

All about the EP

The Ecological Profile (EP) is a comprehensive collection of information about practically every aspect of Quezon City. It characterizes the city through its rich history, geo-physical and ecological features, natural and man-made risks and hazards, and situation in the five development sectors – city population and social services, the local economy, bio-physical and natural environment, infrastructure support, and the local government's institutional capability.

As such, it should be open to a wide range of readership. Primarily, this document serves as a vital resource for responsible officials, staff, and departments of the city government in planning and policymaking. In addition, the compilation of data contains minimal analysis and interpretation to allow different users to apply their own analytical frameworks to extract the desired interpretations and conclusions from the same data sets, and hence can likewise be used by other readers for various purposes. High school and undergraduate college students will find the Profile a rich resource for school reports and term papers, while graduate students and other planning practitioners can use information from the Profile to identify areas for in-depth investigations towards the production of urban research and development interventions.

Even casual visitors who happen to pick up a copy may find a wealth of detail between covers interesting enough to make them want to take a second look. Movers and migrants who, by chance or by choice, have taken up residence in the city may find in this Profile enough advantages of staying in Quezon City to make them decide to become permanent residents. Old-time residents may yet find new and unique features of their city and rekindle their sense of loyalty and pride of place.

This edition of the Quezon City Ecological Profile presents several significant updates drawn from national and local policies, mechanisms, and



conditions relevant to the city. Furthermore, it aims to provide a more detailed perspective by presenting the city's profile down to the district level, offering readers a deeper and more comprehensive understanding of Quezon City.

Updates from the 2020 Census of Population and Housing, and 2021 Family Income and Expenditure Survey, the latter providing city-level disaggregated data, and the city's plan reviews indicate changes in population, income and expenditure, land uses and serve as significant bases for planning and policymaking.

The Risk Profile details various meteorological, geological, anthropogenic industrial and other hazards that cut across various sectors. This is informed by the Climate and Disaster Risk Assessment (CDRA) and serves as a vital resource for the city's climate change, disaster risk reduction, and resilience interventions.

The 2022 national and local elections and 2023 barangay elections year marks another term for this city administration and some transitions at the barangay level. Data compiled in this edition represent to a significant degree the accomplishments of this administration from the previous terms and the effects and outcomes of said accomplishments. The current administration may also use the updated data to continuously craft programs that will have the effect of building and improving on the record from previous terms, which will ensure both continuity and progress.

As part of the planning mandates of the Local Government Code, this updated Profile served as the main database for the crafting of the revised Comprehensive Land Use Plan (CLUP) for 2025 and the succeeding edition of the Comprehensive Development Plan (CDP) as well as other sectoral and thematic plans.

In the broader context, the Profile also reflects the city's contributions to the realization of global development goals, and implementation of national planning framework and policies, as well as city's situation in the context of emerging development challenges and opportunities from full devolution, health crisis impacts, transport and infrastructure development, advocacy for smart growth, and other local policies and priorities.

The production of this document owes in large part to the painstaking efforts of the different sectoral committees anchored by the respective technical staff members of the Quezon City Planning and Development Office. The latter office's key role in this undertaking owes to the current practice among local governments to prepare or update the Profile in conjunction with the larger task of preparing their mandated plans.

This 2022 edition of the Ecological Profile of Quezon City aspires to continuously set a good practice of evidence-based, data-driven planning, policymaking, programming, and investments of local governments in the Philippines.



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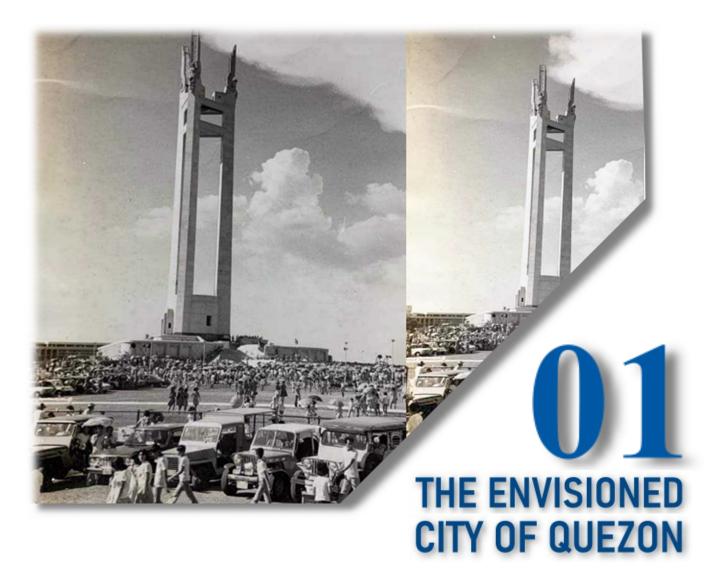
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Quezon City was conceived as a vision of a man incomparable - the late President Manuel Luis Quezon – who dreamt of a central place that would house the country's highest governing body and provide low-cost and decent housing for the less privileged sector of society. He envisioned the growth and development of a city where the common man could live with dignity.

"I dream of a capital city that, politically shall be the seat of the national government; aesthetically the showplace of the nation--- a place that thousands of people will come and visit as the epitome of culture and spirit of the country; socially a dignified concentration of human life, aspirations and endeavors and achievements; and economically as a productive, self-contained community."

--- President Manuel Luis Quezon

Equally inspired by this noble quest for a new metropolis, the National Assembly moved for the creation of this new city. The first bill was filed by Assemblyman Ramon P. Mitra with the new city proposed to be named as "Balintawak City". The proposed name was later amended on the motion of Assemblymen Narciso Ramos and Eugenio Perez, both of Pangasinan to "Quezon City".

1.1 THE CREATION OF QUEZON CITY

On September 28, 1939, the National Assembly approved Bill No. 1206 as Commonwealth Act No. 502, otherwise known as the Charter of Quezon City. Signed by President Quezon on October 12, 1939, the law defined the boundaries of the city and gave it an area of 7,000 hectares carved out of the towns of Caloocan, San Juan, Marikina, Pasig, and Mandaluyong, all in Rizal Province. The law likewise specified the manner in which the city was to be governed. All the city officials were to be appointed by the President with President Quezon himself being the first acting Mayor. He served from October 12 to November 4, 1939, after which Tomas Morato, then Mayor of Calauag, Tayabas, was appointed as his successor.

The original physical plan of the City, which was prepared in 1940 by Harry T. Frost, architectural adviser of the Commonwealth, reflect a big quadrangle in the heart of the City from which four (4) avenues radiate toward the outskirts with rotundas placed on the four (4) corners, the largest being the 26-hectare elliptical center, now known as the Quezon Memorial Circle.

Progress in Quezon City continued until the outbreak of World War II on December 8, 1941. Just before the Japanese occupied the city, President Quezon issued Executive Order No. 400, dated January 1, 1942, incorporating Quezon City with Greater Manila for synchronized and coordinated activity in such time of emergency. Under the order, the Quezon San Juan, Mayors of City, Parañaque, Caloocan and Mandaluyong, Makati became the assistants to the Mayor of Greater Manila who at that time was Jorge Vargas. However, when Mayor Morato was arrested by the Japanese in mid-1942, Dr. Florencio Cruz then City Health Officer was installed as Chief of the City (being a district of Greater Manila) until liberation.¹

As soon as the war was over, in April 1945, the Secretary of Interior Tomas Confesor designated Oscar Castelo, who was then an Assistant Fiscal of Manila, as Acting Mayor of Quezon City, and therefore, Assistant to the Mayor of Manila Juan Nolasco. The house of President Quezon on Gilmore Avenue was used by Castelo as temporary office of the city government.

Captain Sabino de Leon, former Quezon City Police Chief, was designated as Acting Assistant Mayor of Quezon City on October 1, 1945 while Castelo returned to his job as Assistant City Fiscal of Manila. Capt. De Leon moved the city government offices to a market site along South 9th Street near Sampaloc Avenue (now the site of Roces High School). Quezon City regained its separate political existence from Greater Manila on January 2, 1947 by virtue of Republic Act No. 45. Ponciano A. Bernardo was appointed City Mayor.

1.2 QUEZON CITY AS THE CAPITAL CITY

Upon assumption of office of President Manuel A. Roxas as the first president of the second Philippine Republic in 1946, he announced his intention to restore Quezon City as a regular chartered city. Various sectors declared their protests by citing the city's economic and financial bankruptcy, dismal health and sanitary conditions, and high rate of

¹ Executive Order No. 400, s. 1942 (January 1, 1942), <u>Creating the City of Greater Manila</u>, <u>Official Gazette of the Republic of the Philippines</u>, archived from the <u>original</u> on July 1, 2022, retrieved August 24, 2022

criminality during the post-war period.

On July 25, 1946, President Manuel Roxas issued Administrative Order No. 5, establishing a committee to study the selection of a new official capital for the Philippines.² The Selection Committee was tasked with identifying "the most suitable site on which to build the capital city of the Philippines and the capitol building/s." Senator Melecio Arranz, appointed as the head of the committee, argued that while Manila had historically served as a central hub, it had become "undesirable as a national capital"

due to the extensive damage from World War II, increasing congestion from commercial activities, and the expanding demands of both government and military operations. In contrast, Quezon City, established a few years earlier, had already begun addressing the vestiges of the war and was actively working on post-war rehabilitation, positioning itself as a viable alternative for the nation's capital.

The selection process underwent series of extensive studies, researches, discussions, and public hearings which primarily focused on the following considerations: "general sanitation, public works development, strategic considerations, scenic beauty, and administrative coordination." Out of the sixteen (16) nominated sites, three sites emerged as the top choices: Ipo Novaliches area; Baguio; and, Quezon City-Novaliches. The contiguous areas of IpoQuezon City-Novaliches proved to be the ideal choice for the nation's capital and still garnered the highest composite average rating over the second placer Baguio. Thus, the Arranz Selection Committee concluded: "...the area now covered by Quezon City extending northward along Marikina River to the upper limits of Novaliches reservoir watershed, [and] West to the boundary line...comprising an approximate total area of 16,200 hectares... one-fourth of which is owned by the

THE CAPITAL CITY BILL

AN ACT TO ESTABLISH THE CAPITAL OF THE PHILIPPINES AND THE PERMANENT SEAT OF THE NATIONAL GOVERN-MENT, TO CREATE A CAPITAL CITY PLANNING COMMISSION, TO APPROPRIATE FUNDS FOR THE ACQUISITION OF PRIVATE ESTATES WITHIN THE BOUNDARY LIMITS OF SAID CITY, AND TO AUTHORIZE THE ISSUANCE OF BONDS OF THE NATIONAL GOVERNMENT FOR THE ACQUISITION OF PRIVATE ESTATES, FOR THE SUBDIVISION THEREOF, AND FOR THE CONSTRUCTION OF STREETS, BRIDGES, WA-TERWORKS, SEWERAGE AND OTHER MUNICIPAL IMPROVE-MENTS IN THE CAPITAL CITY

Be it enacted by the Senate and House of Representatives of the Philippines in Congress assembled.

SECTION 1. Section two of Commonwealth Act Numbered Five hundred two, as amended, is hereby further amended to read as follows

"SEC. 2. Powers.—The territory within the boundaries described in the next succeeding section is to be known as QUEZON CITY which shall be the CAPITAL of the Philippines and the permanent seat of the national government;

"SEC. 3. Boundaries .- The boundaries and limits of the territory of said city, containing the total areas of fifteen thousand six hundred sixty hectares, more or less, are established and prescribed.

SEC. 3. There is hereby created and established a Capital City Planning Commission composed of seven Members three of whom shall not be government officials to be appointed by the President of the Philippines with the consent of the Commission on Appointments of the Comgress of the Philippines.

SEC. 7. The Capital City Planning Commission shall submit to the President within one year after its organization the master plan of the Capital City of the Philippines for his approval.

SEC. 9 The President of the Philippines is authorized to issue, in the name and behalf of the Republic of the Philippines, bonds in an amount of twenty million pesos, the proceeds of which shall be used as a revolving fund for the acquisition of private estates, the subdivision of the area, and the construction of atreets, bridges, waterworks, sewerage and other municipal improvements in the Capital City of the Philippines.

SEC. 12. The Capital City Planning Commission shall have the supervision of all the work to be done and improvements to be made with the proceeds of the sale of the bonds authorized by this Act.

SEC. 13. All acts and executive orders or regulations or parts there of, inconsistent with the provisions of this Act, are hereby repealed.

SEC. 14. This Act shall take effect upon its approval.

Approved, Finally passed by the Senate on June 26, 1948.

This Act, which originated in the House of Representatives, was finally passed by the same on June 25, 1948.

Approved and Signed by His Excellency, the President of the Philippines, Elpidio Quirino.

²https://lawphil.net/executive/ao/ao1946/ao_5_1946.html

Government, is the best...[site] to be made as the Capital City of the Republic."³

The committee also cited the following advantages of the City as the choice of the nation's capital:

- "[The City's] proximity to Manila, the best port of entry from foreign countries and the commercial and financial center of the country...;
- Its accessibility from all the important inhabited areas in the Philippines either by land, air or sea;
- Its already available conveniences from the standpoint of a municipal entity...[-as an organized and partially developed chartered city];
- Its public works facilities with regard to the provision of water supply, easy drainage, availability of power and proximity to commercial, industrial, and manufacturing establishments engaged in the sale, production, and distribution of construction materials and equipment;
- Its geological qualities, which provide a satisfactory foundation for buildings and other structures, at the same time allowing the construction of underground structures;
- Its larger area of government-owned land right in its central zone which will permit a substantial economy in the development of public improvements as well as more freedom and liberal assignments for streets, parks, and playground areas;
- Its healthfulness due to its elevation (it averages about 250feet above sea level) together with the availability of an abundant and wholesome water supply and excellent drainage which are the most important requirements for the development of modern cities: and. Its historical background; consideration of public expenditures already made; administrative commitments and evident public support."

However, before the selection was made, President Roxas died of heart attack in Clark Field, Pampanga. It was President Elpidio

R. Quirino, his successor, who signed Republic Act No. 333 on July 17, 1948, which made Quezon City the capital of the Philippines. The Act created the Capital City Planning Commission to prepare the general development plan and supervise the improvements to be done in the Capital City. Archt. Juan Arellano headed the architectural division of the Commission while Mavor Bernardo handled public relations. After almost one year, on April 8, 1949, the Master Plan was signed by President Quirino. It further stipulated "the appropriation of funds for the acquisition of private estates within the boundary limits of the city, and authorized the issuance of bonds... for the construction of streets, bridges, waterworks, sewerage..." and other city improvements.

In July 1947, the City Hall building was constructed along Highway 54 (now Epifanio delos Santos Avenue or EDSA) on what used to be the site of the pre-war public market. It was occupied in February 1948, housing all the city government's offices and departments except for the police department.

Quezon City was formally inaugurated as the national capital of the Philippines on October 12, 1949. President Quirino laid the cornerstone of the proposed Capitol Building at Constitution Hills. The Welcome Arch (now Mabuhay Rotunda) at the boundary of Manila and Quezon City was built, and the construction of Roxas Homesite by the Philippine Homesite and Housing Corporation, consisting of 1,104 housing units on an area of 40 hectares, started.

The City's territorial boundaries were revised four times since its creation on October 12, 1939. Originally, Quezon City had only about 7,000 hectares extending from La Loma to Marikina River and from Pasong Tamo River down to (and including) Wack Wack Golf Club in Mandaluyong. It was first amended in 1941 by Commonwealth Act 659 which

³QC, The Rise of the Asia's City of the Future, pp 96-98

returned the portions west of Marikina River to Marikina, a reduction of about 500 hectares. After the war, Republic Act 333 dated July 17, 1948 which declared the City as the National Capital, incorporated the areas of Novaliches and Payatas thereby greatly increasing the territory by more than double: from 6,500 hectares to 15,660. A third revision which decreased the City's area by about 300 hectares was made in 1950 by RA 537 when parts of the territory east of Marikina River were given back to Montalban and San Mateo, as well as Wack Wack and Camp Crame to Mandaluyong and San Juan, respectively.

The final amendment was made on June 16, 1956, by virtue of RA 1575 which again reduced the City's area by 260 hectares from 15,359 to 15,106 hectares, when areas west of Marikina River were again reverted to Montalban and San Mateo even as Camp Crame was reintegrated to the City. This is the present official territorial boundary of Quezon City. However, graphical plots made on this present boundary of the city gave an area of 16,112 hectares, about 1,000 hectares more than the officially declared land area.

Table H-1: Changes in Land Areas of Quezon City

	Commonwealth Act 502	Commonwealth Act 659	Republic Act 333	Republic Act 537	Republic Act 537
Date Approved	October 12, 1939	June 21, 1941	June 17, 1950	June 16, 1950	June 16, 1956
Land Area	7,006 has.*	6,497 has*	15,660 has.	15,359 has	15,106 Has.* 16,112 has**

^{*} Figures obtained thru graphical computations only

1.3 CHANGING FORTUNES OF QUEZON CITY

For twenty-seven (27) years, Quezon City held the distinct status of being the nation's capital. However, two Presidential Decrees issued by President Ferdinand E. Marcos would have substantially changed the political stature and landscape of the city.

Presidential Decree 824 authorized the creation of the Metropolitan Manila and Metropolitan Manila Commission which would exercise territorial and political jurisdiction over seventeen (17) municipalities and cities, including Quezon City. The Decree was deemed necessary due to "rapid growth of population and...of social and economic

requirements in the contiguous communities". Too, the Decree served to address the imperative for integrated development, service delivery, and management in terms of peace and order and eradication of social and economic ills which were considered then as among the reform measures under Martial Law.

It was around this period and under the leadership of appointed mayor Norberto S. Amoranto, that the city attained an impressive performance record in terms of financial standing, delivery of services, particularly that of medical and health services, establishment of buildings, and community beautification projects which were also supported by then First Lady Imelda R. Marcos.

