where practical; and f) designed to achieve sharing of space between sports.
- Linear parks and trails along waterways, vegetation corridors, and road rights-of-way within 1 kilometer of 95 percent of all dwellings.

(Adapted from the State Planning Policy Framework, Victoria, Australia accessed from:  
<http://www.dcpd.vic.gov.au/planningsystems/a-guide-to-the-planning-system>)



Cities and municipalities generally specify their land use policies and objectives in their CLUPs, which in turn provides for the strategic basis for any open space provisions that can be implemented through local (ie, neighborhood) planning schemes. LGUs can include details of their local open space requirements within the CLUP and/or may reference or incorporate their



It is also recommended that cities and municipalities formulate their own City/Municipal Open Space Plan that provides the rationale to inform local planning policies and contributes to the land use context contained within their CLUPs and Comprehensive Development Plans (CDPs). The City/Municipal Open Space Plan will identify supply and demand requirements for the provision of open space. This includes the provision of open space in green field developments and in the case of urban redevelopment or renewal. An Open Space Plan can be used to determine priorities for the planning, provision and development of open space across a city or municipality. It is also critical as a tool for determining the open space contribution from developers (as part of the approval process for subdivisions and other types of development).



Iloilo Esplanade along Iloilo River in Mandurriao, Iloilo City  
Source: Photobucket, Felipe Uygongco, 2011



**Chapter 3 References:**

- UN-Habitat. Global Public Space Toolkit. 2015
- Victoria (Australia) State Planning System

# 4

## **PUBLIC OPEN SPACE PLANNING CONSIDERATIONS**

Manila American Cemetery and Memorial Park, Bonifacio Global City





This section of the guide is intended to introduce and reinforce the important factors in open space planning to ensure quality open space outcomes. It should be pointed out, however, that this section is not a 'how to' guide for preparing open space strategies, but rather:

- To outline the **main considerations** when undertaking open space planning;
- To **summarize the key components** of an open space strategy or plan; and
- To **provide tools** that may assist in various aspects of open space planning including assessment of subdivision applications.

**When undertaking open space planning, the key considerations are to:**

- Establish a scope, purpose and process for the planning activity
- **Assess existing conditions** – existing supply of open space
- Identify the needs – existing and future demand for open space
- **Community and stakeholder** engagement
- Understand influences, drivers for change and trends in open space demand and provision
- **Gap analysis** – understand the context, opportunities and options for the future
- Develop strategic priorities and actions to respond to the identified needs and gaps



# PRINCIPLES OF OPEN SPACE PLANNING

The following principles are listed under key headings that flow through to the design section of this guide, and are intended to be a 'checklist' of guiding principles and key statements.

## Accessibility & Livability

- Acknowledgement of the benefits of open space to social inclusion, health and wellbeing.
- Open space is highly valued by the community; involvement and engagement of the local community is critical.
- Safe and supportive environments / accessible and equitable across communities.
- Usability and appropriateness of use (relevant to the primary function of the open space).
- Well distributed and connected – important role of linkages and connections.
- Meets current and future needs of the community / changing trends in participation and delivery of the open space.
- Partnerships / collaboration (including volunteers) in development and management of open space.

## Multi-functional & Adaptable

- Flexible and multi-use, and encouraging participation.
- Diversity of opportunities, settings and experiences – balanced and complementary.
- Integration of public open space across various land owners and managing bodies.
- Providing for and/or preserving municipal, provincial and national open space needs.
- Responsive, adaptable to population and demographic change.
- Minimizing disaster risk, conflict and competing interests.

## Environmental Protection & Sustainability

- Sustainable development – environmental protection / preservation / enhancement.
- Well maintained, sufficiently resourced and sustainable for future generations.
- Planned approach to the delivery of open space.
- Preservation of natural, heritage and cultural character and features.
- Sustainability through contributions to community economic, health and social wellbeing.
- No net loss as population expands and communities change.

# KEY CONSIDERATIONS

## A ESTABLISHING A SCOPE, PURPOSE & PROCESS

A critical first step in any open space planning process is to agree on the need and scope for the project. Considerations will include:

- Understanding and agreeing on a definition and the value of open space.
- Understanding and defining the roles of the LGU and other key stakeholders in the provision and delivery of open space.
- Reviewing relevant policies, guidelines or plans (such as the CLUP, Provincial Physical Development Framework Plan, Regional Development Framework Plan, etc.) that may impact or influence open space planning (eg, environmental, health, social development plan, sports and recreation plan, etc.).
- Defining the links to overall development priorities and directions and internal decision-making processes.
- Establishing a management group to manage and guide the open space planning project, considering relevant internal and external stakeholders.
- Establishing a liaison process that will ensure informing and involving adjoining LGUs, relevant property owners, and relevant provincial and national government agencies.
- Developing a community engagement process that will ensure involvement of key people and commitment to project outcomes.
- Defining the specific objectives of the open space planning project.
- Defining the range / diversity of open space types to be covered in order to achieve the objectives.
- Defining the hierarchy categories to be provided for each type of open space.
- Defining the area subject of the study – divide the municipality into areas / districts / neighborhoods as appropriate.
- Defining the scope of ownership of the open space to be covered.

# B ASSESSING EXISTING PROVISION AND SUPPLY OF OPEN SPACE

A starting point for any open space planning project is to assess the context in which the project is set. There are a few perspectives to be considered and the level of detail of each of these will depend on the nature of the project.

## Physical Context

- **Settlement types** (or settings) within the city/municipality
- **Housing densities** – including access to private open space, private 'communal' open space
- Urban and landscape **design considerations**
- **Access or links to natural assets or physical landmarks** (eg, national and/or provincial parks, coastal resorts and foreshores, hinterlands, major rivers and lakes, etc.)
- **Areas of disaster mitigation**, environmental or biodiversity values, ecology, topography and geology

## Social Context

- **Health and wellbeing** objectives of the city/municipality
- **Population** growth / decline / movements
- **Demographic profile** and factors affecting changes in the population
- **Community connectivity** / connection

## Planning and Policy Context

- **International Conventions** – such as Human Rights Charter, Child Friendly Cities, UN Rights of the Child, Sustainable Cities, Climate Change Resilient Cities, Disaster Risk Mitigation
- **National laws**, rules, standards and regulations
- Regional / Provincial **Physical Development Framework Plan**
- City / Municipal **Comprehensive Land Use Plan (CLUP)** and other local plans
- **Principles of sustainability and/or livability** that are embedded in the local government unit's strategic development framework
- Strategic links to aligned issues such as transport, healthy ageing, cultural heritage conservation, settlement planning, disaster risk management
- **Priorities for the local government** unit's long-term financial planning and investment programming framework

## Assessing Existing Supply

- Site name / Ownership / Address or Location / Total area / Existing Land Use
- **Shape or Configuration** / Dimensions
- Characteristics: Slope, drainage, soils, land cover, features, quality
- Character: Heritage and Cultural Considerations
- Facilities and infrastructure
- **Condition of the site** and its improvements
- **Zoning** and other relevant planning overlays and controls
- **Provision or location of services**: water, power, roads, drainage, sewerage
- **Planned or proposed developments** on the site

“

It is recommended that the collection of data regarding open space provision be integrated in the LGU's GIS or equivalent land use mapping system. It is helpful if provision can be made for future updating of this data so that mapping layers be used as planning and decision-making tools as the outcomes of the open space planning project are implemented.

”



# C IDENTIFYING THE NEEDS AND FUTURE DEMAND FOR OPEN SPACE

Identifying the need for open space will rely on a **combination of qualitative and quantitative approaches**. This initial assessment is recommended prior to the broad community consultation phase as it develops a clear and objective picture that utilizes a wide range of agreed measures. The following checklist provides some guidance in achieving an understanding of the need for open space:

- The **expressed need or demand** identified by key stakeholders in an early consultation phase.
- Consideration of private backyard sizes, private/communal open space provided in high density residential areas.
- Recorded, anecdotal and observed **demand for public open space** by the users of spaces, the community, visitors, students and workers.
- Types of open spaces and open space functions that are the subject of such demand.
- **Perceived attitudes** about open space that might be identified through previous community engagement projects, including environmental values, sharing of spaces, existing conditions, adequacy of primary as well as supporting facilities.
- **Existing participation trends** and how these compare to national, regional and local trends.
- Location and size requirements of open space.
- **Identified constraints** to using public open space – barriers such as physical, geographic, financial, social and cultural.
- Analysis of the existing open space supply and its suitability to provide for the various needs and functions. Suitability considerations could include the quality of spaces, size, ability to meet its function and location.
- **Hierarchy and associated catchments** of the open space network considered in the context of location and distribution.
- The connectivity of the open space network including the physical connection and destination nodes (ie, spaces of interest).
- **Benchmarking of provision** can be used as a valuable tool in association with other methods of analyzing provision, and consideration needs to be given to local factors such as population size, demographics, barriers to access, local needs and trends in demand and usage.

# D COMMUNITY ENGAGEMENT

To ensure that open space planning is successful, it is important to understand and address the diverse needs and interests of the various **internal and external stakeholders**, including government planners who are likely to be affected by the outcome of the planning process.

Stakeholder engagement should be planned in accordance with mandated community engagement / community consultation framework (eg, Local Development Councils) that has been legislated for all LGUs. The core values for community engagement are:



- The **public should have a say in decisions** about actions that could affect their lives
- Public participation includes the promise that the public's contributions will influence the decision
- Public participation promotes **sustainable decisions** by recognizing and communicating the needs and interests of all participants, including decision-makers
- Public participation seeks out and facilitates the involvement of those potentially affected by or interested in a decision
- Public participation provides participants with the information they need to **participate in a meaningful way**
- Public participation communicates to participants how their inputs will affect a decision

## E

# UNDERSTANDING INFLUENCES, DRIVERS AND TRENDS

There are numerous factors that influence **priorities and change in open space demand and provision**. The following list is not exhaustive and not every factor will apply to each area. However, it is **a starting point and “trigger”** for thinking about the drivers and influencing factors that will guide policy and planning outcomes.

**Changes in settlement types and density of population**, with the increasing pressures that come with increased residential density.

Resourcing pressures on LGUs for development, management and maintenance of open space.

**Increasing awareness and understanding that open space is compromised** if built on, fenced off or allocated for the exclusive use of a specific group to the exclusion of the community.



Decreasing private back-yard sizes as lot sizes decrease or multiple housing units are developed on single lots.

The opportunity to **maximize use of community public land and infrastructure** such as public schools.

Changing sport and recreation preferences and participation trends, particularly the diversification of activity and increasing popularity of informal and casual participation.

**Increasing pressure of community expectations** for open space due, for example, to (i) perceived inequity in older established areas when compared to new subdivisions in the same city or municipality; (ii) expectations not being met when open space is developed and maintained at a higher level by a private developer than what a LGU is able to achieve once the open space is handed over to the LGU.

The implications of community use of land reserved for other primary purposes such as road and railway reserves, and waterway corridors.

Urban design initiatives that have challenged the definition of open space to include spaces such as civic squares, promenades as well as areas of parkland.



Increasing awareness and pressure for **alternative forms of transport**, which is placing pressure on government to provide safe and connected pathways, quality and efficient public transport, as well as decreasing the use of valuable open space for vehicle parking.



A greater understanding of the role that open space, physical activity and recreation has for **preventive health and increasing health and wellbeing**.



Importance of **disaster risk reduction** and **climate change adaptation** measures, as well as biodiversity values.



Greater interest in **community gardens**, **edible landscapes**, and **food production** in communities, and the diverse ways that this issue can be addressed in open space and other public land.



An appreciation of 'microclimate' conditions that green space provides and the importance of this providing relief in built up areas.

Increasing attention to recognizing and protecting indigenous cultural and heritage assets and other heritage classifications (through national historical protection laws) of open space and features within open space.



Need for **alternative management strategies regarding collection and use of water** including reduction of use of potable water whenever possible, alternate approaches to irrigation of green space and landscape, use of drought tolerant plant species, treatment of storm water, development of wetlands, sewer mining for irrigation, etc.

Emphasis on **social contact**, **connectedness** and **sense of belonging**.



The need to adopt measures to build resilience to climate change, such as the use of open space for emergency evacuation and/or temporary housing areas, floodwater impounding lagoons, water conservation through the use of rainwater harvesting, protection of erosion-prone steep slopes from development, conservation of floodplains and river basins.



Implications of community celebration, events and festivals taking place in open space.