All of these are reminiscent of the same noble dream that brought forth the creation of the City

1.4 CAPITALIZING ON THE "QUEZON CITY" VISION

The original vision of President Manuel L. Quezon for the City became the thread that wove and continues to weave a rich and radiant past, present, and future for the City. The "Quezon dream-vision" continues to guide efforts to attain a progressive and peaceful, clean and orderly place conducive and hospitable to living, employment, and business, "A Quality Community that is Quezon City."

The City has been host of monumental events that shaped the course of history in the struggle for freedom and sovereignty. Chief among which are the "Cry of Pugad Lawin" led by the Great Plebeian and revolutionary hero Andres Bonifacio, the People Power Revolution in EDSA that toppled the regime of President Marcos, and the installation of President Corazon Aquino under the restored democracy—all of which took place in areas that now comprise the City.

Currently, Quezon City is the largest among Metropolitan Manila's cities in terms of population and land area. Peppered within its walls are the country's top educational institutions, business and growth hubs, world-class entertainment and shopping centers, sprawling residential communities, parks and open spaces, and well-linked transportation facilities.

On top of having the physical attributes of an innovative forward-looking city, it features a vibrant local economy and tourism with major parks and open spaces such as the La Mesa water shed, Quezon Memorial Circle, and Ninoy Aguino Parks and Wildlife.

The dynamism of its local economic landscape, effective fiscal management, streamlined government processes, and

participatory governance have made Quezon City the most competitive highly urbanized city in the Philippines today. In particular, the City produced an annual budget surplus averaging P9 billion from 2019 to 2023, and earned a record-high income of P30 billion in 2021.

Underpinned by a strong sense of good governance, the City has achieved various firsts in many areas such as environment protection and solid waste management programs, protection of women, children, and members of the LGBT community, and institutionalization of citizen participation in governance through the City Development Council.

Under the leadership of the current local chief executives, Mayor Josefina 'Joy' G. Belmonte-Alimurung and Vice Mayor Giancarlo G. Sotto, Quezon City is steered to new heights with over 90 awards for LGU performance. Quezon City has been a consistent recipient of Seal of Good Local Governance, manifestation of integrity and good performance in institutionalizing governance reforms in the continuing pursuit of meaningful local autonomy and development. It is also an inductee in the local revenue generation Hall of Fame, having consistently topped the best performing local government unit in terms of revenue generation since 2018.

The City manifests the same makings for the nation's capital—being at the center of trade, commerce, education and culture, seat of the national government, modern transportation, communication and accommodation facilities, and the physical design of a future-ready city.

HISTORICAL HIGHLIGHTS

1896-2022

Pre-Establishment

1896

Philippine Revolution: During the Philippine Revolution against Spanish colonial rule, the areas that would later form part of Quezon City, such as Novaliches and Balintawak, were significant sites of revolutionary activity. The Cry of Balintawak (or Cry of Pugad Lawin) marked the start of the revolution led by Andrés Bonifacio and the Katipunan.

Foundation and Early Development

1938-1949:

October 12, 1939: Commonwealth Act 502, signed by Pres Manuel L. Quezon, established QCas the new capital of the Philippines

1946: After World War II, QC was officially inaugurated as the Capital of the Philippines, though this status was later transferred back to Manila.

1949: The City Charter was revised under RA 537, expanding the city's area and jurisdiction.

Political Changes and Modernization

1986-1995:

1986: Quezon City played a central role during the EDSA People Power Revolution, leading to the ousting of President Marcos and the restoration of democracy

1989: The city celebrated its Golden Jubilee, marking 50 years since its establishment

1995: The city began to modernize rapidly, with increased infrastructure development and urbanization.

Post-War Growth

1950-1976:

1950: The National Government Center (NGC) was established in Diliman, QC, symbolizing its role as the administrative hub of the Philippines.

1954: Ramon Magsaysay, the then President of the Philippines, officially inaugurated Quezon Memorial Circle, a major city landmark.

1976: PD No. 940, signed by Pres Ferdinand Marcos, restored Manila as the Capital of the Philippines, but QC Quezon City remained a vital urban center.

Continued Growth & Development

2000-2022 :

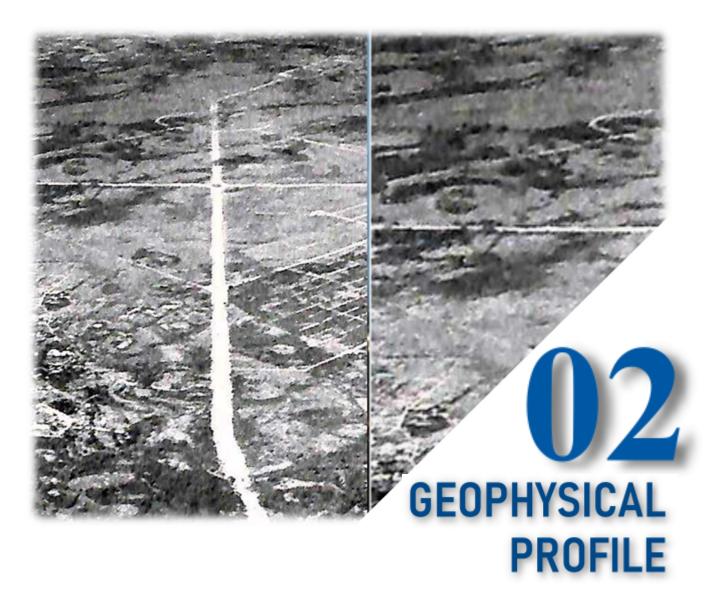
2004: Feliciano Belmonte Jr. was elected Mayor, leading significant developments in the city's infrastructure and governance.

2010: Herbert Bautista was elected Mayor, continuing the city's modernization and development projects, focusing on disaster risk reduction and urban planning

2018: Quezon City was ranked as the most competitive city in the Philippines, reflecting its economic growth and development

2022: In their second terms, Joy Belmonte and Gian Sotto served as Mayor and Vice Mayor, respectively, leading QC to new heights. The city has garnered over 90- awards and accolades and for the first time in its history, received an "unqualified opinion" from the Commission on Audit (COA)





The Land Use/Infrastructure Sector discussed six areas of concern namely: geography, topography, climate, land use patterns, service utilities, and transportation.

2.1 GEOGRAPHY

Quezon City is situated in the northeast portion of Metro Manila. It is bounded on the north by Caloocan City and San Jose del Monte City in Bulacan Province, on the east by San Mateo and Marikina, on the south by Pasig and Mandaluyong, San Juan and Manila, and on the west by Valenzuela, Caloocan and Manila. Its northeastern and eastern boundaries are defined by the Novaliches Watershed and the Marikina River.

It is close to the region's major activity centers—like Binondo, Ayala, Monumento, Ortigas, the Ninoy Aquino International Airport (NAIA), the North and South Harbor as well as the newly developed Fort Bonifacio Global City. With an area of 16,112.58 hectares (based on 1995 GIS graphical plot, it is the largest among the sixteen (16) cities and one (1) municipality in in the region and is almost one-fourth the size of Metro Manila.

2.2 TOPOGRAPHY

2.2.1 Slope

The City's slope is generally manageable ranging from less than 8% to 15%. A small, scattered area has a very steep slope which can be utilized for parks and green area development

2.2.2 Soil

A survey by the Bureau of Soils and Water Management (BSWM) showed that the predominant soil type in the city is of the Novaliches Loam series, commonly called "adobe" and mainly characterized as hard and compact. The quality of the soil varies as the depth increases. (See Table GP-1.)

Table GP-1: Relation of Soil to Depth

Depth of Soil (in ms)	Description		
0-5	Brown, loose and friable loam to clay loam		
6-20	Dark brown granular city loam with gravel and concretion		
20-35	Adobe clay loam with concretion and gravel, highly weather stuff		
36-60	Weathered adobe rock, slightly compact		
60-plus	Compact and massive adobe rock		

Source: Bureau of Soils

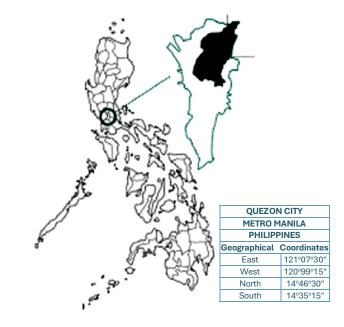


Figure GP-1: Location Map



Figure GP-2: Slope Map

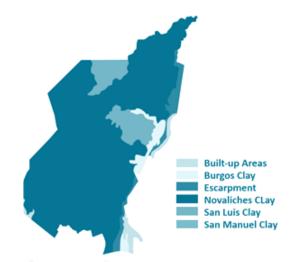


Figure GP-3: Soil Map

2.2.3 Drainage

The City is drained thru four (4) principal river basins namely: the San Juan-San Francisco River, Marikina River, Tullahan River and Meycauayan River. The San Juan River which traverses the central and southern sections of the city, as well as the Marikina River which traverses along the eastern boundary discharge to the Pasig River. The Tullahan River traversing the Novaliches area discharges to Tenejeros River in Malabon. The creeks at the northwestern most portion drain to the Meycauayan River. The ultimate drainage outfall of these river systems is the Manila Bay.

The San Juan-San Francisco River Basin covers the largest area of 80 sq. kms. extending from the city's southern limits up to San Bartolome in Novaliches and from Quirino Highway towards Marikina Valley ridge in the east, except for La Loma and Galas which slope down directly to the Pasig River. Meanwhile, the Marikina River Basin, comprising 26 sq. kms., is the outfall of marginal areas east of Marikina Ridge from Don Jose Subdivision near Fairview down to Corinthian Gardens at Ortigas Avenue. The Tullahan River basin with an approximate drainage area of 28.94 sq. kms., serves most of the Novaliches District from Batasan at the east towards Caloocan City at the west, including Fairview and Lagro and across Novaliches Proper up to DamongMaliit Road in NagkaisangNayon. The remaining areas at the northwestern peripheries drain to Meycauayan River. The Novaliches Watershed with an area of 2,574 hectares exclusively serves the La Mesa Reservation Area.



Figure GP-4:QC River System Map

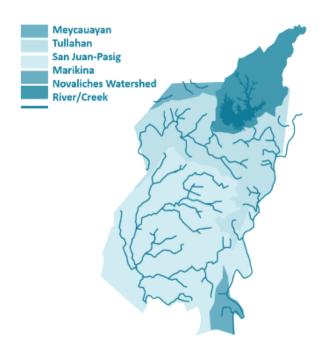


Figure GP-5:QC Drainage System Map

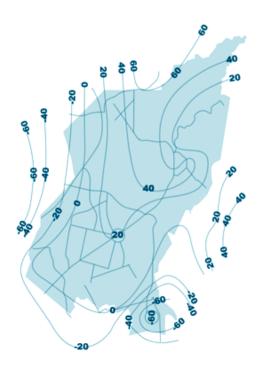


Figure GP-6: Piezometric Map

2.2.4 Groundwater Levels

The 1955 piezometric map indicates that in the northern part near Novaliches reservoir and at +60 meter contour in the groundwater divide, two separating groundwater flow directions exist. One is towards the southeast direction to Marikina Valley and the other towards the southwest direction to Pasig River near the sea.

Since 1955, the groundwater flow pattern has been significantly altered due to excessive withdrawal of groundwater. The adversely affected parts of the aquifer created cones of depression. The 2004 groundwater level proved the worsened situation as increased groundwater abstraction resulted in deeper cones of depressions

2.3 CLIMATE

The climate in Quezon City is typical of Metro Manila's, which has a distinct dry season from December to April and wet season from May to November. Based on the Climatological Extremes measured as of 2021 at the Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA) Science Garden Station showed that Quezon City has registered a maximum temperature of 38.5 deg C on May 14, 1987 while a minimum temperature of 14.9 deg C was recorded on March 1, 1963. The city experienced the greatest daily rainfall of 455.0 mm during the onslaught of Tropical Storm Ondoy on September 26, 2009. Strongest wind was experienced on November 3, 1995, registered at 50 mps heading NNW. The highest sea level pressure, on the other hand was recorded at 1,021.7 mbs on February 14, 2017.

Table GP-2: Climatological Extremes, QC: as of 2021

		TEMPEF	RATURE	(deg C)			TEST DAILY FALL (mm)	ST	RONGE: (m)	ST WINDS ps)	SEA LEVEL PRES- SURES (mbs)	
MONTH	Max (ºC)	Date	Min (ºC)	Date	Mean (ºC)	Amou nt (mm)	Date	SPD	DIR	Date	MSLP	Date
JAN	34.7	01-17-1998	15.5	01-27-1987	25.1	72.4	01-20-2021	24	ESE	01-17-1972	1021.4	01-21-2005
FEB	35.6	02-04-1967	15.1	02-04-1987	25.4	61.7	02-22-2013	22	SSE	02-02-1992	1021.7	02-14-2017
MAR	36.8	03-26-1983	14.9	03-01-1963	25.8	65.0	03-31-2012	13	S	03-16-1992	1021.0	03-05-2005
APR	38.0	04-25-1998	17.2	04-05-1963	27.6	64.8	04-21-2015	26	SSE	04-07-1992	1016.9	04-05-1998
											1016.9	04-03-2017
MAY	38.5	05-14-1987	17.8	05-03-1962	28.2	166.0	05-20-1966	21	Ν	05-10-1992	1015.1	05-28-1986
JUN	38.0	06-02-1993	18.1	06-27-1961	28.0	334.5	06-07-1967	37	SW	06-25-1972	1014.9	06-07-1997
JUL	36.2	07-20-1998	17.7	07-23-1961	27.0	246.4	07-07-2002	36	NNW	07-09-1977	1015.0	07-01-1979
AUG	36.1	08-17-2017	17.8	08-23-1961	27.0	391.4	08-07-2012	32	N	08-22-2000	1015.3	08-23-2002
SEP	35.6	09-10-2017	20.0	09-08-1964	27.8	455.0	09-26-2009	35	NE	09-28-2006	1016.0	09-28-1997
OCT	35.4	10-09-2003	18.6	10-31-1967	27.0	209.3	10-18-1975	30	SE	10-11-1989	1016.0	10-25-1986
											1016.0	10-30-2021
NOV	35.0	11-01-2001	15.6	11-12-1962	25.3	169.9	11-20-1966	50	NNW	11-03-1995	1019.1	11-18-1979
DEC	34.9	12-06-2018	15.1	12-13-1988	25.0	135.5	12-15-2015	22	SE	12-22-1997	1020.0	12-27-2001
ANNUAL	38.5 05-14-1987 14.9 03-01-1963 26.7					455.0	09-26-2009	50	NNW	11-03-1995	1021.7	02-14-2017
Period of Record	1961-2021					19	61-2021		1961-	2021	196	61-2021

Source: PAGASA Science Garden, QC

Latitude: 14°38'41.35" N Longitude: 121°02'40.45" E

Elevation: 43m

2.4 FAULT SYSTEM

The West Valley Fault System affects Quezon City. It runs along the City's eastern boundary from the down slope area east of ViolagoPark Homes in the northeast to Bagong Silangan, Northview Subdivision, Capitol Park Homes, Loyola Grand Villas, Industrial Valley Subdivision, and St. Ignatius to Green Meadows Subdivision in Ugong Norte in the southeast.

2.5 LAND USE PATTERNS

Historically, the development of Quezon City was based on two master plans: the 1940 Frost Plan named after its principal architect, Harry Frost; and the 1949 Master Plan prepared by the City Planning Commission in accordance with the vision of President Manuel Luis Quezon. The 1940 Frost Plan was only partially implemented owing to the occurrence of World War II. Thus, it was the succeeding Master Plan prepared in 1949 that directed the development of the city from the destruction brought about by the war.

From these two earlier plans, ensuing local instruments defined the direction of the city's land use patterns. The Revised Charter of QC of 1950 retained the residential character of the city including other major land use allocations, such as road/public/utility terminals, parks/playground and agricultural areas. The City Zoning Plan of 1963 provided for the highest allocation to residential land use, while there were no significant changes in other major land uses.

In the succeeding years, the increase in the city's population and its urbanization resulted in the deviation from these Master Plans. Land use patterns then were observed with an interval of 10-13 years from 1972 to 1985 and 1986-1995. One significant development that contributed to the land use change was the construction of new roads leading to the northern part of the city. This paved the way to inward growth pattern of the residential communities in these districts.



Figure GP-7: Fault System Map

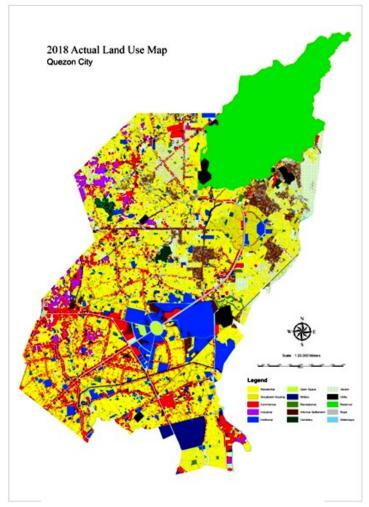


Figure GP-8: 2022 Actual Land Use Map

Also, the city's vast vacant spaces became the prospective in-migration areasfor residents displaced from the inner core of the metropolitan areas resulting in the proliferation of informal settlers in the city. unstable changes except for industrial and institutional uses which showed remarkable decrease in area. This observed decrease in areafor industrial and institutional uses is due in part to the conversion into mixed use development and to the national policy to disperse industries outside Metro Manila.

2.5.1 Residential Development

Quezon City is predominantly residential, with more than 30% of its 161-square-kilometer land cover consisting of formal and informal housing. At about 51 square kilometers, this represents the largest land use in the city. It was observed that, since 1972, residential development had continuously dominated the land area of the city.

In 2000, residential communities covered an approximate land area of 7,791.19 hectares or equivalent to 48.36% of the city's land area and these are mostly in Districts I, II and IV which are extensively occupied by residential buildings. Residential growth continued its northward spread with the development of new subdivisions and road networks particularly in Districts II and V. Although Districts I, III and IV are already built-up areas, residential lots in these districts were

further subdivided into smaller lot sizes to develop townhouses and high-rise residential condominiums that had started to boom.

In 2009, residential developments decreased by 10% which comprises 35.33% of the city's urban area. The decrease was attributed to the number of informal settlers relocated through the city's off-site resettlement scheme as well as to the high-density residential areas which were slowly converted to mix residential/commercial uses or to purely commercial uses. Investors and

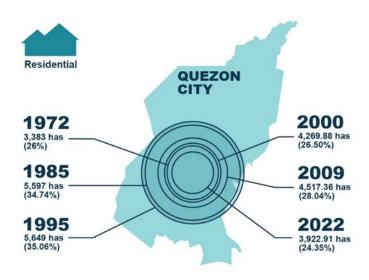


Figure GP-9 Growth of Residential Areas, QC: 1972-2022

Table GP-3: Changes in Residential Land Use, QC 2009; 2022

Land Use	2009 (in has.)	Share over QC Land	2022 (in has.)	Share over QC Land	Increase (+) Decrease (-) (in has.)	Share over Total Residential Area	% Increase 2009-2022
Residential	3,562.04	22.11%	3,917.82	24.32%	355.78	76.91%	9.99%
Socialized Housing	357.54	2.22%	387.68	2.41%	30.14	7.61%	8.43%
Informal Settlements	739.36	4.59%	788.59	4.89%	49.23	15.48%	6.66%
TOTAL	4,658.94	28.91%	5,094.09	31.62%	435.15	100%	25.08%

developers continued to develop high rise residential condominium in Districts I, III and IV with the city being highly urbanized and a potential hub for huge developments. In 2011, residential development again increased by 6% comprising about 41.57% of the city's urban area. The developers opted to convert some industrial land uses in Districts V and VI along with the commercial land uses within the core of the city and converted into residential uses.

By 2022, the residential area in the city grew by a quarter, primarily due to the conversion of utility areas and vacant lots into housing units. Formal residential properties, including socialized housing, make up nearly 85% of the city's residential land, while informal settlements account for the remaining 15%. Despite a modest increase of about 8% in the land area allocated for socialized housing in 2022, which translates to an additional 30.14 hectares compared to 2009, the informal settlements have seen a more significant rise of almost 7%, representing 49.23 hectares in area(See Table GP-3). This highlights the urgent need to strengthen the city's socialized housing initiatives to meet the demand.

2.5.2 Commercial Development

Generally, commercial development in the city was concentrated along its major roads reflecting a ribbon type development and from clusters of small to medium commercial shops and stores in residential communities to smaller commercial nodes in some prominent commercial areas in the city.

This ribbon-type growth continues to be the dominant feature of the city's commercial development. Occurring mainly due to the natural tendency to build as near as possible to the main road, this leads to the problem of traffic congestion in the city.

Major commercial developments emerged from 2000 with the establishments of

SM City and Robinson's in Fairview, the Triangle North of Manila (Trinoma) and Eastwood Cyberpark. These developments covered huge land areas in the city that caused significant increase in the city's commercial The area for commercial use is approximately 8.23% equivalent to 1,326.61 hectares. By the end of 2009, only a small strip of commercial developments contributed to the commercial land use of the city. These weremostly developments establishments, shops and other retail stores that slowly proliferated the side streets of a major thoroughfare. These were seen in the areas of Banawe Street, D. Tuazon Street, G. Araneta Avenue, Regalado Avenue, and T. Morato. The conversion of the industrial areas in Balintawak (Robinsons, Golden ABC) and Novaliches (SM Novaliches) and the UP Science and Technology Park (UP-Ayala Technohub) brought the increase commercial use in 2011 of about 8.13% or an equivalent land area of 1,310.23 hectares. Major land development took place in the Central Business District and at the Neopolitan/Lagro Area in District V. The transformations of several residential zones into special urban development areas, such as in Maginhawa and Malingap Streets and Katipunan Avenue have also increased.

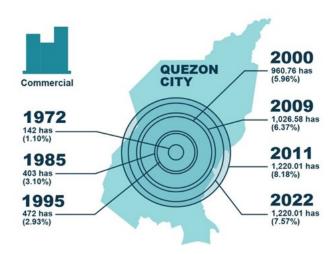


Figure GP-10 Growth of Commercial Areas.

Commercial land use in the city increased by 222.23 hectares from about 997.78 hectares in 2009 to 1,220.01 hectares in 2022. As to share in the total land use, the share of commercial land use also increased from 6.2% land use share in 2009 to 7.6% land use share in 2022(See Table GP-4).

The five (5) growth centers have been the catalysts of commercial development in the city. The traditional commercial area of the city, the Cubao Growth Area continues to be the central commercial district of Quezon City.

Table GP-4: Changes in Commercial Land Use, QC, by District: 2009; 2022 (in hectares)

DISTRICT	TOTAL QC AREA 16,112.58	2009 997.78	% of QC 6.19%	2022 1,220.01	% of QC 7.57%	DIFFERENCE 222.23
	TOTAL DISTRICT AREA		% of District		% of District	
1	1,959.39	261.02	13.32%	298.07	15.21%	37.05
2	2,182.37	38.66	1.77%	60.67	2.78%	22.01
3	2,184.82	175.09	8.01%	181.82	8.32%	6.73
4	2,341.89	232.49	9.93%	278.23	11.88%	45.74
5	5,246.71	142.31	2.71%	207.54	3.96%	65.23
6	2,197.40	148.21	6.74%	193.68	8.81%	45.47
Total	16,112.58	997.78	6.19%	1,220.01	7.57%	222.23

The CBD-Knowledge Community District where the North Triangle area is located, has developed as one of the city's major commercial hubs where two (2) of the biggest shopping centers (Trinoma Mall and SM City North EDSA) have been established. The Novaliches-Lagro Growth Center and the Balintawak-Muñoz Growth District also developed as two of the city's commercial nodes, embracing the shopping center type of

commercial development with the establishment of the SM City Fairview, Robinsons Novaliches, and later on the Ayala Malls Fairview Terraces and the Ayala Malls Cloverleaf, respectively. The stretch of Commonwealth Avenue which is part of the Batasan-National Government Center is characterized mainly by commercial development particularly a mixture of retail and wholesale.

Table GP-5: Changes from Commercial to Different Land Uses, QC, by District: 2009; 2022

DISTRICT	2009 Total Commercial Area of District	To Commercial	To Industrial	To Institutional	To Informal Settlement	To Socialized Housing	To Residential
1	261.02	231.63	1.78	1.68	0.10	0.00	10.25
2	38.66	33.95	0.00	0.72	0.11	0.26	0.34
3	175.09	157.50	0.00	0.27	0.00	0.00	2.59
4	232.49	218.96	0.00	0.49	0.13	0.00	7.90
5	142.31	139.23	0.00	0.93	0.09	0.00	0.90
6	148.21	140.63	0.04	0.40	0.06	0.00	1.28
Total	997.78	921.90	1.82	4.49	0.49	0.26	23.26

DISTRICT	2009 Total Commercial Area of District	To Recreational	To Road	To Utility	To Vacant	To Open Space	To Cemetery
1	261.02	0.00	0.19	2.32	12.58	0.00	0.00
2	38.66	0.00	0.32	0.21	1.69	0.05	0.00
3	175.09	0.00	0.08	1.73	8.19	0.00	0.00
4	232.49	0.00	0.00	1.53	5.17	0.00	0.00
5	142.31	0.00	0.06	1.69	7.74	0.02	0.00
6	148.21	0.00	0.45	0.81	4.51	0.05	0.00
Total	997.78	0.00	1.10	8.29	39.88	0.12	0.00

2.5.3 Industrial Development

Industrial development continues to be confined to the city's industrial zones such as Balintawak, Novaliches, and Libis. These are the city's traditional industrial areas owing to the large land parcels and proximity to industrialized areas and adjoining cities of Caloocan, Malabon, Valenzuela and Pasig, as well as the accessibility to international and domestic sea and airports via A. Bonifacio Quirino Highway.

For the period 2009-2022, industrial areas showed a decreasing trend, from 365.78 hectares in 2009 to 328.56 hectares in 2022 or a decrease of 10.2%. As to share in the total land use, the share of industrial use also decreased from 2.27% land use share in 2009 to only 2.04% land use share in 2022.

In 2000, the growth in this sector constituted only 6.36% or 1, 024.60 hectares of the city' land area and decreased in 2011 to 5.53% or an area of 891.68 hectares. The decrease was the result of the Presidential Memo Circular of March 17, 1973, a national policy that bans the establishment of additional medium and heavy industries in Metro Manila within 50-kilometer radius from the Rizal Monument. This ban somehow contributed to the location of industries to the fast-growing industrial parks of Laguna and Cavite. Another factor for the decrease is the conversion of some industrial zones to residential or commercial use in Bgy. Bagumbayan (Novu City, Metropoli Residences and Circulo Verde), Balintawak (Robinsons, Golden ABC) and Novaliches (SM Novaliches).

Another major factor for commercial development in the city is the conversion of 298.11 hectares from other uses to commercial use which compensated for the 79.72 hectares of land converted from commercial use to other uses.

Among the land use conversions, the top three most significant changes were from

commercial to vacant with 39.88 hectares, commercial to residential with 23.26 hectares. and commercial to utility with 8.29 hectares. A closer look at the changes shows that of all six districts, the first district cumulatively had the biggest set of changes with a total of 28.91 hectares converted from commercial to other uses. From this total, the top three land use conversions from 2009 to 2022 in District 1 are 12.58 hectares converted from commercial to vacant, 10.25 hectares converted from commercial to residential, and 2.32 hectares converted from commercial to utility. Other noteworthy changes include 7.90 hectares converted from commercial to residential land use in District 4 and commercial lands that have become vacant in Districts 3, 4, 5, and 6 with 8.19, 5.17, 7.74, and 4.51 hectares, respectively(See Table GP-5).

For industrial development, the top three most significant changes land use conversions were from industrial to vacant with 30.25 hectares, industrial to commercial with 16.80 hectares, and industrial to residential with 6.38 hectares. A closer look at the changes shows that of all six districts, District 5 cumulatively had the biggest set of changes with a total of 19.02 hectares converted from industrial to other uses. From this total, the top three land use conversions from 2009 to 2022 in District 5 are 12.82 hectares converted from industrial to vacant,

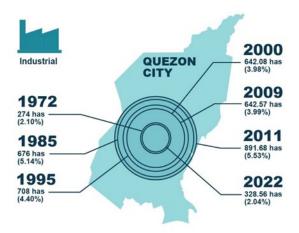


Figure GP-11: Growth of Industrial Areas, QC: 1972-2022

Table GP-6: Changes in Industrial Land Use, QC, by District: 2009; 2022 (in hectares)

	TOTAL QC AREA	2009	% of QC	2022	% of QC	DIFFERENCE
DISTRICT	16,112.58	365.78	2.27%	328.56	2.04%	37.22
	TOTAL DISTRICT AREA		% of District		% of District	
1	1,959.39	60.37	3.08%	54.01	2.76%	-6.36
2	2,182.37	0.05	0.00%	0.41	0.02%	0.36
3	2,184.82	28.99	1.33%	18.72	0.86%	-10.27
4	2,341.89	10.71	0.46%	4.86	0.21%	-5.85
5	5,246.71	150.05	2.86%	140.68	2.68%	-9.37
6	2,197.40	115.61	5.26%	109.87	5.00%	-5.74
Total	16,112.58	365.78	2.27%	328.56	2.04%	-37.22

3.72 hectares converted from industrial to commercial, and 1.01 hectares converted from industrial to residential (See Table GP-7).

Other noteworthy changes include land use conversions from industrial use to vacant land in districts 1, 3, and 6 with 2.15, 8.53, and 6.65 hectares of converted land use,

respectively. Also significant are land use changes from industrial to commercial use in District 1 with 5.91 hectares and District 4 with 4.91 hectares. With this conversion trend, it is perceived that the share of industrial use would continue to decrease.

Table GP-7: Changes from Industrial to Different Land Uses, QC, by District: 2009; 2022

DISTRICT	2009 Total Industrial Area of District	To Commercial	To Industrial	To Institutional	To Informal Settlement	To Residential
1	60.37	5.91	49.70	0.24	0.00	2.30
2	0.05	0.00	0.05	0.00	0.00	0.00
3	28.99	0.85	18.69	0.00	0.00	0.00
4	10.71	4.91	4.43	0.00	0.00	1.66
5	150.05	3.72	127.71	0.44	0.00	1.01
6	115.61	1.41	105.90	0.00	0.19	1.40
Total	365.78	16.80	306.49	0.68	0.19	6.38

DISTRICT	2009 Total Industrial Area of District	To Recreational	To Road	To Utility	To Vacant	To Cemetery
1	60.37	0.00	0.06	0.12	2.15	0.00
2	0.05	0.00	0.00	0.00	0.00	0.00
3	28.99	0.00	0.00	0.00	8.53	0.00
4	10.71	0.00	0.00	0.00	0.10	0.00
5	150.05	0.00	0.77	0.00	12.82	0.26
6	115.61	0.22	0.55	0.00	6.65	0.00
Total	365.78	0.22	1.38	0.12	30.25	0.26



2.5.4 Institutional Development

In 13 years, institutional uses have increased by over 345 hectares or from 1,202.04 hectares to 1,547.26 hectares in 2022, accounting for 2.14% of total city area (See Table GP-8).

Institutional areas are confined mostly in Districts 1, 2, and 4 where most of the national agencies and the country's specialized hospitals are located. Also, wellknown universities and colleges like University of the Philippines, Ateneo de Manila University and Miriam College occupy enormous tracks of land that form part of the traditional institutional zones.

Due to the rapid increase of the city's population resulting in the growth of residential communities, more institutional buildings such as public and private primary and secondary schools, and health facilities emerged, specifically in District II or in the northern portion of the city.

Institutional uses in the year 2000 comprised about 8.17% of the city's urban area. This showed a slight decrease from 2009 until 2011 comprising 7.16% and 6.90% respectively. This is seen to have been brought about by the declaration of National Government Center (NGC) in Batasan Hills as a socialized housing and mixed use development.

Adding to the inventory of institutional areas are those occupied by at least 590 public and private schools offering preparatory, elementary and secondary levels of education, 107 colleges, universities including vocational and technical schools, 66 public and private hospitals, 65 health centers, 125 churches and chapels, and about 91 government offices.

The city recorded changes from institutional land use in 2009 to other land uses in 2022. Some 11% of informal converted settlement areas was institutional use in 2022, while smaller conversion percentages were reported from residential (0.8%) and commercial areas (0.4%). The least conversion to institutional use was noted in the city's open spaces (0.08%) and industrial areas (0.06%) (See Table GP-9).

Table GP-8: Changes in Institutional Land Use, QC, by District: 2009; 2022 (in hectares)

DIS-	TOTAL DIS-		IONAL AR-	DIFFERENCE			
TRICT	TRICT AREA	2009	2022	TOTAL	% of Dis- trict	% of QC	
- 1	1,959.39	188.37	198.92	10.55	0.54%	0.07%	
Ш	2,182.37	64.76	313.52	248.76	11.40%	1.54%	
III	2,184.82	149.28	167.04	17.76	0.81%	0.11%	
IV	2,341.89	597.64	609.88	12.24	0.52%	0.08%	
V	5,246.72	117.29	143.21	25.92	0.49%	0.16%	
VI	2,197.39	84.69	114.69	30.00	1.37%	0.19%	
TOTAL	16,112.58	1,202.04	1,547.26	345.22	2.14%	2.14%	

Table GP-9: Changes from other Land Uses (2009) to Institutional Land Use (2022), QC, by District: (in hectares)

DIS- TRICT		n Resi- ntial	From Com- mercial		From Industrial		From Institu- tional		From Informal Settlements		From Open Spaces	
T	1.65	0.88%	1.68	0.89%	0.24	0.13%	178.39	94.70%	6.93	10.71%	0.00	0.00%
Ш	1.15	1.78%	0.72	1.11%	0.00	0.00%	45.18	69.77%	1.81	1.22%	0.00	0.00%
Ш	0.68	0.46%	0.27	0.18%	0.00	0.00%	144.79	96.99%	0.29	0.05%	0.02	0.01%
IV	2.30	0.39%	0.49	0.08%	0.00	0.00%	585.18	97.92%	2.27	1.94%	0.00	0.00%
V	1.04	0.89%	0.93	0.79%	0.44	0.37%	108.19	92.24%	6.38	7.54%	0.90	0.76%
VI	2.32	2.74%	0.40	0.48%	0.00	0.00%	84.34	99.59%	17.69	1.47%	0.00	0.00%
TOTAL	9.16	0.76%	4.49	0.37%	0.68	0.06%	1146.07	95.34%	6.93	10.71%	0.92	0.08%

DIST	From REC		From	From ROAD		From SH		From U		From V		From WW	
I	0.00	0.00%	0.01	0.00%	16.89	8.97%	0.00	0.00%	0.06	0.03%	0.00	0.00%	
Ш	0.06	0.09%	0.15	0.24%	229.17	353.87%	0.00	0.00%	30.15	46.55%	0.01	0.02%	
III	0.00	0.00%	0.00	0.00%	18.56	12.43%	0.00	0.00%	0.91	0.61%	0.00	0.00%	
IV	0.00	0.00%	0.00	0.00%	21.45	3.59%	0.00	0.00%	0.16	0.03%	0.00	0.00%	
V	0.00	0.00%	0.02	0.02%	22.18	18.91%	0.00	0.00%	7.25	6.18%	0.01	0.01%	
VI	0.00	0.00%	0.05	0.06%	18.16	21.44%	0.00	0.00%	3.03	3.57%	0.00	0.00%	
TOTAL	-0.04	0.00%	0.23	0.02%	326.40	27.15%	0.00	0.00%	41.55	3.46%	0.02	0.00%	

Meanwhile, the city also saw changes from areas previously categorized under institutional uses in 2009 to other land uses in 2022. A total of 21.26 hectares of institutional areas were converted to mainly commercial, residential uses including informal settlements in the city. (See Table GP-10).