# OPEN SPACE GAP ANALYSIS

## 4.3

Articulating the need for open space will rely on a comparison between the **identified needs and demands for open space** and the **supply and provision of open space** to address these needs. If the outcome of this planning exercise as basis for LGU policy and/or legislative ac-

tion (e.g., ordinance or resolution), it will be important to develop quantitative outcomes that can be translated into land area for open space contribution. The following provides a list of options that can be considered in developing a tailored approach.

- Understanding **community aspirations and expectations** through a community engagement process (see the previous section on this)
- A **spatial analysis using mapping and (GIS) layers** to identify barriers and shortfalls in provision in terms of location and distribution of open space

Comparison of open space provision to the population (current and projected).

Comparison of open space provision to the defined hierarchy of open space and recommended sizes, catchments and level of site development.

Comparison of open space provision to the identified community needs (through research and community engagement) and the use of participation trends and benchmarks / standards to validate gaps in provision.

- A clear identification of the **requirements for open space provision** (that will satisfy demand) using the planning framework that has been defined and developed as part of this assessment.

**Criteria that form the planning framework might include:**

Comparison of open space provision to the agreed sustainable level of development of open space, quality and presentation of existing open space sites.

Assessment of linkages and connections, and identification of shortfalls in the current open space system.

# 4.4

## DEVELOP STRATEGIC PRIORITIES AND ACTIONS

Once the gaps and shortfalls in open space provision have been identified, there are steps that can be considered in the **development of an implementation plan**. The following can be used as a guide and checklist to develop a methodology that fits the specific organization and project.

- **Review the policy setting** to define any arrangements that will be helpful in improving provision through established policies, guidelines and processes. These may include national, provincial and local planning provisions, ordinances and other policies.
  - By **using the findings and outcomes of the open space planning process** to determine the mix and levels of open space provision required, specific actions will be able to emerge for specific areas, which may be in the form of specific recommendations or be more general about seeking opportunities that may arise in the future to achieve certain outcomes.
  - **Consider status of land** in terms of ownership, management and maintenance responsibilities, other roles and functions that need to be considered when formulating recommendations.
- An **implementation plan** might include details such as:
    - Outline or summary of specific recommendations;
    - Level of priority as defined and agreed by the organization;
    - Resourcing considerations – costs, funding opportunities, staff time and other operational considerations;
    - Responsible organization / department;
    - Approvals and/or legislative processes required for implementation;
    - Any contextual link to the document, which could include principles, specific site locations, and reference numbers to actions; and
    - Partnerships that need to be considered in the implementation of actions.

#### **Chapter 4 References:**

- Hopper, L. J. (2009). Landscape Architectural Graphic Standards. Hoboken, NJ: Wiley.
- Parks & Leisure Australia. (2013). Open Space Planning and Design Guide.
- The City of Waukesha. (1998). Park and Open Space Plan (POSP) for the City of Waukesha. Wisconsin.
- The City of Stirling. (2 December 2008). Public Open space Strategy. Australia.
- New Yorkers for Parks. (2010). The open space index [PDF file]. Retrieved March 02, 2017 from <http://www.ny4p.org/research/osi/LES.pdf>
- New Yorkers for Parks. (2010). Manhattan's east side open space index [PDF file]. Retrieved March 08, 2017 from <http://www.ny4p.org/research/osi/EastSideOSI.pdf>

# ANNEX



**CASE STUDY:**

# Public Open Spaces in Davao City's CLUP

## FUTURE PROOFING CITIES

**CITY'S MISSION:**

Transform Davao City into a modern, vibrant, and a well-planned settlement and investment center in Mindanao and the Asia-Pacific region, propelled by socially enlightened leaders and empowered citizenry, spiritually committed to attain sustainable growth and optimum development within the context of balance ecology.

**STRATEGY VISION:**

Davao City is the Premier Socio-economic, Investment, Tourism Center in Mindanao, East ASEAN Growth Area (EAGA) and the Asia-Pacific Region propelled by enlightened leaders and empowered citizenry and committed to sustainable social growth and development, and economic growth without compromising the environment under the guidance of Divine Providence.

Guided by its Mission and Vision, the city has identified the need to add at least 25 hectares more of parks and open spaces in their CLUP based from HLURB standards. While the city acknowledges this shortage through national guidelines, the city is still proposing more than what is required for their current and future public parks and open space requirements, based from their CLUP.

Available Urban Land Supply and Projected Urban Land Demand, 2013–2022, Davao City (Hectares)								
Land Use	Allocated land (1996–2021)	Geo-Hazard	Available Land Excluding Geo-hazards	Existing Occupied Land	Available Existing	Projected Additional Land Req't	Gap	Proposed
Residential	11,512	2,246	9,266	8,382	884	2,086	(1,1202)	15,452
Commercial	3,800	324	3,476	1,583	1,893	622	1,271	2,638
Industrial	6,550	268	6,282	853	5,429	995	4,434	3,724
Institutional	2,152	99	2,053	629	1,424	69	1,355	1,287
Open space/ Parks & Recreation	420	100	320	1,321	(1,001)	25	(1,026)	582
Source: OCPDC								



**Furthermore, according to the city's CLUP,  
Public Open Spaces are aimed to:**

- **Provide a contrast to the built environment**
- **Contribute to a sense of place and character**
- **Provide opportunities for biodiversity conservation**

Source: Davao City CLUP 2013–2022

Davao city's latest park opened last 2007, the Davao city People's Park. The city also continues to improve its public open spaces through renovating existing parks within its CBD and by partnering with NY University and the UN to study on how to make adequate and more efficient public open spaces.





## CASE STUDY:

# The Angeles People's Park

## Giving Life to the Community and Idle Spaces

Development of the Angeles city people's park started with the request of the local parish Bishop to the city government to historically restore the old PNR station left unused due to train services being suspended indefinitely.

The city government didn't only agree to the Bishop's proposal, they went on to improve the 2km stretch of unused land and turn it to a park. This made the proponents of the restoration very happy.

With a vision set, one obstacle remained against their endeavor – the property they wish to work on is owned by the PNR, and not by the city government. To get around this, the city government negotiated with the PNR, stating that they would return the property once the agency needed it for their projects. PNR agreed, and so the park came to fruition. Because of this agreement, the park only had light structures that can be moved once the lot is needed by the agency.

The project also involved the community, the city gov't spent nothing on the parks – instead it was made possible through the donation of the public. Because of this according to the city mayor, the park belonged to the people, hence the name, "Angeles People's Park."

Today, the dirty and idle lot of PNR was given a new lease of life as residents surrounding it are now using it as a place of leisure.

Source: Angeles City Website



Old PNR Station at Angeles People's Park (Source: Google Maps)

## CASE STUDY:

# Iloilo City Zoning Ordinance

## Strengthening Public Open Spaces Through Legislation

According to section 55 of Iloilo city's zoning ordinance, all residential, commercial, industrial-use subdivisions are required to provide tree-planted strips along its internal roads and that similar subdivisions with more than ten (10) ha are required to provide an additional landscaped forest park adequate for its occupants and/or the general public.

It also states that all residential compounds are to provide an open space for playground purposes. But, if it is for less than ten (10) families, this requirement may be waved as long as there are open spaces that may be used as yard requirements for the compound. These spaces cannot be converted to other uses.

Source: Iloilo City Zoning Ordinance



Artist Rendition of Ilo-ilo Festive Walk (Source: Philstar.com)



## CASE STUDY:

# Cebu City Parks & Playgrounds Commission

The commission on Cebu City Parks and Playgrounds functions for maintenance purposes of relatively very small and pocket parks. Despite the population's continuing increase, addition of public parks and open spaces has not been pursued nor promoted.

### VISION

Making Cebu City's Parks and Playgrounds the cleanest and greenest - the nation's garden city.

### MISSION

1. To maintain the beautification of the city's parks and center islands.
2. To create awareness and respect from the public for our parks and center islands.
3. To uphold high morale of members and workers for the Parks and Playgrounds Commission.

### LEGAL MANDATE

Parks and Playgrounds Commission was created in December 02, 1968 through Ordinance No. 647 entitled, "an ordinance creating the Cebu City Parks and Playgrounds Commission."



Plaza Independencia, Cebu City [Source: Cebucity.gov.ph]

## SERVICES

### A. Maintenance of parks and road center islands

#### 1. Major Parks

- a. Plaza Independencia
- b. Fuente Osmeña
- c. Plaza Sugbu

#### 2. Minor Parks

- a. Heritage Park
- b. Hamabar Park
- c. Park under the J. Luna Flyover
- d. Park under the Ayala Flyover
- e. Osmeña Shrine

#### 3. Road Center Islands

- a. Osmeña Avenue
- b. New Imus Road
- c. Jones Avenue
- d. N. Bacalso Avenue
- e. J. Luna Avenue

Maintenance Includes:

#### 4. Trimming of trees

#### 5. Landscaping

#### 6. Bush cutting of grasses

#### 7. Lighting of parks

### B. Composting

### C. Propagates ornamental plants at the Nursery

### D. Other Activities

1. Landscaping for various City hall activities
2. Take action on requests for removal/trimming/pruning of hazardous trees along sidewalks

## ACCOMPLISHMENTS

1. Well-maintained parks and center islands.
2. Landscaping requests for special gatherings as requested by various offices in City hall.
3. Bush cutting requests from other offices.
4. Trimming of trees that pose hazard as requested by constituents in various barangays.
5. Clearing of Fort San Pedro playground.
6. Clearing of fallen and hazardous trees.
7. Restoration of Plaza Hamabar.
8. Participates in the clean up drive such as Sinulog and coastal clean up.

## ONGOING PROJECTS

1. Re-landscaping of the mini park under the J. Luna flyover.
2. Landscaping of Legaspi Extension elevated center island.
3. Re-landscaping/restoration of Heritage Park in Parian.
4. Re-landscaping of the mini park under the BanTal flyover.

Source: Cebu City Government Website



Fuente Osmeña, Cebu City (Photo by: Efren Pomperada)



## CASE STUDY:

# RIISING FROM THE RUBBLE: The Kid's Playground in Pasil, Cebu

Opened February last year, this 3,000 sqm playground is transforming the community around it. Envisioned to be a sports event area, the park aside from the finished playground will sport two (2) badminton courts and other sporting facilities aimed at enticing children to do sports – instead of their former pastime of playing computer games.

The park is situated on the site of the old Pasil fish market. The Market was damaged by an earthquake last 2013, after which by the virtue of the city mayor it was then converted to a park. The mayor stated that the area was originally a park back in the 60's.

The park was realized through a public – private partnership of an engineering firm and the city government, wherein the firm provided the finances for the project, while the city government provided manpower and some recycled raw materials from used tires of the city engineering office.

Finally, the efforts for the park is summed - up by these words of the mayor. "Tragedy offers opportunity. Thus, we must bring back what used to be for the children. This is a Work of love. This is the identity of the Cebuano when they were called upon in putting up this project."

Pasil Children's Park



Source: Princess Felitas



Source: The Cebuano.com

## CASE STUDY:

# NO SPACE? NO PROBLEM The Parks of Pasig City

The city lacked available land for public parks and open spaces, especially in districts that needed them the most. So instead the usual at - grade parks, the city just decided to put them on top of things.

## Pasig Panorama Park

The Pasig Panorama Park; it is located at the roof deck of Pasig city hall. It only has a few vegetation because of structural limitations, but nevertheless it's still much greener than most of the city. The park is aimed to be an events place, while also offering a panoramic view of the city. Completed 6 years ago back in 2011, it continuously gives Pasigueños a break from the busy city life.



## The Ortigas Central Elevated Plaza



The Ortigas elevated plaza, a project born out of the cooperation between Pasig city and ADB, places a park above the busy intersection of Doña Julia Vargas Avenue and F. Ortigas Jr. Rd. Currently under construction, it is envisioned as a part of above and at - grade covered walks and parks that aims to transform the Ortigas CBD into a green bicycle and pedestrian friendly workplace.

Top: Ortigas Elevated Central Plaza Design Perspective, Below: Ortigas Elevated Central Plaza Under Construction (Source: Paulo Alcazaren, FB Page)



## CASE STUDY:

# Transforming Barcelona INTO A GREEN URBAN FOREST

Barcelona is a city known for its history, art, and architecture. Being the second most populous city in Spain, it is densely built and badly needs to battle its heat island effect, manage air and noise pollution, and improve the quality of life of its citizens.

Thus, the city is planning for a major green makeover. Finding space for greening the city has proved to be challenging but they found space for five new gardens which will be linked to existing open spaces. The Barcelona's green network aims to create a seamless habitat for urban fauna with the lush new corridors of greenery acting as linkages.