Table GP-10: Changes from Institutional (2009) to other Land Uses (2022), QC, by District: (in hectares)

DISTRICT	From Instituonal Land Use (2009)		To Industrial (2022)	To Institutional (2022)	To Residential (2022)	To Informal Settlements (2022)	To Open Space (2022)
I	188.37	0.00	0.00	178.39	0.00	0.00	0.00
II	64.76	0.00	0.00	45.18	0.00	0.00	0.00
Ш	149.28	0.07	0.00	144.79	0.00	0.00	0.00
IV	597.64	8.89	0.00	585.18	0.00	5.00	0.00
V	117.29	7.14	0.00	108.19	0.00	0.02	0.00
VI	84.69	0.00	0.00	84.34	0.14	0.00	0.00
TOTAL	1,202.04	16.10	0.00	1,146.07	0.14	5.02	0.00

DISTRICT	TO REC	TO ROAD	TO SH	TO U	TO V	TO WW
I	0.00	0.00	0.00	0.00	0.16	0.00
Ш	0.00	0.00	0.00	0.00	0.01	0.00
III	0.00	0.10	0.00	0.16	2.15	0.00
IV	0.04	1.03	0.00	0.45	4.06	0.00
V	0.05	0.00	0.00	0.00	3.54	0.14
VI	0.00	0.35	0.00	0.00	0.00	0.00
TOTAL	0.09	1.48	0.00	0.60	9.92	0.14

2.5.5 Parks and Open Spaces

Currently, the city has a total of 632 parks comprising of developed undeveloped parks. These are primarily subdivision open spaces intended for park functions which have been turned over to the City Government by subdivision developers or homeowners' associations. For major parks, the city boasts of the Quezon Memorial Circle and the Ninoy Aguino Parks and Wildlife which cover a combined total area of 42.29 hectares. Too, the city has "Special" Parks which include the La Mesa Watershed (2,569.41 has.), the UP Arboretum (3.57 has.), and recreational greens like the Capitol Golf and Country Club and the QC Sports Complex and the Veteran Memorial Hospital and the Camp Aguinaldo Golf Course. Though these may be added to the physical inventory, the same cannot be fully considered as city parks due to their limited accessibility to the public. The land area of open spaces in the city has shown a slight decline over the past decade. Decreasing from 241.80 hectares in 2009 (as recorded in the CLUP 2011-2025) to 166.67 hectares in 2022, based on recent GIS mapping. This reduction in open spaces is partly attributed to the conversion of these areas into residential zones. Notably, during this period, the National Housing Authority (NHA) developed a housing project in Barangay Tandang Sora.

Table GP-11: Status of Parks and Open Spaces. QC, by District, 2022

	Developed		Ur		
District	With Deed of Donation	Without Deed of Do- nation	With Deed of Donation	Without Deed of Donation	Total
- 1	33	11	37	7	88
II	13	15	5	45	78
III	35	14	8	23	80
IV	31	23	21	17	90
V	62	31	11	50	154
VI	52	33	5	50	141
Total	226	127	87	192	632

Source: PDAD

A detailed review of GIS maps further reveals that some portions of the city's open spaces, particularly in Barangays within Districts V and VI may have been encroached upon by adjacent residential structures. Additionally, there are significant instances where open spaces have been occupied by informal settlements. This is especially evident in areas like Don Carlos Subdivision, Highland Subdivision, Bankers Ville and Empire View Park in Barangay Payatas, as well as in portions of Barangays Fairview and Sta. Lucia.

2.6 SERVICE UTILITIES

2.6.1 Water Supply

Like the rest of Metro Manila, Quezon City gets its water from the Metropolitan Waterworks and Sewerage System (MWSS) through itsprivate distribution concessionaires: Maynilad Water Services, Inc. (MWSI) which serves the north and western half and Manila Water Company, Inc. (MWCI) which caters to the city's south and eastern part.

MWSI covers 381,166 water service connections comprising 67% of total

connections in the city, while MWCI has 184,450 water service connections or 32%. In terms of service connections, data from MWSI and MWCI as of December 2022 show that a total of529,037 domestic households and semi-businesses (93.5%) were served. Non-domestic consumers including commercial and industrial connections account for a total of 36,579 connections (6.5%). (See Table GP-12)

The same concessionaires provide sewerage services with MWSI servicing 81,786

(56%) and MWCI for 65,530 accounts or 44%. Domestic consumers account for 90% and non-domestic accounts for 10% of total sewerage service provision. Desludging services are offered to a total of 72,061 domestic consumers with MWCI covering 58% and MWSI servicing 42%.

Table GP-12: Water and Sewerage Service Connections, QC: 2022

SERVICE	CONSUMER TYPE	MAYNILAD WATER SERVICES, INC.	MANILA WATER COMPANY, INC.	TOTAL PER CONSUMER TYPE
Water Service	Domestic (includes Semi- business)	359,300	169,737	529,037
Connec- tion	Non-domestic (includes Commercial and Industrial)	21,866	14,713	36,579
	TOTAL	381,166	184,450	565,616
Sewerage Service	Domestic (includes Semi- business)	81,387	51,607	132,994
Connec- tion	Non-domestic (includes Commercial and Industrial)	399	13,923	14,322
	TOTAL	81,786	65,530	147,316
Desludg- ing	Domestic (includes Semi- business)	29,958	42,103	72,061

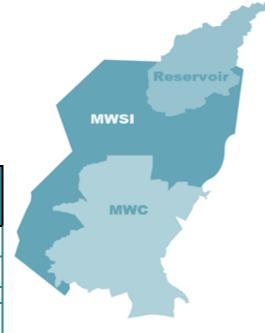


Figure GP-12: Water Supply Map

Source: MWSS

In terms of average billed volume, the amount of water sold per month by MWSI covers 52% or a total 8.81 million cubic meters (MCM), while MWCI accounts for 8.16 MCM (48%) for a combined total of 16.97 MCM. Residential consumers recorded the biggest billed volume (73.10%), followed by commercial consumers (16.07%), and by semi-business (7.99%), while industrial users consumed the least quantity (2.84%).(See Table GP-13)

There are four (4) water treatments plants operated by Maynilad Water Services, Inc. (MWSI) and Manila Water Company, Inc. (MWCI) in the city. These include the La Mesa Water Treatment Plant I and La Mesa Water Treatment Plant II for MWSI and the Balara Water Treatment Plant II and Balara Water Treatment Plant II for MWCI. As for sewerage, there are twenty-seven (27) existing sewage treatment plants (STPs) (15 from MWSI, 12 from MWCI) mostly in the southern part of the city. Currently, both concessionaires are undertaking replacement of sewer lines in various locations across the city.

Table GP-13: Average Billed Volume -Amount of Water Sold per Month,

(in million cubic meters (MCM), QC: 2021

CONSUMER TYPE	MAYNILAD WATER SER- VICES, INC.	MANILA WATER COMPANY, INC.	TOTAL	P %
Residential	7.23	5.18	12.41	73.10%
Commer- cial	0.73	1.99	2.73	16.07%
Semi- Business	0.59	0.77	1.36	7.99%
Industrial	0.27	0.22	0.48	2.84%
Total	8.81	8.16	16.97	100%

Source: Metropolitan Waterworks and Sewerage System (MWSS)

The Manila Water Company, Inc. (MWCI) plans to undertake three (3) sewerage system projects and one (1) catchment project that will service various Metro Manila cities including Quezon City. One of the three sewerage projects, Combined QC North and QC West Sewerage System Project will include the construction of Sewerage Treatment Plant (STP) at Project 6, Quezon City. The QC South area will be serviced by the proposed STP at Mandaluyong City as stated in the Combined Mandaluyong West, QC South and SJ South sewerage system project

while the QC East area will be serviced by the proposed STP at Marikina City with site location around Marikina Riverbanks area, as stated in the QC East Sewerage System Project.

2.6.2 Power Supply

Manila Electric Company (MERALCO) adequately serves the electric power requirements of the City. Three (3) power transmission lines, two from north Luzon and one from south Luzon, of MERALCO/National Grid Corporation of the Philippines (NGCP) pass within the City terminating at Balintawak and Galas delivery point stations. There are thirteen (13) MERALCO sub-stations across the city.

2.6.3 Communication

From 2022, the City has three (3) major mobile service providers including Philippine LongDistance Telecommunications (PLDT)/Smart Group, Globe Group, and DITO Telecommunity Corporation. The latter started its commercial operations as a major telecommunications company in the country in March 2021. A new classification for a service provider was identified under Cable Service Provider for which Sky Cable Corporation is listed as a cable Internet provider with business address located in Quezon City.

Table GP-14 Internet Service Providers, QC: 2022

1	Philippine Network Foundation, Inc.	10	Cubiscomm Signal Sales, Inc.
2	Commworks, Inc.	11	BT Industries Inc.
3	Pil-Chi Telecoms, Inc.	12	HML Technologies and Services, Inc.
4	Three Lights Management & Consultancy Corp.	13	Neo-Tech Asia Distribution, Inc.
5	Mycloud Corporation	14	Stellarsat Solutions Inc.
6	Seven E Komp Tek Corp.	15	Cyber Peers Wireless Internet Services Co.
7	Tic Network Solutions Corp.	16	Teranet Wired Internet Services
8	Iptech Solution Provider, Inc.	17	Dikwis Network and Data Solutions
9	Telkomserv Corporation		
So	urce: NTC		

In addition, Table GP-14 lists seventeen (17) Internet service providers with valid Value-Added Services Certificate of Registration from the National Telecommunication Commission (NTC) and with business addresses also registered in the city.

In 2021, the city government partnered with a private telecommunications company to provide free 30 to 60 minutes daily Internet connectivity in more than 3,500 hotspot sites including business establishments, hospitals, public markets, schools, transportation terminals, public parks, and barangay halls throughout the City.

In terms of the broadcast media, a total of fourteen (14) local television networks are in Quezon City, as of 2022. Of which, four (4) are digital channels and ten (10) are analog channels including GMA Network in EDSA corner Timog Avenue, TV5 in San Bartolome, Novaliches, Radio Philippines Network in Panay Avenue, the state-owned People's Television Network in Visayas Avenue, and Intercontinental Broadcasting Corporation in San Francisco Del Monte (See Table GP-15).

Table GP-15: Television Broadcast Stations, QC: 2022

Type*	Company	Call- Sign	Chan- nel
TV	People's Television Network, Inc.	DWGT	4
DTV	People's Television Network, Inc.	DWGT	14
DTV	People's Television Network, Inc.	DWGT	42
TV	ABC Development Corp.	DWET	5
TV	GMA Network, Inc.	DZBB	7
DTV	GMA Network, Inc.	DZBB	15
TV	Radio Philippines Network, Inc.	DZKB	9
TV	Intercontinental Broadcasting Corp.	DZTV	13
TV	Eagle Broadcasting Corp.	DZEC	25
TV	GMA Network, Inc.	DWDB	27
TV	Swara Sug Media Corporation	DWAQ	39
DTV	Swara Sug Media Corporation	PA	43
TV	Interactive Broadcast Media, Inc.	DWTE	47
TV	Christian Era Broadcasting Service International, Inc.	DZCE	49

^{*}TV means analog type TV; DTV means digital TV

2.7 TRANSPORTATION

2.7.1 Road Network

Quezon City has a cumulative road kilometerage of 2,328.22 kilometers, which accounts for a 3.85-kilometer increase from 2018 to 2022. The current road-to-land area ratio, on the other hand, is pegged at 16.71 kilometers per 100 hectares (excluding the reservoir) (See Table GP-16).

Table GP-16: Road Kilometerage and Road-to-Land Area Ratio* Per District, Quezon City: 2018 and 2022

District	Area (has)	2018		20)22	Increase/Decrease (2018 through 2022)		
District	District Area (rias)	km	Ratio (per 10 has.)	km	Ratio (per 10 has.)	km	Ratio	
I	1,959.39	325.27	16.60	325.27	16.60	-	-	
II	2,182.37	375.62	17.21	375.84	17.22	0.22	0.01	
III	2,184.82	341.17	15.62	341.31	15.62	0.14	0.01	
IV	2,341.89	353.85	15.11	354.5	15.14	0.65	0.03	
V	2,802.57	514.57	18.36	516.97	18.45	2.4	0.09	
VI	2,197.39	368.69	16.78	370.53	16.86	1.84	0.08	
Total	13,668.43*	2,279.17*	16.67	2,284.42*	16.71	5.25	0.22	

^{*}Reservoir is excluded.

Source: Quezon City Planning and Development Office (CPDO)

Of the total additional roads constructed from 2018 to 2022, approximately 0.57 kilometers (15%) were categorized as primary arterial roads, while around 3.26 kilometers (85%) were either secondary, alternate, collector, tertiary, or service roads. Tertiary or distributor roads are used for access to properties (See Table GP-17).

Table GP-17: Road Kilometerage per Category, Quezon City: 2016, 2018, 2022

Category	2016		2018		2022		Increase/ Decrease (2018 to 2022)	
	Km	%	Km	%	Km	%	Km	
Primary	160.11	6.97	162.27	6.98	162.84	6.99	0.57	
Secondary	160.74	7.00	161.05	6.93	161.04	6.93	-	
Alternate	68.20	2.97	68.63	2.95	68.64	2.95	0.01	
Collector	426.74	18.57	428.82	18.45	429.31	18.44	0.49	
Tertiary	1,285.47	55.95	1301.2	55.98	1303.98	56.01	2.78	
Service	196.33	8.55	202.42	8.71	202.41	8.71	-	
Total	2,297.59	100.00	2,324.39	100.00	2,328.22	100.00	3.85	

Source: CPDD, Geographic Information System (GIS)

Of the total kilometerage of 2,328.22 kilometers, 214.93 kilometers or 9.23 % are classified as national roads, 945.79 kilometers or 40.63% are city roads, 979.79 kilometers or 42.08 % are privately-owned roads and 187.58 kilometers or 8.06% are barangay roads (See Table GP-18).

Table GP 18: Road Kilometerage Per Category and Classification (per km), QC: 2022

Category	National Road	City Road	Private Road	Barangay Road	Total
Primary Road	154.3	2.85	5.69	0	162.84
Secondary Road	42.33	92.53	16.07	10.11	161.04
Alternate Road	4.9	58.25	4.41	1.08	68.64
Collector Road	6.96	205.54	173.19	43.62	429.31
Tertiary Road	3.86	578.35	591.65	130.13	1,303.98
Service Road	2.59	8.4	188.78	2.65	202.41
Total	214.93	945.92	979.79	187.58	2,328.22
Percentage	9.23	40.63	42.08	8.06	100

Source: Quezon City Planning and Development Department

The Department of Public Works and Highways (DPWH) oversees and maintains the national roads while the City Engineer's Office takes care of city roads. Maintenance and improvement of private roads are the responsibility of their respective owners, developers, or homeowners' associations.

The road growth pattern is generally an inward expansion from the existing primary roads like Quirino Highway, Commonwealth Avenue, and Tandang Sora Avenue, to inner areas where most of the vacant lands are situated. The construction of a new elevated 18.8-kilometer toll expressway passing through the city connecting North and South Luzon Expressways was undertaken to decongest traffic not only in the City but in Metro Manila particularly EDSA (C-4) and C-5-Katipunan Avenue.

2.7.2 Traffic Volume and Congestion Prone Areas

Based on the traffic count of Metro Manila Development Authority - Traffic Engineering Center (MMDA-TEC) in 2022, Epifanio Delos Santos Avenue (EDSA) is the most traveled thoroughfare in the city with an average traffic volume of 385,097 vehicles per day (vpd), followed by Commonwealth Avenue with 346,184 vpd, Quezon Avenue with 280,607 vpd, Katipunan Avenue / C-5 with 211,819 vpd, and Aurora Boulevard with 119,625 vpd.(See Table GP-19).

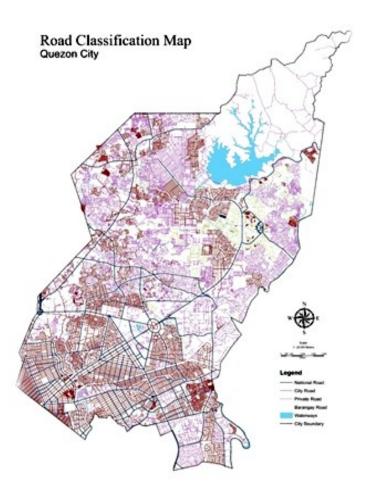


Figure GP13: Road Classification Map, QC: 2022

Table GP-19: Annual Average Daily Traffic (AADT), 2022

Road Name	Car	PUJ	UVE	Taxi	PUB	Truck	Trailer	MC	Tricycle	TOTAL
EDSA	202,764	1,803	2,475	18,186	5,588	2,295	119	151,847	20	385,097
Commonwealth Ave	153,029	5,520	4,223	16,026	4,614	7,336	439	154,369	628	346,184
Quezon Avenue	130,465	2,806	2,963	13,003	853	4,088	314	125,966	149	280,607
Katipunan Avenue /C-5	93,513	405	2,668	4,123	789	8,993	1,151	100,133	44	211,819
G. Araneta Avenue (C-3)	59,994	14	16	2,758	26	2,639	507	44,877	1,475	112,306
Aurora Boulevard	43,305	7,954	2,121	5,600	522	1,988	42	57,926	167	119,625
A. Bonifacio Avenue	38,715	3,202	72	1,319	1,593	7,880	1,458	30,308	265	84,812
AVERAGE	103,112	3,101	2,077	8,716	1,998	5,031	576	95,061	393	220,064
PERCENTAGE	46.86	1.41	0.94	3.96	0.91	2.29	0.26	43.20	0.18	

Source: Metropolitan Manila Development Authority- Traffic Engineering Center (MMDA-TEC)
Public Utility Jeepney (PUJ), Utility Vehicle Express (UVE), Public Utility Bus (PUB), Motor Cycle (MC)

Deficiency primary and in secondary roads in several parts of the city is evident in the prevalent heavy traffic along the few existing thoroughfares and the frequent occurrence of congestion at major intersections. Figure GP-13 illustrates the traffic choke points and Table GP-20 lists the traffic prone areas in the city.