However, the biggest change arose not from the parks but the policies designed to connect the green spaces into one leafy network. In one of the big districts, ten large interior courtyards will be planted with trees while 10 city squares will have parking restrictions in order to allow more plantable area. Moreover, avenues will be enlarged in order to plant trees that will thread the network along major roads. The streets will be constructed with surfaces more permeable to rain so that birds and insects can spread across the seamless habitat as well. There are also small projects and initiatives in greening the city at a smaller scale by the residents. Together, this will create a future for Barcelona that is greener, fresher, more sustainable, and more humane.

Source: Built-out Barcelona Makes Space for an Urban Forest by Feargus O'Sullivan



A rendering of Barcelona's green corridor network, showing the enlarged park at Plaça de les Glories Catalans at its heart.

Source: Ajuntament de Barcelona

## CASE STUDY:

# *The Big Apple's Million Trees*

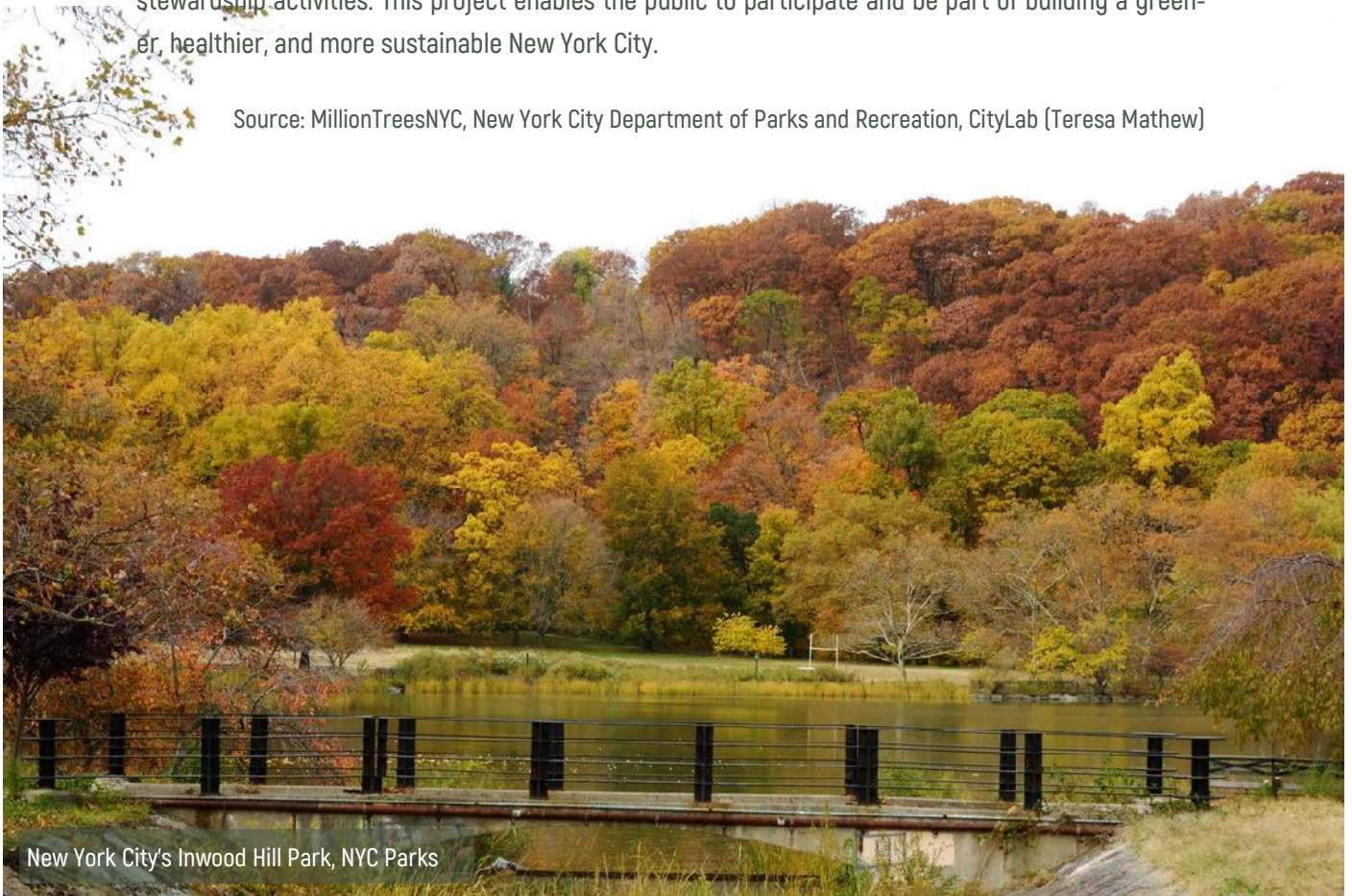
## PLANTING ONE MILLION TREES IN NEW YORK CITY

A public-private initiative called MillionTreesNYC planted more than 1 million trees across the five boroughs of New York City - 70% was planted in parks and other public spaces, while the 30% was planted by private organizations, homeowners, and community organizations. The initiative started in 2007 and in eight years, they already reached its goal and expanded the city's urban forest by nearly 20%.

Trees have proven to improve the quality of life of people by aiding mental health, decreasing obesity and other health risks, and generally making people happier. However, they are not considered as a vital component in healthcare and urban infrastructure. A conservation-focused nonprofit organization called The Nature Conservancy argues that trees are important public health assets and should be funded as such.

The New York City Department of Parks and Recreation has supported this initiative and made various projects like the New York City Street Tree Map. This online tree map includes every street tree in New York City and updated daily by a Forestry team. Through this map, one can explore the city's urban forest, mark trees as their favorites and share with friends, and record all caretaking and tree stewardship activities. This project enables the public to participate and be part of building a greener, healthier, and more sustainable New York City.

Source: MillionTreesNYC, New York City Department of Parks and Recreation, CityLab (Teresa Mathew)



New York City's Inwood Hill Park, NYC Parks



## CASE STUDY: City of Stirling, Australia

### CITY'S MISSION:

To lead in the delivery of responsive, sustainable services to the City's diverse community. In doing this, the City seeks to preserve and enhance its environment and lifestyle, now and into the future.

### STRATEGY VISION:

To create a network of resource efficient, quality public open space across the City that will satisfy current and future recreational needs in an equitable and sustainable manner.

### OBJECTIVES:

- To recognize and provide for the range of functions of public open space including ecological, cultural, visual and recreational.
- To establish a hierarchy of public open space types of sufficient quantity and quality to meet community needs.
- To address the importance of accessibility and walkability to public open space, particularly within the local context.
- To promote the safe use and enjoyment of public open space through appropriate siting and design.
- To improve land efficiency through partnerships and multi-purpose use opportunities.
- To recognize and respond appropriately to constraints on the City's resources (environmental, social and economic).
- To establish a sustainable model to allow consistent decision-making for the ongoing development and management of public open space.
- To ensure the community's needs and aspirations are addressed through appropriate community engagement.

### **AS PUBLIC OPEN SPACE MODEL**

To achieve the objectives, a model has been developed which includes guiding principles that have assisted in the development of the Strategy as well as provide further guidance at the implementation stage.

In total the City has 1342 hectares of open space for recreation and conservation reserves. There are over 400 parks and currently 50 active reserves = 13.5% of the total area of the City and approximately 75sqm. of open space per head of population (based on an approximate population of 180,000 people in 2006)

#### Sources:

- Hopper, L. J. (2009). Landscape Architectural Graphic Standards. Hoboken, NJ: Wiley.
- Parks & Leisure Australia. (2013). Open Space Planning and Design Guide.
- The City of Waukesha. (1998). Park and Open Space Plan (POSP) for the City of Waukesha. Wisconsin.
- The City of Stirling. (2 December 2008). Public Open Space Strategy. Australia.



Map of Stirling, Australia showing  
prominent green open spaces  
scattered around the city.  
(Source: Google Earth)







## CITY OF STIRLING, AUSTRALIA

### **Provision Standards** – Western Australian Planning Commission – Liveable Neighborhoods

The Western Australian Planning Commission (WAPC) seeks to improve public open space planning in new areas through the **Liveable Neighborhoods development code**.

The policy aims to provide 'a range of site-responsive urban parkland that is under surveillance, safe and conveniently located'. Provisions to achieve this include a hierarchy of different size spaces and functions.

**Liveable Neighborhoods** is based on 'New Urbanism' and sustainability principles which encourage the development of walkable neighborhoods where shops, schools, public transport and public open space are within walking distance of homes.

4 Neighborhoods @ 50 hectares each (800 meters in width each )	200ha
Subtract areas for regional reserves, school sites & other contingencies	- 30ha
Gross subdivisible area	170ha
12 local parks (3 per neighbourhood) @ 3,000m <sup>2</sup> each	3.6ha
4 neighbourhood parks (1 per neighbourhood) @ 8,000m <sup>2</sup> each	3.2ha
1 district park (shared by 4 neighbourhoods)	6.8ha
1 community purpose site (e.g community centre, library, kindergarten)	0.2ha
Restricted open space (e.g bushland, wetland buffer area)	3.2ha
<b>TOTAL OPEN SPACE PROVISION</b>	<b>17ha</b>

### **STATE, REGIONAL, & LOCAL PLANNING STATE**

The WA State Sustainable Strategy  
The State Planning Strategy  
Environment and natural Resource Policy  
Bush Forever  
Liveable Neighborhoods  
WAPC Development Control Policies

### **REGIONAL**

WALGA Recreation/Leisure Technical Group

### **CITY OF STIRLING – LOCAL**

Strategic Plan  
Sustainable City Agenda  
Economical Development Plan  
Public Open Space Strategy  
Leisure Planning Framework  
Green Plan 2  
Local Planning Strategy  
Access and Inclusion Plan  
Local Area Public Open Space  
Implementation Plans  
Regional Reserves Master Plans



### **Sources:**

Hopper, L. J. (2009). Landscape Architectural Graphic Standards. Hoboken, NJ: Wiley.  
Parks & Leisure Australia. (2013). Open Space Planning and Design Guide.  
The City of Waukesha. (1998). Park & Open Space Plan (POSP) for the City of Waukesha. Wisconsin.  
The City of Stirling. (2 December 2008). Public Open space Strategy. Australia.

“

## NEW PUBLIC OPEN SPACE STRATEGY PRINCIPLES

A set of guiding principles has been used in the preparation of this strategy to help guide the vision of the strategy and the development of classification criteria.



Sustainability



Access and Availability



Equity



Quality and Enjoyment



Financial Responsibility



Flexibility



Diversity



Partnerships



Culture and Heritage



Management



Sports and Recreation



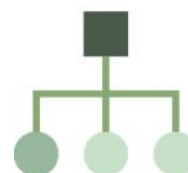
Community Health and Wellness



Efficient use of Resources



Community Engagement



New public open space hierarchy and role

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### SOURCE:

New Yorkers for Parks. (2010). The open space index [PDF file]. Retrieved March 02, 2017 from <http://www.ny4p.org/research/osi/LES.pdf>  
New Yorkers for Parks. (2010). Manhattan's east side open space index [PDF file]. Retrieved March 08, 2017 from <http://www.ny4p.org/research/osi/EastSideOSI.pdf>

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# THE OPEN SPACE INDEX

- In order to encourage comprehensive open space planning, New Yorkers for Parks (NY4P) has developed the Open Space Index, a set of targets for open space access and environmental sustainability in New York City neighborhoods (Stuart, 2010).
- The targets are informed by existing sustainability in New York City open space conditions current New York City park and sustainability policies, measures in other cities and recommendations from professionals in the fields of real estate, open space planning, environmental justice, community-based planning and environmental science. The Open Space Index will serve as a tool to evaluate neighborhood open space and help communities identify and advocate for their open space priorities. It is NY4P's hope that these neighborhood-level assessments will contribute to thoughtful, community-driven plans for parks and open space in New York City (Stuart, 2010).
- Parks provide New Yorkers with space for recreation and play, quiet reflection, connection to nature, social networking and civic engagement. Each community and neighborhood within New York City has open space needs unique to its population's ages, interests and current open space resources. The City must make certain that all neighborhoods have appropriate recreational and open space opportunities to meet these needs. This can only be achieved with a methodologically-sound assessment that identifies the gaps in the open space system and supports the creation of a long term comprehensive plan to enhance, preserve and promote quality parks. Given the unique characteristics of New York City's geography and land use, the Open Space Index, shown on page 3, offers a variety of targets, making it flexible enough to be relevant across diverse neighborhoods in all five boroughs. The 15 targets of the Open Space Index fall within four main categories:
  - Active and Passive Open Space
  - Access and Distance
  - Environmental Sustainability
  - Park Maintenance