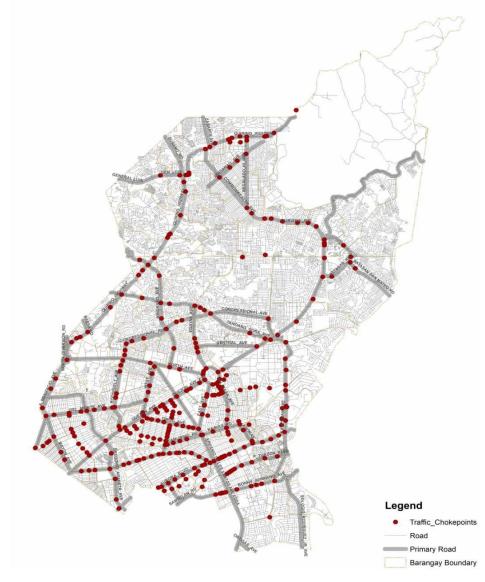


Figure GP-14: Traffic Lights and Choke Points Map, QC: 2022

Road/Street	Location / Intersection
Esteban Abada Street	Alvero St., Dela Rosa St., Xavierville Ave.
Anonas Road	Chico St., Kamias Rd., Molave St., V. Luna Rd. Ext.
G. Araneta Avenue	Bayani St., Caliraya St., Palanza St.
Aurora Boulevard	15th Ave., 20th Ave., Aguinaldo St., Annapolis St., Anonas Ave., Balete Drive, Benitez St., Boston St., Broadway St., Cambridge St., Doña Hemady St., EDSA, F. Castillo/St. Joseph, Gilmore St., Imperial St., J.P. Rizal Avenue, Katipunan, Madison St., N. Domingo St., Pinatubo St./ Manalo St., PSBA (U-Turn Slot), SM Centerpoint, St. Mary St., Westpoint St., Yale St.
Banawe Avenue	Calamba, Dapitan, Don Manuel Agregado, Linaw, Maria Clara, P Florentino
Benitez Street	Mariposa St.
Boni Serrano Avenue	15th Ave., 18th Ave., 1st Ave., 20th Ave., 2nd Ave., 3rd Ave., 4th Ave., 8th Ave., Camp Crame Gate, Mariposa St.
Bonifacio Avenue	7th Ave., Calavite, Del Monte Ave, Edsa/ Balintawak, Marvex Dr., Mauban St.
Chuatoco Street	Sct. Reyes St., Sct. Tobias St.
Commonwealth Avenue	Atherton st, Bicol leyte st., Capitol dr., Central Ave, Don Antonio st, Don fabian st, don jose/doña carmen st., Fairlane st, IBP/ Litex, IBP/SANDIGAN/BF, Luzon ave, Mindanao ave ext, Pearl drive, Regalado ave, T. Sora ave., Villonco st, West riverside, Winston st, Zuzuarregi st., Philcoa, Loading/Unloading Bay
Congressional Avenue	Abra St., Cagayan St., Cherry Foodarama, Jupiter St., Luzon Ave., Shorthorn St., Spring St., T. Sora Ave., Villa Socorro St.
CP Garcia Avenue	Delos Reyes St., Emilio Jacinto St., Velasquez St.
Del Monte Avenue	Araneta Ave, Banawe St, Corumi, D.Tuazon, Del monte, Sto. Domingo St, Tolentino, West Riverside st
Eugenio Lopez Drive	Mother Ignacia St.,Panay Ave.
E. Rodriguez Sr. Ave- nue	Araneta Ave., Balete Drive, Banawe St., Betty Go Belmonte St., Broadway St., Cordillera St., D. Tuazon St., Egea St., Gilmore St., Hemady St., Judge Jimenez St., La Filonila St., Monte De Piedad St., New York St., Sta. Cecilia St. Sta. Ignaciana St., T. Gener St., T. Morato Ave., Victoria St./St. Luke's Hospital
East Avenue	Agham Rd., Agham Road/BIR, EDSA Heart Center, Matalino St., QC Hall Gate 1, QC Hall Gate 3 V. Luna Rd.
IBP Road	Fillinvest 1, Fillinvest 2, HOR South gate, Ilang ilang st, Sn. San mateo rd
Kalayaan Avenue	Ermin Garcia St., Gate 5/Matino St., Matalino St., Mayaman St., QC Hall G-7, V. Luna Rd.
Kamias Road	EDSA/Mercury, K-H, K-J
Kamuning Road	11th Jamboree St., EDSA, Judge Jimenez St., Sanghio St., T- Gener St.
Katipunan Avenue	Ateneo G-5, Ateneo Gate 3, C.P. Garcia St., H. Ventura (Balara Fil.), Magsaysay St., Miriam College (U-Turn Slot), Santolan Road, U-Turn Slot UP Town Center Mangyan Street, White Plain/Temple Drive
K-J Street	10 th , 8th
Maginhawa Street	Magiting St., Mayaman St.

Table GP-20: Traffic Prone Areas, Quezon City: 2022

Road/Street	Location / Intersection
Matalino Street	Maginoo St., Malakas St., Masikap St., Matatag St.
Mayon Avenue	Maria Clara
Mindanao Avenue	Congressional Ave., North Ave., Road 1, Road 20, U-Turn (SB Road), U-Turn (Sauyo)
Mo. Ignacia Street	Sct. Magbanua St., Sgt. Esguerra St.
N. Domingo Street	Balete Dr., Broadway St., Gilmore St., Hemady St./ Horseshoe Dr., Seattle St.
North Avenue	Agham Rd., SM North/EDSA
NS Amoranto Street	Banawe, bulusan, CDC, Isarog, Mayon, Sto. Domingo
P. Tuazon Boulevard	10th Ave., 12th Ave., 15th Ave., 20th Ave., 7th Ave., 8th Ave., 9th Ave., Benitez St., J.P. Rizal St., Lakandula St., N. Domingo St.
Panay Avenue	Sct. Borromeo St., Sct. Magbanua St., Sct. Reyes St.
Quezon Avenue	Roosevelt/ Fishermall, Agham Road, Banawe St., EDSA, EDSA/Centris, Roces Avenue, Sct., Albano/Examiner, Sct. Borromeo (U-Turn), Sct. Borromeo St., Sgt. Esguerra St., Underpass, Wildlife Loading/Unloading
Elliptical Road	DA Loading Bay/North Ave., Kalayaan Avenue, Maharlika St., NHA Loading Bay, North Avenue Philcoa/U Turn Slot, Quezon Avenue, Visayas Avenue
Quirino Highway	Ascension Ave ext, Balonbato, Belfast, Belfast/sm parking, Camachile, Dela costa Subd, Dumalay, Forest hills Subd., Gen luis / Buenamar St, Gen Luis Damong Maliit, Gen Luis (Nova Bayan), Howmart Rd., Jordan Subd., Kingfisher, Kingspoint, Leland Dr., Maligaya, Mindanao Ave., Mindanao ave. Ext, Our Lady of Mary church, P Dela Cruz St., Piko St., QCPU, Regalado Ave ext., Robinson, Rockville, Rodriguez Dr., Sacred heart Subd, Sagittarius St., Sarmiento, Sm Faiview, SM Novaliches, St. Jude Subd, T. Sora Ave., Zabarte Ave.
Regalado Avenue	Bristol, Mindanao Ave Ext, Mindanao Ave Ext. / Belfast, SM Fairview
Republic Avenue	Regalado ave, Sauyo Rd
Roces Avenue	Mo. Ignacia St., Panay Avenue, Sct. Reyes St., Sct. Santiago St., Sct. Tobias St., Sct. Tuazon St.
Roosevelt Avenue	Araneta Ave., Baler St., Del Pilar St., Examiner, Gen Lim, Mangga st., Muñoz Market / Dangay St., Pitimini, West Ave
Sgt. Esguerra Street	E. Lopez St., Panay Ave.
Tomas Morato Avenue	E. Lopez St., Kamuning Rd., Roces Ave., Sct. Bayoran St., Sct. Borromeo St., Sct. De Guia St., Sct. Delgado St., Sct. Fernandez St., Sct. Fuentebella St., Sct. Limbaga St., Sct. Rallos St.
Tandang Sora Avenue	Banlat Rd., GSIS Drive, Himlayan Rd., Mindanao Ave., Sn. Miguel St., Tierra Bella Subd., Tierra Pura Subd., Visayas Ave.
Timog Avenue	11th Jamboree St., M. Ignacia St., Panay Ave., Samar St., Sct. Tobias St., Sct. Torillo St., Sct. Tuazon St., Sct. Ybardolaza St.
Visayas Avenue	Central Avenue, Fisheries, Forestry, Road 1, Road 8
West Avenue	Baler, Del Monte Ave, Examiner, Paramount, St. Vincent School, Zamboanga
Other Areas of Concern	Chico St./Langka St., Maharlika/Masaya, Mayaman St./Matahimik St., V. Luna/Malakas St.

Source: QC Traffic and Transport Management Department



2.7.3 Transportation

Transportation in the city is entirely land-based. According to the 2022 MMDA-Traffic Engineering Center (TEC) data, private transport dominates the city with 46.86% of the total volume, while public utility vehicles (PUVs) including buses, jeepneys, taxis, UV express, and tricycles comprise 7.40%, with industrial or commercial vehicles such as trucks and trailers at 2.55%. The total volume of PUVs is distributed among PUJ (19.04%), UV express (12.75%), taxi (53.52%), bus (12.27%), and tricycles (2.41%).

Two (2) Light Rail Transit (LRT) systems operate along EDSA (Line 1) and Aurora Boulevard (Line 2). MRT Line 3 along EDSA carries an average of 273,141 passengers per day, as of 2022 records. LRT Line 2 along Aurora Boulevard with seven (7) stations in this City transports about 108,726 passengers daily. Two (2) railway projects that pass through the city are underway: 1) the MRT Line 7 from North Avenue to San Jose Del Monte City in Bulacan; and 2) the Metro Manila Subway Project (MMSP), a 33-kilometer underground railway system that will pass through Quezon City, from Valenzuela City to NAIA in Pasay City. Also, in progress is the construction of a common station, the Unified Grand Central Station, along EDSA corner North Avenue that will connect LRT 1, MRT 3, MRT 7, and the nearby MMSP.

Table GP-21: Transport Programs and Projects in QC

PROGRAM/ PROJECT	DESCRIPTION	STATUS	LEAD AGENCY
Metro Manila Skyway Stage 3	The Metro Manila Skyway Stage 3 Project (MMSS3) is an elevated expressway from Buendia, Makati City to the North Luzon Expressway in Balintawak, Quezon City with a length of about 18.83 kilometers.	 (As of June, 2023) Partial opening of Skyway Stage 3 to motorists for the main line from Buendia to Balintawak started on December 29, 2020. Inauguration and formal opening held on January 14, 2021. Status of Construction Section 3: Ramon Magsaysay Ave. to Quezon Ave. (99.74%) Section 4: Quezon Ave. to Balintawak (97.03%) Section 5: Balintawak to NLEX Footbridge (99.99%) Overall Construction accomplishment (including Section 2A' (94.02%) On-going construction, with overall progress rate 	DOTr-TRB, Citra Corporation
MRT / Project	North Avenue to the City of San Jose Del Monte in Bulacan that will traverse North Avenue, QMC, Commonwealth Avenue, Regalado Avenue and Quirino Highway in Quezon City.	of 69% (as May 2024). The first 12 stations (QC) are targeted to be operational by December 2025.	Miguel Corporation
Metro Manila Subway Project	A 28.33-kilometer underground rapid transit line which will run northsouth between the cities of Quezon City, Pasig, Makati, Taguig and Parañaque.	 On-going construction of Quirino Highway, Tandang Sora, North Avenue and Quezon Avenue stations. Right-of-way acquisition activities for East Avenue, Anonas and Camp Aguinaldo stations. Coordination meetings with the Quezon City Local Government regarding Transit-Oriented Development at East Avenue Station. 	DOTr, JICA

Table GP-21: Transport Programs and Projects in QC

PROGRAM/ PROJECT	DESCRIPTION	STATUS	LEAD AGENCY
NLEX Harbor Link Project and Cir- cumferential Road 5 (C-5) – Segment 8.2	An 8.30-kilometer 4-lane divided (2x2) expressway from Segment 8.1 at Mindanao Avenue, traversing westward to Republic Avenue in Quezon City.	(As of May, 2023)Right-of-Way accomplishment for Section 1A (Mindanao Ave. to Quirino Highway): 77.10%	DPWH
MRT 4 Project	A proposed rail line that will traverse three (3) cities in the eastern district of Metro Manila, namely Mandaluyong City, Quezon City and Pasig City; and two (2) municipalities in the second district of Rizal Province, namely Cainta and Taytay.	Conducted coordination meeting with the Quezon City Local Government and stakeholders meeting	DOTr
MRT 11 Project	Proposed 18 kilometer elevated Metro Railway Transit System from EDSA, Balintawak, Quezon City to Caloocan City up to San Jose Del Monte, Bulacan.	DOTr reviewing the proposal and seeking the expertise of Internation- al Finance Corp. (IFC) of the World Bank to provide technical assis- tance	DOTr
Southeast Metro Manila Express- way (SEMME/C6) Project	Toll road project with approxi- mately 32.66 kilometers that is intended to run from Skyway/FTI in Taguig City to Batasan Complex	Under construction, portion of Section 1: Skyway/FTI – C5/Diego Silang, on-going civil works; acquisition of right-of-way is currently in progress for Section 1B	DPWH, Citra Corporation
Metro Manila Interchange Con- struction Project, Phase VI - North Avenue / Minda- nao Avenue Inter- change	Part of the Metro Manila Inter- change Construction Project which composed of an underpass and a flyover, and a road widening, mostly along North Avenue.	 (As of March 19, 2024) Updating of Detailed Engineering Design. Currently coordinating with the affected stakeholders in line with the proposed road widening. Currently coordinating with DOTr (MRT-7 and MMSP) for harmonization of some technical details. 	DPWH
Metro Manila High-Quality Bus Services	An improvement in bus-based public transport in Metro Manila starting on three corridors – Quezon Avenue, C-5 and Ortigas-Aurora. Project components include fixed route service, accessible and modern buses, improved travel time and speed, new and attractive bus stops, enhanced interchange facilities, and multiple depots.	On-going coordination with the Quezon City Local Government	DOTr, World Bank Group

Source: DOTr, DPWH

Figure GP-15: Bicycle Lane Network Map, 2022

The limitation on public transportation during the health pandemic paved the way for the city to initiate its Quezon City Bus Augmentation Program (QCity Bus). Since December 2020, the QCity Bus had served around a total of 11.08 million passengers from the year 2020 to 2022 in its regular trips. It continuously provides free bus services to the public through its eight (8) major routes. (See Table GP-22)

Table GP-22: Quezon City Bus Annual Ridership, 2020-2022

Route No.	2020 (December)	2021	2022
1	15,605	607,384	1,095,163
2	38,646	999,032	1,631,083
3	3,917	166,878	197,891
4	16,280	621,358	1,327,300
5	10,191	455,374	719,431
6	4,786	281,612	370,151
7	7,151	391,298	509,891
8	10,665	564,402	1,037,598
Total	107,241	4,087,338	6,888,508
Average Daily	13,405	510,917	861,064

Source: Traffic and Transport Management Department

To promote active transportation among its citizens and contribute to the reduction of greenhouse gas emission, the City developed a bicycle lane network from zero in 2009 to a total length of 154.67 kilometers, of as 2022. Specifically, the Quezon City Bicycle Lane Network has a total length of 102.57 kilometers. while the National Government Bicycle Lanes span a total length of 52.10 kilometers (See Figure GP-15).

According to 2022 data from the QC DPOS Green Transport Division, Class 2 spans 93.3 kilometers while Class 3 runs for 9.27 kilometers in the QC Bike Lane Network.

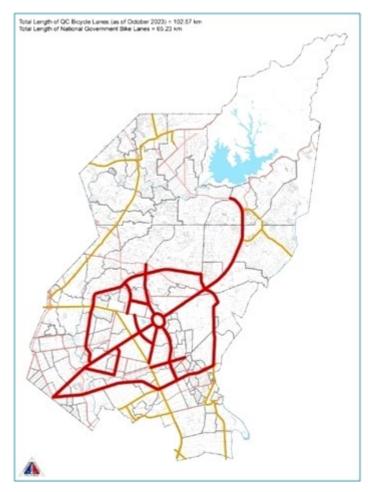


Figure GP-15: Bicycle Lane Network Map, 2022



DEMOGRAPHIC PROFILE AND SOCIAL DEVELOPMENT

The Demographic and Social Development Profile discusses sub-sectors on Population, the Status of Well-Being which includes Health, Education, Social Welfare Services, Housing, Sports, and Recreation and Protective Services.

3.1 POPULATION

3.1.1 Population Size and Growth Rate

Population Size

The 2020 official census conducted by the Philippine Statistics Authority (PSA) records Quezon City with a population of 2,960,04, an increase of 23,932 persons or 0.82% compared to the 2015 population of 2,936,116. Notably, Quezon City has the largest population among the cities in National Capital Region (NCR), comprising almost one-fourth (21.95%) of the National Capital Region's population of 13.84 million and 2.7% of the 109.98 million Philippine population (See Figure DS-1). Among the 33 highly urbanized cities (HUCs) in the country, the city also holds the top rank in terms of the population size.

The population of the city has consistently shown significant growth over the years, as evident from various census years. The city's population in 1939, the population stood at 39,013 persons. Remarkably, the city surpassed the milestone of one million residents in 1980, recording a population of 1,165,865. Further displaying its rapid expansion, the city crossed the two million mark in 2000 with a population of 2,173,931. In the most recent PSA censuses, the city's population surged to nearly three million,

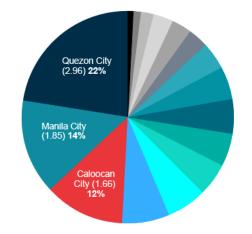
reaching 2,936,116 in 2015 and 2,960,048 in 2020 (refer to Table DS-1 for further details). These figures underscore the city's remarkable growth trajectory, highlighting its continuous rise in population over the years.

Growth Rate

The city's annual population growth rate has seen varying patterns over time. The highest growth rate was recorded

between 1939 and 1948 at 12.20%, decreasing to 11.32% from 1948 to 1960 and decreasing further to 6.60% between 1960 and 1970. From thereon, the annual population growth rate gradually decreased to 4.87% in the period of 1970-1975; 4.03% between 1975 -1980; 3.64% in the years 1980-1990; and 3.60% by 1990 and 1995. The city recorded a significant decrease at 1.92% in 1995-2000; but slightly increased to 2.92% in 2000-2007, followed by a slight decrease to 2.42% (2007-2010). The lowest growth rates were observed in the last two censuses, with 1.17% in 2015 and 0.17% in 2020. This trend highlight the fluctuating nature of population growth and has been criticized for being inaccurate enumeration since the Philippine Census survey was conducted during the height of the COVID19 pandemic wherein some of the city's inhabitants have refused to be interviewed with worries of getting the virus or missed the survey because they were stranded in their respective provinces. This may be among the major challenges faced on the issues of accuracy and precision of the PSA survey which primarily affects the National Tax shares of the Local Government Units. (Refer to Table DS-1 for more details).

Viewing it in a larger geographical perspective, the city's current annual population growth rate of 0.17% appears relatively lower in comparison to the growth rate of the National Capital Region (NCR) at



LGU		
Quezon City	2.96	22%
Manila City	1.85	14%
Caloocan City	1.66	12%
Taguig City	0.89	7%
Pasig City	0.80	6%
Valenzuela City	0.71	5%
Parañaque City	0.71	5%
Makati City	0.63	5%
Las Piñas City	0.61	5%
Muntinlupa City	0.54	4%
Pasay City	0.44	3%
Mandaluyong City	0.43	3%
Malabon City	0.38	3%
Navotas City	0.25	2%
San Juan City	0.13	1%
■ Pateros	0.13	1%

Figure DS-1: Distribution of Population; Metro Manila: 2020

0.97%, as well as the country's growth rate of 1.63% *(refer to Figure DS-2)*. The city's growth rate is the second-lowest among the cities and municipalities within Metro Manila, with Navotas which recorded as the

lowest growth rate of -0.16%. This information underscores the city's relatively slower pace of population growth compared to both the regional and national averages, positioning it among the areas with the least population growth within Metro Manila.

At the current growth rate, the city's population doubling time is 408 years which is significantly longer compared to only 59 years in the 2015 census. This implies that the city's population is growing at a much slower pace and will take much longer time to double its population size if this trend continuous.

Table DS-1: Total Population and Growth Rate, by Census Year

Census Year	Total Population	Annual Growth Rate
1939	39,013	
1948	107,977	12.20
1960	397,990	11.32
1970	754,452	6.60
1975	956,864	4.87
1980	1,165,865	4.03
1990	1,666,766	3.64
1995	1,989,419	3.60
2000	2,173,931	1.92
2007	2,679,450	2.92
2010	2,761,720	2.42
2015	2,936,116	1.17
2020	2,960,048	0.17

Source: Philippine Statistics Authority

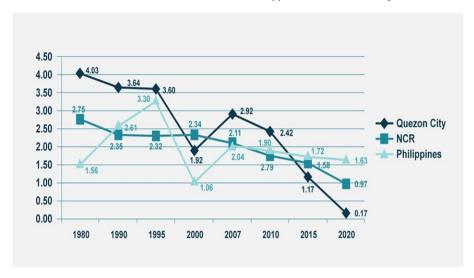


Figure DS-2: Annual Population Growth Rate in Various Census Periods; Quezon City: 1980-2020

Population Size and Growth Rate by District

In 2012, Republic Act 10170 restructured the city's districts, dividing it into six distinct areas. Among these, District II remains the most populous, with 688,773 residents (23.46% of the city's total population) in 2015, increasing to 738,328 residents (24.94%) by 2020, representing nearly a quarter of the entire city population. However, District V stands out as the fastest-growing district, with a population growth rate of 1.79% in 2015, rising to 2.27% in 2020. Notably, four of the six districts—Districts I, III, IV, and VI—experienced a negative growth rate in 2020. (Refer to *Table DS-2 for* detailed data.).

Table DS-2: Population Distribution and Growth Rate by District; Quezon City: 2010, 2015, 2020

DISTRICT	20	2010		2015		020	2010- 2015	2015-2020
DISTRICT	Pop'n	Percent (%)	Pop'n	Percent (%)	Pop'n	Pop'n Percent (%)	GROWTH RATE	GROWTH RATE
I	414,039	14.99	409,162	13.94	384,384	12.99	(-0.23)	(-1.31)
П	635,967	23.03	688,773	23.46	738,328	24.94	1.53	1.47
III	307,638	11.14	324,669	11.06	319,371	10.79	1.03	(-0.35)
IV	428,555	15.52	446,122	15.19	407,402	13.76	0.77	(-1.89)
V	488,172	17.68	535,798	18.25	596,047	20.14	1.79	2.27
VI	487,349	17.65	531,592	18.10	514,516	17.38	1.67	(-0.68)
TOTAL	2,761,720	100.00	2,936,116	100.00	2,960,048	100.00	1.17	0.17

Source: Philippine Statistics Authority (PSA)

Barangay Population and Growth Rate

At the barangay level, Barangay Commonwealth in District II remains the most populated, with 213,229 residents—a 7.54% increase from the 198,285 recorded in the 2015 census. On the opposite end, Barangay Bayaninahan in District III is the least populated, with only 613 residents, marking a significant 49.84% decrease from its 2015 population of 1,222.

Barangay Katipunan in District I exhibits the fastest growth rate among all 142 barangays, with an impressive increase of 31.9%. Its population surged from 2,818 in 2015 to 10,508 in 2020, reflecting a remarkable growth of 7,690 individuals or 73.18%. However, the majority of barangays

(64.08%), particularly those in Districts I, III, and IV, experienced a negative growth rate, ranging from -15.05% to -0.22%. This leaves only 51 barangays showing positive growth, with rates varying between 0.07% and 31.9%.

3.1.2 Population Density

The city's population density saw a slight increase from 18,222 persons per square kilometer in 2015 to 18,371 persons per square kilometer in 2020. While this represents a growth, it remains lower than the overall population density of Metro Manila, which stands at 21,202 persons per square kilometer.

District II stands out as the most densely populated district, with a population

Table DS-3: Population Density (person per km²); Quezon City, NCR and the Philippines: 2015 and 2020

AREA LAI	LAND ADEA ((mag2)	2015		2020		
	LAND AREA (km²)	POPULATION	DENSITY	POPULATION	DENSITY	
Quezon City	161.125	2,936,116	18,222	2,960,048	18,371	
NCR	636.000	12,877,253	20,247	13,484,462	21,202	
Philippines	300,000.000	100,981,437	337	109,035,343	363	

Source: Philippine Statistics Authority (PSA)

density of 33,831 persons per square kilometer. It is followed by District VI with 23,415 persons per square kilometer, and District V with 21,268 persons per square kilometer. On the other end, District III is the least dense, with 14,618 persons per square kilometer. This lower density is largely due to the presence of first classresidential subdivisions such as La Vista, White Plains, Corinthian Gardens, Blue Ridge, Green Meadows, and St. Ignatius, which contribute to the more spacious living environment in the area.

3.1.3 Natural Increase in Population

Table DS-4: Population Size and Density per District
Quezon City: 2015 and 2020

DISTRICT	AREA	20	15	2020		
	(SQ.KM.)	POPULATION	DENSITY	POPULATION	DENSITY	
I	19.59	409,162	20,886	384,384	19,621	
II	21.82	688,773	31,566	738,328	33,831	
III	21.85	324,669	14,865	319,371	14,623	
IV	23.42	446,122	19,057	407,402	17,396	
V	28.03	535,798	19,115	596,047	21,268	
VI	21.97	531,592	24,196	514,516	23,419	
Reservoir	24.44					
TOTAL	161.125	2,936,116	18,223	2,960,048	18,371	

Source: Philippine Statistics Authority (PSA)

The increase in the city's population is largely attributed to natural growth and in-migration. Natural increase, calculated as the difference between total live births and total deaths, accounted for 179,612 people, or 71.91% of the total population increase of 249,778 between 2015 and 2022. The remaining 28.09%, or 70,166 individuals, are presumed to have contributed through migration (see Table DS-5).

Data from the Philippine Statistics Authority's 2020 Census of Housing and Population supports this observation, noting that 16.6% of domestic long-distance movers and 7.6% of domestic short-distance movers have relocated to the National Capital Region (NCR). The 2018 National Migration Survey,

Table DS-5: Yearly Natural Increase of Population; Quezon City: 2015-2022

YEAR	ESTIMATED POPU- LATION	TOTAL YEARLY POPULATION	тот	YEARLY NAT- URAL IN- CREASE	
	LATION	INCREASE	BIRTHS	DEATHS	(BIRTHS- DEATHS)
2015	2,936,116				
2016	2,974,226	38,110	55,985	22,216	33,769
2017	3,014,042	39,816	56,197	22,104	34,093
2018	3,055,676	41,634	55,377	14,189	41,188
2019	3,099,208	43,532	52,892	14,848	38,044
2020	3,112,436	13,228	40,471	22,761	17,710
2021	3,148,947	36,511	33,183	27,559	5,624
2022	3,185,894	36,947	31,302	22,118	9,184
Т	OTAL	249,778	325,407	145,795	179,612
PERCENT OF	TOTAL INCREASE	100			71.91%

Source: Vital Health Statistics, Quezon City Health Department

conducted by the PSA and the University of the Philippines Population Institute, further highlights that employment opportunities are the primary drivers of internal migration to the area.

3.1.4 Household Size

The average household size in the city decreased to 4.0 members in 2020, down from 4.3 members in both 2010 and 2015. This suggests that the typical household now consists of a couple with two or three children, or includes other family members. Despite this decline, Quezon City's average household size remains slightly higher than the Metro Manila average, which stands at 3.8 members per household.

3.1.5 Age and Sex Composition

As of 2020, the household population of the city is predominantly young, with a median age of 27 years. The population is fairly evenly split by gender, with females making up 50.33% (1,485,013) and males comprising 49.67% (1,465,480).

According to the 2020 disaggregated household population data from the Philippine Statistics Authority (PSA), the child and youth population (ages 0-29) represents a significant majority, accounting for 54.83% (1,617,899) of the household population. Within this group, 291,124 individuals (9.87%) are aged 0-4, highlighting a substantial infant to young child demographic. A young population is often seen as both an asset, due to the potential for a robust future workforce, and a liability, as it requires increased resources and services to meet the needs of this age group.

The total labor force or working-age population (ages 15-64) in 2020 stands at 1,984,173, which is 67.25% of the total population. This group is also fairly balanced between genders, with 49.53% being male and 50.46% female.

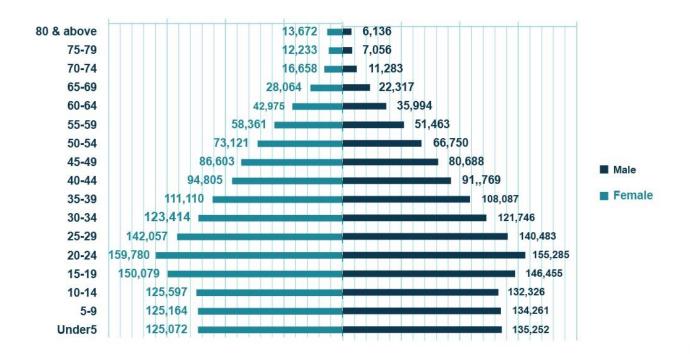


Figure DS-3: Population by Sex and Age Classification; Quezon City: 2020

Additionally, there are 234,675 individuals (7.95%) aged 60 and over, with a noticeable gender disparity in the elderly population: 58.16% are female, while 41.84% are male.

In 2020, the city's dependency ratio was calculated at 49 dependents for every 100 individuals within the working-age population. This ratio is predominantly driven by the young dependency segment, which accounts for 44 dependents, while the elderly dependency ratio is much lower, with only 7 dependents per 100 working-age persons.

Within the household population, there were 1,485,013 females in 2020, of which 54.52% (809,555) were of reproductive age (15-49 years old). The number of women in this age group is a crucial demographic indicator, as it suggests potential for increased birth rates in the future. Supporting this, the average annual fertility rate from 2018 to 2022 was recorded at 63.81 births per 1,000 women of childbearing age. This statistic highlights the ongoing reproductive potential within the population, which could impact future population growth.

3.1.6 Population Distribution by Marital Status, Religion, Language Spoken and Ethnicity

In 2020, among the 2,950,493 individuals aged 10 years and over in the household population, 51.10% were single, while 28.88% were married. The remaining population was distributed as follows: 14.70% were in common-law or live-in arrangements, 3.21% were widowed, and 2.09% were divorced or separated. Notably, females outnumbered males in nearly all marital status categories, except for the single category (see Table DS-6).

Table DS-6: Household Population 10 Years Old and Over by Civil Status and Sex; Quezon City: 2020

		•	Q			
MARITAL STA- TUS	TOTAL	%	MALE	%	FEMALE	%
Total	2,950,493	100.00	1,465,480	100.00	1,485,013	100.00
Single	1,507,765	51.10	783,238	53.45	724,527	48.79
Married	851,984	28.88	424,588	28.97	427,396	28.78
Common-law/ Live-in	433,619	14.70	216,649	14.78	216,970	14.61
Widowed	94,845	3.21	20,073	1.37	74,772	5.04
Divorced/ Separa ted/ Annulled	61,731	2.09	20,728	1.41	41,003	2.76
Unknown	549	0.02	204	0.02	345	0.02

Source: Philippine Statistics Authority (PSA)

The dominant religion in the city is Roman Catholicism, including Catholic Charismatic groups, which constitutes 86.42% of the population. The remaining religious affiliations are as follows: Iglesiani Cristo at 4.49%, Islam at 1.24%, and various other religious affiliations. Additionally, a small but noteworthy segment of the population, 0.07% or 2,047 individuals, identify as non-religious, reflecting a trend toward secularism or personal spiritual exploration (see Table DS-7).



Table DS-7: Total Population by Sex and by Religion;

RELIGIOUS AFFILIATION	TOTAL	%	MALE	%	FEMALE	%
Total	2,950,493	100.00	1,465,480	100.00	1,485,013	100.00
Roman Catholic						
Excluding Catholic	2,549,957	86.42	1,269,101	86.60	1,280,856	86.25
Charismatic						
Iglesia ni Cristo	132,418	4.49	66,513	4.54	65,905	4.44
Islam	36,599	1.24	18,621	1.27	17,978	1.21
Other Religious Affiliation	227,821	7.72	109,392	7.46	118,429	7.97
Not Reported	1,651	0.06	758	0.05	893	0.06
None	2,047	0.07	1,095	0.07	952	0.06

Source: Philippine Statistics Authority (PSA)

Tagalog is the most widely spoken language in the city, used by 52.33% of the population. Other prominent languages include Bisaya/Binisaya, spoken by 14.86% of residents; Bikol/Bicol, used by 8.04%; and Ilocano, spoken by 7.22%. The remaining population speaks a variety of other languages (refer to Table DS-8).

Table DS-8: Household Population by Ethnicity and Sex;

ETHNICITY	TOTAL	%	MALE	%	FEMALE	%
Total	2,950,493	100	1,465,480	100.00	1,485,013	100.00
Tagalog	1,544,032	52.33	762,230	52.01	781,802	52.65
Bisaya/Binisaya	438,314	14.86	216,161	14.75	222,153	14.96
Bikol/Bicol	237,174	8.04	120,087	8.19	117,087	7.88
Ilocano	213,602	7.22	107,933	7.37	105,669	7.12
Waray	130,530	4.42	65,882	4.50	64,648	4.35
llonggo	123,574	4.19	60,206	4.11	63,368	4.27
Pangasinan	54,564	1.85	27,874	1.90	26,690	1.80
Kapampangan	39,804	1.35	19,884	1.36	19,920	1.34
Cebuano	33,269	1.13	16,611	1.13	16,658	1.12
Maranao	20,308	0.69	10,361	0.71	9,947	0.67
Not Reported	2,351	0.08	1,076	0.07	1,275	0.09
Others	112,971	3.83	57,175	3.90	55,796	3.76

Source: Philippine Statistics Authority (PSA)

3.2 HEALTH

3.2.1 Health Status

3.2.2 Maternal Health

Ensuring the health of mothers and children begins with proper care from conception and continues through the postnatal period. Quality maternal care, including prenatal, natal, and postnatal services, is essential for safe motherhood.