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New York Skyline

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# THE OPEN SPACE INDEX

OPEN SPACE ELEMENTS	PROPOSED NEW YORK CTY NEIGHBORHOOD STANDARDS
<b>Active and Passive Open Space</b>	
<b>Active Open Space and Facilities</b>	1 acre/ 1,000 residents
<b>Playgrounds</b>	1 Playground/ 1,250 children
<b>Athletic Fields</b>	1.5 Athletic Fields/ 10,000 residents
<b>Courts</b>	5 Courts/ 10,000 residents
<b>Recreation Centers</b>	1 Recreation Center/ 20,000 residents
<b>Passive Open Space</b>	1.5 acres/ 1,000 residents
<b>Community Gardens</b>	1 Community Garden/ 10,000 residents
<b>Total Acres of Open Space</b>	2.5 acres of Open Space/ 1,000 residents
<b>Access and Distance</b>	
<b>Walking Distance to a Pocket Park (less than 1 acre)</b>	100% of residents are within a 5 minute walk (1/4 mile)
<b>Walking Distance to a Neighborhood Park (1- 20 acres)</b>	100% of residents are within a 5 minute walk (1/4 mile)
<b>Walking Distance to a Large Park (20+ acres)</b>	100% of residents are within a 10 minute walk (1/2 mile)
<b>Environmental Sustainability</b>	
<b>Urban Tree Canopy Cover</b>	Neighborhood-specific goals*
<b>Permeable Surfacing within Parks</b>	70%
<b>Park Maintenance</b>	
<b>Parks rated overall "acceptable" by DPR</b>	85%
<b>Parks rated "acceptable" on cleanliness by DPR</b>	90%

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**SOURCE:**

New Yorkers for Parks. (2010). The open space index [PDF file]. Retrieved March 02, 2017 from <http://www.ny4p.org/research/osi/LES.pdf>  
 New Yorkers for Parks. (2010). Manhattan's east side open space index [PDF file]. Retrieved March 08, 2017 from <http://www.ny4p.org/research/osi/EastSideOSI.pdf>



# “ NEW YORK CITY

- New Yorkers for Parks' Open Space Index is a blueprint of open space and sustainability targets that will help New York City neighborhoods create open space agendas and help the City to begin planning for open space on a comprehensive level. The Index, shown on page 9, is a product of a three-year research and development endeavor at NY4P.
  - Each target was examined through:
    - an analysis of current New York City open space conditions, and
    - a wide study of measures in other cities and interviews with experts in the fields of real estate, open space planning, environmental justice, community based planning and environmental science.
  - Communities can use the Open Space Index:
    - ⇒ assess open space needs
    - ⇒ highlight equity issues
    - ⇒ identify environmental sustainability opportunities
    - ⇒ organize an advocacy campaign
  - Scope: The Neighborhood Scale
    - ⇒ Acknowledging that New Yorkers live in densely occupied, shared spaces, the Open Space Index examines parks and environmental sustainability on the smallest stage available: the neighborhood. In thinking about access to open space opportunities, most residents would be more likely to walk to a park within the bounds of a neighborhood, rather than their larger Community Board or Council District. This smaller scale allows for a more feasible and meaningful assessment.
  - Research
    - ⇒ The foundation of NY4P's research for the Open Space Index was an extensive study of open space policies and standards in other cities. As the Index developed, NY4P also drew upon existing NYC open space and sustainability goals and recommendations by third parties such as recreation and environmental advocates. Additionally, a range of park, recreation and environmental groups have published open space goals for American urban areas. While many of these standards are generalized and do not consider New York City's unique population density and geographic constraints, they provided thoughtful groundwork for NY4P's own set of standards. Some
- key resources that influenced the Open Space Index standards are listed below:
- Existing Local Guidelines
  - National Recreation and Parks Association (NRPA)
  - LEED Standards
  - Other Cities' Goals
- Pilot Study
  - ⇒ **Manhattan's East Side Open Space Index**
    - The East Side of Manhattan is one of New York's most vibrant neighborhoods. It's a teeming grid of apartment and office towers, hotels and hospitals, restaurants, bars and boutiques, stately townhouses and rows of tenements. But the line of children waiting to play at Saint Catherine's Park on First Avenue and East 67th Street paints a vivid picture of one of the East Side's biggest challenges: its glaring lack of open space.
  - ⇒ City Council District 4
    - Manhattan City Council District 4 spans more than 80 blocks from 14th Street to 97th Street. The district zigs and zags, carving out portions of those blocks from the East River all the way west to Columbus Circle. Access to open space varies greatly, depending on residents' proximity to Central Park and the East River.
    - Taken as a whole, the district lacks adequate passive and active open space per resident. It falls short of every standard except maintenance. Those who live in proximity to Central Park have it better: when we take into account the area of Central Park that falls within a one-quarter mile radius of park entrances abutting CD4, the district meets open space standards for passive space per resident, playgrounds per child, and proportion of parkland with permeable surfacing. But still, despite perceptions, this district is grossly underserved in terms of open space resources.
  - ⇒ Statistics:
    - Total Population: 155, 867
    - Children under 18: 19, 116
    - Seniors 65+: 28, 699

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# MANHATTAN'S EAST SIDE OPEN SPACE INDEX

OPEN SPACE ELEMENTS	PROPOSED NEW YORK CTY NEIGHBORHOOD STANDARDS
<b>Active and Passive Open Space</b>	
<b>Active Open Space and Facilities</b>	1 acre/ 1,000 residents
<b>Playgrounds</b>	0.92 Playground/ 1,250 children
<b>Athletic Fields</b>	0.38 Athletic Fields/ 10,000 residents
<b>Courts</b>	1.76 Courts/ 10,000 residents
<b>Recreation Centers</b>	0.03 Recreation Center/ 20,000 residents
<b>Passive Open Space</b>	0.17 acres/ 1,000 residents
<b>Community Gardens</b>	0 Community Garden/ 10,000 residents
<b>Total Acres of Open Space</b>	0.25 acres of Open Space/ 1,000 residents
<b>Access and Distance</b>	
<b>Walking Distance to a Pocket Park (less than 1 acre)</b>	51% of residents are within a 5 minute walk (1/4 mile)
<b>Walking Distance to a Neighborhood Park (1- 20 acres)</b>	51% of residents are within a 5 minute walk (1/4 mile)
<b>Walking Distance to a Large Park (20+ acres)</b>	60% of residents are within a 10 minute walk (1/2 mile)
<b>Environmental Sustainability</b>	
<b>Urban Tree Canopy Cover</b>	6.4%
<b>Permeable Surfacing within Parks</b>	39%
<b>Park Maintenance</b>	
<b>Parks rated overall "acceptable" by DPR</b>	88%
<b>Parks rated "acceptable" on cleanliness by DPR</b>	93%