Table DS-9: Summary of Vital Health Statistics;

	2019		2020		2021		2022	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate
Live Birth	67,555	21.67	54,251	17.43	43,663	14	42,950	13.50
Death	14,848	4.79	22,761	7.31	27,559	9	23,118	7.30
Neo-Natal Death	637	9.49	494	9.11	523	12	519	12
Infant Death	1,288	19.20	866	15.96	1,004	23	951	22
Maternal Death	14	20.87	53	97.70	167	73	72	168
Fertility Rate		73.2		61.6		49		48.60
Child Death	1,722	25.67	655	12.07	1,330	30.46	1,244	28.96

Source: Quezon City Health Department, Department of Health

In 2022, a total of 44,804 pregnant women received prenatal check-ups, surpassing the target of 54,011 by 9,207, or 17.05%. Notably, 83% of these women had their first prenatal visit during the first trimester. However, less than half of these women (48%) received the complete iron supplementation necessary to prevent or address iron deficiency anemia.

The administration of at least two doses of tetanus toxoid immunization (TT2+) in 2022 was provided to 67% of the target pregnant women, significantly higher than Metro Manila's coverage rate of 23.71%. This vaccination is crucial in preventing tetanus in newborns.

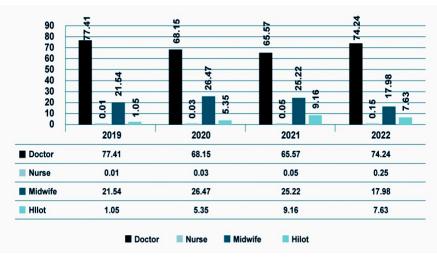
The birth rate in the city declined from 21.65 per 1,000 population in 2019 to 13.50 per 1,000 population in 2022. In 2022, 51.55% of births were male, slightly higher than the 48.45% female births.

Most deliveries (43,349) were attended by skilled health personnel, including physicians (74.24%), midwives (17.98%), and nurses (0.15%), making up 92.37% of deliveries. This is a slight increase from 90.84% in 2021. However, there was a notable rise in deliveries attended by traditional birth attendants

("hilots"), increasing from 1.05% (875 deliveries) in 2019 to 7.63% (3,831 deliveries) in 2022 (refer to Figure DS-4).

The statistics on deliveries attended by skilled personnel closely linked to the place of delivery. Figure DS-5 illustrates that 91.08% of births occurred in health facilities in 2022, with 69.95% in public and private hospitals and 21.13% in public and private lying-in clinics. This represents significant decrease 7.27% from the 98.35% of deliveries that took place in such facilities in 2019.

Conversely, home deliveries saw a dramatic increase of 337.83%, rising from 875 in 2019 to 2,956 in 2022. This surge is notable despite the city's prohibition on home births. The rapid rise in non-institutional deliveries can be largely



Source: Quezon City Health Department

Figure DS-4: Births Attended by Health Personnel,

Quezon City: 2020 – 2022



Source: Quezon City Health Department

Figure DS-5: Births by Place of Delivery, Quezon City: 2019-2022

attributed to the COVID-19 pandemic. With many public and private hospitals focusing on COVID-19 patients, pregnant women opted for home births to avoid exposure to the virus.

The city's maternal mortality rate has shown a troubling upward trend from 2019 to 2022. In 2019, the rate was 31.3 per 100,000 live births, translating to 21 maternal deaths. This rate increased significantly to 97.69 per 100,000 live births (53 maternal deaths) in 2020, and further surged to 167.19 per 100,000 live

births (73 maternal deaths) in 2021. In 2022, it remained high at 167.64 per 100,000 live births, with 72 maternal deaths. Compared to Metro Manila, the city's maternal mortality rate has been consistently higher from 2020 to 2022, although it was lower than the National Capital Region's rate of 43.17 per 100,000 live births in 2019 (see Figure DS-6).

Maternal deaths may also be attributed to the number of mothers who still deliver their babies through "Hilots". Pre-eclampsia with severe features, Uterine Atony/Postpartum



Source: Quezon City Health Department & Center for Health & Development. DOH-NCR Figure DS-6 Trends of Maternal Mortality Rate (per 100,000 Live Births), Quezon City and Metro Manila: 2019 - 2022

Hemorrhage, and confirmed COVID-19 positive were the first 3 primary causes of maternal deaths.

3.2.3 Child Health

The growth and development of a child are heavily dependent on maintaining sustainable and good health conditions. Without adequate care and nutritional support in the early stages of life, children are at a higher risk of mortality. It is essential for infants aged 0-11 months to complete their vaccinations against preventable diseases such Diphtheria, Polio, Tuberculosis, Measles, and Hepatitis B.

In 2022, a total of 56,677 children, or 97% of the targeted 58,456 infants, were fully immunized, a significant



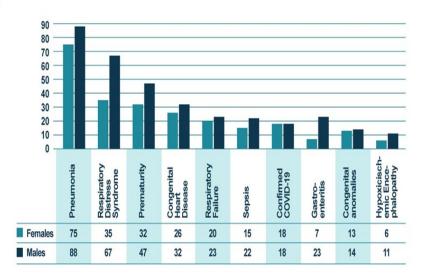
Source: Quezon City Health Department & Center for Health & Development. DOHNCR

Figure DS-7: Trends of Infant Mortality Rate (Per 1,000 Live Births), Quezon City and National Capital Region: 2019-2022

improvement compared to the 70.11% coverage (38,030 children) in 2021. Additionally, 85% of infants, or 46,137, were exclusively breastfed up to 6 months in 2022, a notable increase from 65.41% (35,477 infants) in 2021.

The infant mortality rate saw a significant decline from 19.20 per 1,000 live births in 2019 to 15.96 in 2020. However, the rate rose to 22.99 per 1,000 live births in 2021 and slightly decreased to 22.14 in 2022. This figure remains higher than the Metro Manila rate of 17.38 per 1,000 live births. Nationally, 14,645 infants (8,290 males and 6,355 females) died out of 1,413,107 live births in the Philippines in 2022.

The top five leading causes of death among infants aged 0-11 months in Quezon City are Pneumonia, Respiratory Distress Syndrome, Prematurity, Congenital Heart Disease, and Respiratory Failure. Pneumonia, in particular, has consistently ranked among the top causes of infant mortality since 2015. Other significant causes of infant deaths include Sepsis, confirmed COVID-19, Gastroenteritis, Congenital Anomalies, and Hypoxic Ischemic Encephalopathy. (*Refer to Figure 8* for detailed data.)



Source: Quezon City Health Department

Figure DS-8: Number of Infant Deaths by Type of Causes (Per 1,000 Live Births), Quezon City: 2022

In contrast, the mortality rate among children aged 1-4 years old over the past four years shows a concerning trend. Although there was a decline from 25.67 per 1,000 in 2019 to 12.07 per 1,000 in 2020, a sharp increase to 30.46 per 1,000 was observed in 2021. Additionally, the Under-Five Mortality Rate (UFMR) in Metro Manila was lower, at 20.26 per 1,000, compared to the significantly higher rate of 28.96 per 1,000 in the city in 2022.



Source: Quezon City Health Department & Center for Health & Development. DOH-NCR

Figure DS-9 Trend of Child Mortality Rate (Per 1,000 Population 1-4 Years Old) Quezon City and National Capital Region: 2019-2022

A gender disparity is evident, with a higher percentage of male children (56.31%) dying at an early age compared to females (43.69%). In 2022, the top three leading causes of child mortality were Pneumonia, Gastroenteritis, and Congenital Heart Disease.

3.2.4 Nutrition

The COVID-19 pandemic has also posed a significant risk of becoming a nutrition crisis. Overburdened healthcare systems, disrupted food supplies, and income losses have hindered children's access to nutritious diets and essential nutrition services, including early detection and treatment of child wasting. In response, Local Government Units (LGUs) adhered to the National Nutrition Council's (NNC) Memorandum 10, titled "Interim Guidelines in the Conduct of Operation Timbang Plus (OPT Plus), Nutrition Screening, Growth Monitoring, and Promotion (GMP) Activities in the Context of COVID-19 Pandemic and Other Related Disasters," published on December 15, 2020. Due to community quarantine restrictions, the usual weight and height measurements were not feasible, leading to the adoption of alternative methods such as Mid-Upper Arm Circumference (MUAC) measurements and the identification of bilateral pitting edema.

Among the 17 LGUs in the National Capital Region (NCR), four, including the city, implemented MUAC measurements, while the remaining 13 LGUs adhered to the standard weight and height measuring protocol of OPT Plus for all children aged 0-59 months during 2021 and 2022.

When comparing the city's Prevalence of Moderate and Severe Acute Malnutrition (M/SAM) to NCR and other cities using MUAC measurements, the 2022 data revealed that the city's rate of 0.17% (or 386 children) among those aged 6-59 months was slightly lower than NCR's 0.18% (or 662 children). Other cities using the same tool reported the following rates: Marikina at 0.06% (19 children), Pasig at 0.12% (58 children), and Taguig at 0.30% (199 children), the highest prevalence rate among them.

For children aged 0-5 months, the city's Prevalence of Weight-for-Length/Height in 2022 was notably lower at 0.17% compared to NCR's 0.58%. However, the city's prevalence rate for Overweight and Obesity in this age group was higher at 1.37%, compared to NCR's 1.13%. *Table DS-10* below provides a detailed comparison of the results collected by the National Nutrition Council in 2022

Table DS-10/Prevalence of Moderate and Severe Acute Malnutrition (M/SAM) among Children 0-59 months old in NCR; 2022

	Circum	per Arm ference nonths)		ength/Height conths)	Overweight and Obesity (0-5 months)		
	Prev. of MAM + SAM (%)	Total # of Children with MAM + SAM	Prev. of Wasting + Moderate + Moderate Wasting (%) Total # of wasted and moderately wasted Children		Prev. rate (%)	Total # of Children	
NCR*	0.18	662	0.58	258	1.13	505	
Quezon City	0.17	386	0.07	183	1.37	407	
Marikina	0.06	19	0.01	3	0.28	9	
Pasig	0.12	58	0.08	53	1.36	76	
Taguig	0.30	199	0.03	19	0.21	13	

Source: National Nutrition Council

3.2.5 Family Planning

To manage the birth rate, various family planning methods and contraceptives have been utilized. The number of contraceptive users in the city decreased from 260,824 in 2019 to 237,170 in 2020. However, usage has since risen, with 248,293 users in 2021 and 277,872 in 2022. Despite this increase in users, the contraceptive prevalence rate for 2022 was recorded at 31.41%, slightly lower than the 32.91% rate in 2019. This rise in the number of family planning users can be attributed to extensive information and education campaigns conducted by the Community Health Team field operations and the Family Planning-Maternal and Child Health division of the City Health Department.

Among contraceptive methods, pills remain the most popular, with 96,576 users, representing 34.76% of all current users. This is followed by condoms, with 51,706 users (18.61%), and Injectable Depomedroxyprogesterone Acetate (DMPA), with 40,089 users (14.43%) in 2022. (*Refer to Table DS-11* for detailed data.)

Table DS-11/ Family Planning Users by Methods; Quezon City: 2019-2022

	Current Users								
Methods	2019	2020	2021	2022					
BTL	28,509	28,469	28,767	30,027					
VASECTOMY	235	218	213	227					
PILLS	82,752	75,078	82,505	96,576					
IUD	28,797	29,191	29,547	31,061					
Injectable (DMPA)	41,489	35,510	36,322	40,089					
CONDOM	57,827	48,035	49,406	51,706					
Implant	6,342	7,497	8,499	13,515					
NFP									
LAM	13,161	11,582	11,541	13,182					
СМ	16	13	13	13					
Mercedes Wilson	0	0	0	0					
BBT	0	0	0	0					
2 Day Method	0	0	0	0					
STM	2	0	0	0					
SDM	1,694	1,577	1,480	1,476					
Total (NFP)	14,873	13,172	13,034	14,671					
Current Users	260,824	237,170	248,293	277,872					
Eligible Population	792,579	880,844	883,127	884,626					
Contraceptive Prevalence Rate	32.91	26.93	28.12	31.41					

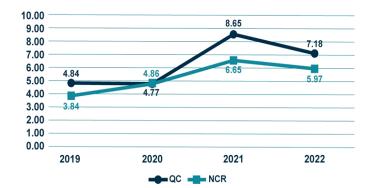
Source: Quezon City Health Department

3.2.6 Mortality

The Crude Death Rate (CDR) serves as the primary indicator of mortality, representing the number of deaths per 1,000 people in a given year. The overall mortality rate for all ages experienced a slight decline, from 4.84 per 1,000 in 2019 to 4.77 per 1,000 in 2020. However, as shown in the graphs below, there was a

significant increase to 8.65 per 1,000 in 2021, followed by a decrease to 7.18 per 1,000 in 2022. In terms of gender, there were fewer recorded female deaths (10,239) compared to male deaths (12,879) in 2022.

Among the top 10 leading causes of death for all ages in the city, Hypertension, various forms of Cancer, and Pneumonia ranked as the top three causes in 2022. As illustrated in Table DS-12 below, from 2019 to 2022, Cardiovascular Disease, Diabetes Mellitus, Myocardial Infarction, and Pneumonia consistently remained among the leading causes of mortality.



Source: Quezon City Health Department & Center for Health & Development. DOH-NCR

Figure DS-10/Trends of Mortality Rate (All Ages),
Quezon City & Metro Manila: 2019-2022

Table DS-12: Leading Causes of Death (All Ages) Quezon City: 2019-2022

Rank	Leading Causes of Death									
Kank	2019	2020	2021	2022						
1	Hypertension	Hypertension	COVID 19, Virus Identified	Hypertension						
2	Pneumonia	Suspected COVID 19	Myocardial infarction	Cancer (all forms)						
3	Cancer (all forms)	Cancer (all forms)	Pneumonia	Pneumonia						
4	Myocardial Infarction	Pneumonia	COVID 19, Virus not Identified	Hypertensive Atheroscleotic Cardiovascular Disease						
5	Diabetes Mellitus	Confirmed COVID 19	Diabetes Milletus	Confirmed COVID 19						
6	Cardiovascular Disease	Diabetes Mellitus	Intracerebral Hemorrhage	Diabetes Mellitus						
7	Coronary Artery Disease	Hypertensive cardiovascular Disease	Hypertensive cardiovascular Disease	Coronary Artery Disease						
8	Pulmonary Tuberculosis	Myocardial Infarction	Chronic Ischemic Heart Disease	Pulmonary Tuberculosis						
9	Heart Disease	Coronary Artery Disease	Unspecified Diabetes Mellitus	Myocardial Infraction						
10	Obstructive Pulmonary Disease	Bronchial Asthma	Respiratory Tuberculosis	Bleeding Peptic Ulcer Disease						

Source: Quezon City Health Department

3.2.7 Morbidity

In 2022, a total of 47,484 cases of illness were reported, marking a significant increase of 47.76% (22,680 cases) compared to the 24,804 cases recorded in 2021. Despite the city's relentless COVID-19 vaccination and booster campaign, more people in 2022 felt confident to go out without personal protective equipment such as facemasks and face shields, leading to increased exposure to a variety of other diseases. Additionally, the impacts of inconsistent climate change are likely affecting public health, contributing to illnesses and deaths through extreme weather events like heat waves, storms, and floods, as well as disruptions to food systems and the spread of vector-borne diseases.

Upper Respiratory Tract Infections have consistently been the leading cause of morbidity in Quezon City over the past four years, with the highest number of cases logged in 2022. This was followed by Hypertension, Heart Disease, and Tuberculosis. (*Refer to Table DS-13* for detailed data.)

Table DS-13:/**Top Ten Leading Causes of Morbidity, Quezon City: 2019 – 2022**

Rank		Leading Causes of Morbidity									
Rank	2019	2020	2021	2022							
1	Respiratory Tract Infection	Upper Respiratory Tract Infection	Upper Respiratory Tract Infection	Upper Respiratory Tract Infection							
2	Hypertension	Hypertension	Hypertension	Hypertension							
3	Pulmonary Diseases	Diseases of the Heart	Diseases of the Heart	Diseases of the Heart							
4	Diabetes Mellitus	Urinary Tract Infection	Urinary Tract Infection	Tuberculosis (All forms)							
5	Gastrointestinal Diseases	Pneumonia	Tuberculosis (All Forms)	Skin Diseases							
6	Urinary Tract Infection	Tuberculosis (All forms)	Animal Bites	Lower Respiratory Tract Infection							
7	Tonsillitis	Rhinitis	Lower Respirator Tract Infection	Urinary Tract Infection							
8	Abdominal Pregnancy	Lower Respiratory Tract Infection	Coronavirus-19	Pneumonia							
9	Skin Diseases/Infection	Skin Diseases	Skin Diseases	Animal Bites							
10	Systemic Viral Infection	Gastroenteritis	Gastroenteritis	Coronavirus-19							

Source: Quezon City Health Department

3.2.8 Disease Prevention and Control

Tuberculosis Cases (All Forms)

In 2022, Tuberculosis (TB) in all its forms was among the top 10 leading causes of illness and death across all age groups in the city. The TB Notification Rate saw a significant increase, rising from 11,807 cases in 2021 to 22,094 in 2022—a surge of 87.13%, or 10,287 additional cases. However, the TB Treatment Success Rate experienced a notable decline, dropping from 4,612 in 2021 to 3,166 in 2022, a decrease of 31.35% or 1,446 cases.

When compared to Metro Manila, Quezon City registered lower rates in both metrics. Metro Manila reported a higher TB Notification Rate of 77.79% (99,466 cases) and a TB Treatment Success Rate of

90.76% (34,266 cases) in 2022, surpassing Quezon City in both categories.