**SOURCE:**

New Yorkers for Parks. (2010). The open space index [PDF file]. Retrieved March 02, 2017 from <http://www.ny4p.org/research/osi/LES.pdf>  
New Yorkers for Parks. (2010). Manhattan's east side open space index [PDF file]. Retrieved March 08, 2017 from <http://www.ny4p.org/research/osi/EastSideOSI.pdf>

# “MANHATTAN'S EAST SIDE OPEN SPACE INDEX

- CD4 falls short of every active recreation standard. Given the density of the population and the paucity of active recreation facilities, it is critical that permits for use of these spaces are distributed in a transparent and equitable manner, and that private use of public facilities is minimized.
- CD4 also falls short of passive and total open space standards. With the inclusion of Central Park, the district exceeds the standards for passive and total open space, but there are no Greenthumb community gardens that allow for public participation.
- The results below take into account that some CD4 residents live within walking distance of parks that fall outside of the district. Residents in the southernmost portion of the district live within walking distance of East River Park—a large park—and can readily access the pocket parks and community gardens of the East Village. While Central Park is an amenity for the district's Upper East Side residents, 40% of CD4 residents live beyond a 10-minute walk from this large park. Approximately 3% of district residents live beyond walking distance to any type of park.
- There are few opportunities for greening the existing street infrastructure, with only 2.7% of street tree pits sitting empty. However, the East River Esplanade would benefit aesthetically, acoustically, and environmentally from additional trees. Periodic park upgrades, esplanade improvements, and new park plans should incorporate greening strategies to increase the permeability of parkland within the district
- While CD4 contains few traditional parks, the existing spaces are well maintained, on average. 75% of the unacceptable cleanliness ratings and half of the unacceptable overall maintenance ratings were concentrated in two parks: St. Vartan and Stanley Isaacs, which were cited for litter in their most recent inspections.
- New York City Council Districts 4 and 5 fall far short of nearly every one of the 15 New York City-specific benchmarks that comprise NY4P's Open Space Index (OSI) – even when Central Park and Privately Owned Public Spaces are taken into account. In addition to the findings, our fourth OSI survey offers preliminary recommendations for East Side open-space improvements, including reimagining underutilized public spaces, pairing new development with open space improvements, and realizing the full potential of the East River waterfront.



Bryant Park, Manhattan New York City (Source: Marriott)

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# PUBLIC OPEN SPACE DEMAND INDEX

- To assess the demand for public open spaces, the factors for the supply of open spaces (population, population density, and land area) were considered together with other factors that would affect these supply factors: hazards, vulnerability, risk and adaptation capability of a place. The demand for POS also considered the relation of open spaces to health and well-being.
- MOVE Framework is one of the methods to determine the hazard, susceptibility, resilience and adaptation which served as components for the demand. (SOURCE: Birkmann, J. C. (2013). Framing vulnerability, risk and societal responses: the MOVE framework. Journal of the International Society for the Prevention and Mitigation of Natural Hazards.)
- These components are broken down into different variables depending on the framework needed (for example: framework for flooding hazard needed the exposure variable).
- The variables gathered are determined using indicators or measuring unit (for example: the variable of exposure for flooding hazard needs data about the exposed people which can the number of population exposed to flood prone areas, distance to nearest body of water, and/or hydrological analysis of the place).
- Examples of Components, and its corresponding variables and indicators/measuring unit.
  - **Exposure**  
SOURCE: Alexander, D., Birkmann, J., & Kienberger, S. (2014). Assessment of Vulnerability to Natural Hazards: A European Perspective.
  - **Susceptibility**  
SOURCE: Alexander, D., Birkmann, J., & Kienberger, S. (2014). Assessment of Vulnerability to Natural Hazards: A European Perspective.
  - **Resilience**  
SOURCE: Alexander, D., Birkmann, J., & Kienberger, S. (2014). Assessment of Vulnerability to Natural Hazards: A European Perspective.
  - **Adaptation**  
SOURCE: Alexander, D., Birkmann, J., & Kienberger, S. (2014). Assessment of Vulnerability to Natural Hazards: A European Perspective.

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## SOURCE:

New Yorkers for Parks. (2010). The open space index [PDF file]. Retrieved March 02, 2017 from <http://www.ny4p.org/research/osi/LES.pdf>  
 New Yorkers for Parks. (2010). Manhattan's east side open space index [PDF file]. Retrieved March 08, 2017 from <http://www.ny4p.org/research/osi/EastSideOSI.pdf>



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From the assessment of components and its variables and measuring units, we proposed a formula for the POS Demand Index:

### **DEMAND**

**= POSITIVE Outcome + NEGATIVE Outcome**

**=Adaptation + Resilience – (Exposure + Susceptibility)**

**=Adaptation – (Lack of Resilience + Exposure + Susceptibility)**

- Each indicator will have a weight of 10 in the formula.
- Resilience shall be included in the POSITIVE Outcome. If there is lack of resilience, it shall be included in the NEGATIVE Outcome.

A sample for the weighted computation for the exposure component for a forest fire susceptibility of a place is shown on the image below:

SOURCE: Alexander, D., Birkmann, J., & Kienberger, S. (2014). Assessment of Vulnerability to Natural Hazards: A European Perspective.

### **SUMMARY:**

The Open Space Index showed the provision of open spaces that is based from the existing population and land area of a place. This would determine the basis for the demand for open spaces. Since there would be other factors that need to be taken into consideration, a demand index formula consisting of benefits of POS and the negative factors to demand POS was made. The application of these Public Open Space Index and Demand Index also requires an extensive amount of time (as the cited case study required 3-year to be accomplished) since the indices need indicators/measuring units that can be accumulated from data gathering, surveys, interviews, and GIS mapping.

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#### **SOURCE:**

New Yorkers for Parks. (2010). The open space index [PDF file]. Retrieved March 02, 2017 from <http://www.ny4p.org/research/osi/LES.pdf>  
New Yorkers for Parks. (2010). Manhattan's east side open space index [PDF file]. Retrieved March 08, 2017 from <http://www.ny4p.org/research/osi/EastSideOSI.pdf>