Dengue Cases

There were 23 reported Dengue-related deaths reported in 2022, representing 0.49% of the 4,723 reported Dengue cases in the city. This marks an increase of 19 deaths compared to 2021, which saw four Dengue-related deaths, or 0.25% of cases, down from eight deaths (0.46%) in 2020.

Table DS-14/ Dengue Fatality Rate per District,
Quezon City: 2020 & 2022

	Dengue Case Fatality Rate (%)								
	2020	2020 2021 20							
Quezon City	0.46	0.25	0.49						
District I	0	0	0						
District II	0.25 (5)	0.06 (1)	0.15 (7)						
District III	0	0	0.02 (1)						
District IV	0.11 (2)	0	0.06 (3)						
District V	0	0.12 (2)	0.11 (5)						
District VI	0.06 (1)	0.06 (1)	0.15 (7)						

Legend: (#) Number of Deaths

Source: Quezon City

From 2020 to 2022, the majority of Dengue fatalities occurred in District II (13 deaths), followed by District VI (9 deaths), District V (7 deaths), and District IV (5 deaths). District III reported only one death, while District I recorded no Dengue fatalities during this period. (Refer to *Table DS-14* for detailed data.)

3.2.9 Access to Safe Water

According to records from the Department of Health-NCR and the Quezon City Health Department, the percentage of households with access to safe water increased to 94% in 2022, up from 85.30% in 2019. However, this figure is slightly lower compared to the NCR average of 97.6% for households with access to potable water in 2022.

3.2.10 Access to Sanitary Toilets

Records indicate that 93% of households had access to sanitary toilets in 2022, a rate significantly higher than the 84% reported for Metro Manila in the same year..

3.2.11 Health Facilities and Services

The improved health of the city's population relies heavily on the effective delivery of basic health services and the availability of adequate health facilities and personnel. The city government has actively implemented strategies to enhance the use of health services among residents. These strategies include providing free medications and encouraging enrollment in social insurance schemes, thereby promoting greater access to and utilization of health facilities.

Health Centers/Super Health Centers

Over the past five years, the city has maintained a total of 66 health centers, with no new additions. This includes seven Super Health Centers equipped with lying-in clinics and 59 regular health centers providing primary health care services. All these facilities were previously certified as Sentrong Sigla, meeting the standards set by the Department of Health (DOH).

Distribution of these facilities by district shows that thirteen (13) are in District 1 with 12 regular health centers and one super health center (San Francisco Super Health Center), District II has 10 regular centers and 2 super health centers (Batasan and Betty Go Belmonte SHCs), District III with 8 regular health centers and one super health center (Murphy

SHC), District IV has 10 regular and one super health center (Kamuning SHC), District V has 10 regular health centers and two (2) super health centers (Novaliches and Sta. Lucia SHCs), District VI has no super health center but has 9 regular health centers.

Integrated within some of the city's health center compounds are four Social Hygiene Clinics located in Project 7, Batasan, P. Bernardo, and Novaliches. Additionally, there are four Male Sundown Clinics situated in Klinika Bernardo, Klinika Novaliches, Klinika Project 7, and Batasan Hills, one Adolescent Teen Health Quarters in NGC and twenty-seven microscopy centers dedicated to TB-DOTS and other laboratory procedures.

The 59 regular health centers operate daily, excluding weekends and holidays, from 8:00 a.m. to 5:00 p.m. In contrast, the seven Super Health Centers are open 24 hours, catering to obstetric and emergency cases. Social Hygiene Clinics provide services from 8:00 a.m. to 5:00 p.m., while Sundown Clinics operate from 3:00 p.m. to 11:00 p.m., specifically to accommodate call center employees and ensure patient privacy.

Among the districts, District V had the highest patient volume in 2022, serving a total of 632,924 patients across its 12 health centers. The Gulod Health Center saw the most patients, averaging 151 per day, followed by Bagbag Health Center with 123 patients per day.

Each health center is established based on the standard of one center per 20,000 residents (1:20,000). According to Table DS-15, the current health center-population ratio indicates a need for 82 additional centers, with a total requirement of 148. District II has the highest shortfall, needing 24 more centers, followed by District V with 18 and District VI with 17.

Additionally, the city's newly constructed Health Department facilities include one Employee Clinic, three upgraded Public Health Laboratories, and one Quality Assurance Laboratory Center. The Public Health Laboratories are located at Novaliches District Center (NDC) and the Quality Assurance

Table DS-15: Health Center – Population Ratio by District, Facilities per District
Quezon City: 2022

Districts	Population	Existing Health Centers	Required Health Centers	Health Center Needs
District I	384,384	13	19	6
District II	738,328	13	37	24
District III	319,371	9	16	7
District IV	407,402	10	20	10
District V	596,047	12	30	18
District VI	514,516	9	26	17
Total	2,960,048	66	148	82

Source: Quezon City Health Department

Laboratory Center, situated in Barangay Bagong Pag-asa, is responsible for conducting external quality assessments of all TB microscopy laboratories.

Hospitals

The city is home to a total of 51 hospitals, with 16 being government-owned and 35 privately-owned. Among these, 19 are classified as tertiary hospitals (Level 3), offering comprehensive services with metro-wide and nationwide reach. Eleven hospitals are classified as secondary (Level 2), and 13 as primary hospitals (Level 1). Additionally, there are 8 infirmaries providing care and treatment for the sick or injured.

Tertiary hospitals are predominantly located in Districts I and IV. Notable institutions include the Philippine Heart Center for Asia, the National Kidney and Transplant Institute, the Lung Center of the Philippines, and the state-of-the-art St. Luke's Medical Center, which offer highly specialized services.

The city also operates three key hospitals: Quezon City General Hospital (QCGH), a tertiary facility; Rosario Maclang Bautista General Hospital (RMBGH), a secondary hospital; and Novaliches District Hospital (NDH), a primary level hospital. These serve as vital referral centers for various health centers and other hospitals and clinics. Both NDH and RMBGH are working towards upgrading their classifications—RMBGH to Level 3 and NDH to Level 2—by meeting the space, equipment, and laboratory requirements outlined in AO 2021-037, the new Department of Health guidelines. Since

their inception, these hospitals have been dedicated to providing high-quality medical care, especially to the city's low-income residents, reflecting the city government's commitment to accessible healthcare.

Hospital Bed Capacity

In 2022, the city's combined total bed capacity across public and private facilities was 8,845, resulting in an overall bed-population ratio of 1:314 based on the PSA total population of 2,960,048. This ratio significantly exceeds the standard benchmark of 1 bed per 1,000 citizens (1:1,000). District IV, home to most of the city's tertiary and specialized hospitals, recorded the highest bed capacity with 3,763 beds.

The city's hospital bed capacity appears to be sufficient, with government hospitals providing a substantial portion of the total. The eight major government hospitals—including Quezon City General Hospital, Rosario Maclang Bautista General Hospital, Novaliches District Hospital, East Avenue Medical Center, Quirino Memorial Medical Center, Quezon City Institute, National Children's Hospital, Philippine Children's Medical Center, and Veterans Memorial Medical Center—account for 5,768 authorized beds.

Records show that about 65.21% or 5,768 beds belong to government hospitals while 34.79% or 3,077 beds are from private hospitals. District VI recorded the lowest bed capacity with 112 beds in the two (2) hospitals. District IV, on the other hand, registered 3,763

beds of the combined thirteen (13) hospitals. District I has a combined bed capacity of 2,242 in ten (10) hospitals while those located in District V which are classified mostly as secondary health institutions have a total of 1,050 bed capacity in twenty (20) hospitals while District III has 1,561 beds in seven (7) hospitals. Three (3) city-run public hospitals, namely; Quezon City General Hospital (QCGH) in District I which has 250 beds, Rosario Maclang Bautista General Hospital (RMBGH) in District II which has 107 beds and Novaliches District Hospital (NDH) in District V which has 30 beds that cater mostly to urban poor residents particularly, the northeastern portion of the city. East Avenue Medical Center and Quirino Memorial Medical Center, both located in District IV are national government operated hospitals with regional service area. Table *DS-16* below shows the distribution of hospitals and hospital beds per district.

Among the city-operated public hospitals, Quezon City General Hospital (QCGH) in District I has 250 beds, Rosario Maclang Bautista General Hospital (RMBGH) in District II has 107 beds, and Novaliches District Hospital (NDH) in District V has 30 beds, primarily serving urban poor residents, particularly in the northeastern part of the city. East Avenue Medical Center and Quirino Memorial Medical Center, located in District IV, are national government-operated hospitals serving regional areas.

Table DS-16 provides detailed information on the distribution of hospitals and hospital beds by district. Bed occupancy rates for the three city-operated hospitals in 2022 were as follows: Quezon City General Hospital at 120.40%, Rosario Maclang Bautista General Hospital at 64.37%, and Novaliches District Hospital at 86.20%

Table DS-16: Number of Hospitals and Authorized Hospital Bed Capacity per District, Quezon City: 2022

Districts	No. of Hospitals	No. of Authorized Bed	Percent Share
Districts	No. of Hospitals	No. of Additionized Bed	T ercent Share
District I	10	2,242	25.34
District II	2	117	1.32
District III	7	1,561	17.65
District IV	13	3,763	42.54
District V	18	1,050	11.87
District VI	2	112	1.27
TOTAL	51	8,845	100%

Source: Department of Health – Quezon City

Other Health Facilities,

In addition to the main hospitals, the city is equipped with a range of other health and medical facilities with four (4) Social Hygiene Clinics located in Project 7, Batasan, P. Bernardo, and Novaliches, four (4) Sundown Clinics situated in Klinika Bernardo, Klinika Novaliches, Klinika Project 7, and Batasan Hills, one (1) Adolescent Teen Health Quarters dedicated to adolescent health. one (1) COVID-19 Hope Facility which provides support for COVID-19 patients. and twenty-seven (27) Microscopy Centers focussed on TB-DOTS and other laboratory procedures.

Additionally, the city hosts one employee clinic serving the health needs of employees, eight (8) general clinical laboratories, one specialized laboratory for molecular testing and a Quality Assurance Laboratory Center performing external quality assessments for all TB microscopy laboratories. The latter is located in Barangay Bagong Pagasa.

The city also has 268 other public and private health facilities, including 75 facilities as Lying-In Clinics/Birthing Homes/Maternity Clinics,

five (5) Psychiatric Care Facilities, eighteen (18) Dental Clinics, 16 Water Testing Laboratories and 154 Other Health and Wellness Clinics.

The city's Drug Treatment and Rehabilitation Center, known as "TAHANAN," occupies a 3,000 square meter lot in Diamond Hills, Barangay Payatas, it's a facility dedicated to the treatment and rehabilitation of drug addicts, while the city offers three (3) public cemeteries and three (3) private memorial parks for funeral and burial services. There is one (1) existing government crematorium with three crematory machines at Baesa Public Crematorium, which provides free service to the public with the support of the Social Services Department. The city also has fifteen (15) funeral parlors, ten (10) private crematoriums, and three (3) ossuaries registered with the Business Permits and Licensing Department (BPLD).

Health Personnel

As of 2022, the city's total health workers totaled 3,533. The Quezon City Health Department employs 1,775 medical and non-medical personnel, while the Quezon City General Hospital has 940, the Novaliches District Hospital has 410, and the Rosario Maclang Bautista General Hospital has 408. The current number of health staff increased by 1,430 (40.47%) from 2,103 in 2018. Of the city's total health staff, 533 are physicians, 638 are nurses, 222 are midwives, 76 are dentists, 312 are City Health Workers, and the remaining 1,752 belong to the non-paramedical staffs, which include medical, dental, and laboratory support, dental aides, nutritionists-dieticians, food-drug regulation staff, medical technologists, radiologic technologists, laboratory aides, and dialysis technicians, HIV/AIDS lecturers, Teen Health Quarters health educators, and administrative staff and barangay health workers.

Health Medical Non-Medical **CHWs** Nurse **Midwives Dentist** Total Facility **Doctors** Staff **QCHD** 81 163 201 67 312 951 1,775 **QCGH** 247 288 3 5 0 397 940 NDH 102 84 13 3 0 208 410 **RMBGH** 103 103 5 1 0 196 408 **TOTAL** 533 222 76 312 1,752 638 3,533

Table DS-17: Health Personnel Working in Quezon City: 2022

Source: Department of Health – Quezon City

The 2022 government physician-population ratio and dentist-population ratio are 1:5,977 and 1:41,920, respectively. Both exceed the Department of Health's standard ratio of 1:50,000. This ensures that there will be no scarcity of doctors and dentists in 2022. On the other hand, the government nurse-population ratio is 1:4,994, compared to the normal ratio of 1:25,000, and the government midwife-population ratio is 1:14,351, which is lower than the standard ratio of 1:12,500. It implies that the city no longer requires extra nurses but does have a shortfall of 33 midwives.

3.3 EDUCATION

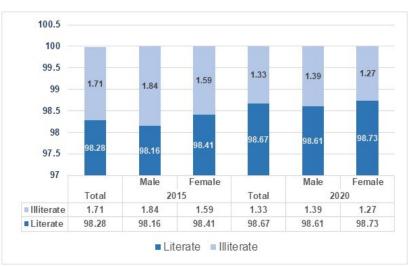
3.3.1. Literacy and Highest Grade Completed

The City has a remarkable simple literacy rate of 98.67% for the household population of 5 years old and over, according to the 2020 PSA Census of Population and Housing, a 0.38% increase from the 2015 literacy score of 98.29%. The results show exceptional gender equality in literacy, with male and female

rates practically identical—98.61% for male and 98.73% for female in 2020, and 98.16% for male and 98.41% for female in 2015 (*see Figure DS-11*).

The city's literacy rate in 2020 was found to be below the NCR's impressive literacy rate of 98.88% but surpasses the national average of 96.95%.

The largest proportion of literate individuals falls within the 10-24 and 35 & Over age groups, accounting for 29.44% and 41.11% of the total literate population, respectively.



Source: Philippine Statistics Authority

Figure DS-11: Literacy Rate by Sex; Quezon City: 2015 and 2020

On the other hand, the total illiterate population is very small, with an illiteracy rate of 1.33% of the total household population 5 years and above, with 18,290 males and 17,039 females. Most of the illiteracy is concentrated in the 5-9 and 35 & Over age groups, which account for 88.33% and 5.55% of the total illiterate population, respectively.

Table DS-18: Literacy of Households Population 5 Years Old and Over by Age Group and Sex; Quezon City: 2020

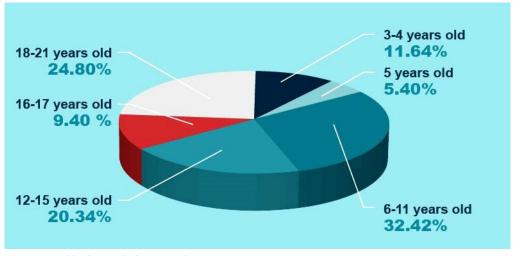
Ago		Lite	rate	Total Illiterate Total			Illiterate		tal	Donulet	ion				
Age Group	Mal	е	Fema	ale	No.	%	Ma	ale	Fen	nale	No	No.	%	Populat	.1011
Group	No.	%	No.	%	INO.	70	No.	%	No.	%	INU.	70	No.	%	
5-9	127,001	9.79	118,210	8.91	245,211	9.34	16,124	88.16	15,081	88.51	31,205	88.33	276,416	10	
10-24	392,628	30.27	379,817	28.63	772,445	29.44	949	5.19	555	3.26	1,504	4.26	773,949	29	
25-29	139,012	10.72	137,059	10.33	276,071	10.52	211	1.15	128	0.75	339	0.96	276,410	10	
30-34	128,008	9.87	123,692	9.32	251,700	9.59	179	0.98	142	0.83	321	0.91	252,021	9	
35 & Over	510,570	39.36	568,043	42.81	,078,613	41.11	827	4.52	1,133	6.65	1,960	5.55	1,080,573	41	
Total	1,297,219	100.00	1,326,821	100.00	,624,040	100.00	8,290	100.00	17,039	100.00	35,329	100.00	2,659,369	100	
Rate	98.61	%	98.73	3%	98.67	7%	0.6	9%	0.6	4%	1.3	3%			

Source: Philippine Statistics Au-

In 2020, the school-age population (3-21 years old) totaled 998,570, or 33.84% of the total household population. In terms of sex distribution, 512,148 are males (51.29%), while 486,422 are females (48.71%).

The largest segment consists of those aged 6-11, aligning with the elementary school level, making up 32.42% of the total school-aged population. This is followed by the junior high school age group (12-15), accounting for 20.34%, and those aged 18-21, who make up 20.79%, typically corresponding to the tertiary education level.

In the younger age groups, 11.64% of the population falls within the day care age (3-4), while 5.40% are of pre-school age (5 years old). Senior high school-aged individuals (16-17) represent 9.40%.

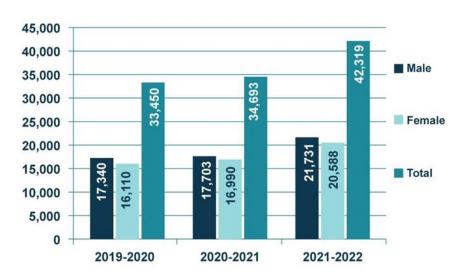


Source: Philippine Statistics Authority

Figure DS-12: Percent Distribution of School Age Population by School level: Quezon City: SY 2020

3.3.2. Enrolment Performance Indicators

For School Year 2021-2022, the total enrollment in public kindergarten schools is 42,319, up 8,869 or 26.51% from 33.450 in SY 2019-2020. Male enrollment is higher (21,731, or 51.35%) than female enrollment (20,588 or 48.65%). The enactment of Republic Act 10533, also known as the Kto-12 Program, and RA 10157, the Kindergarten Education Act of 2011, which requires all 5-year-old children to attend kindergarten as the first stage of compulsory and mandatory formal education, has contributed



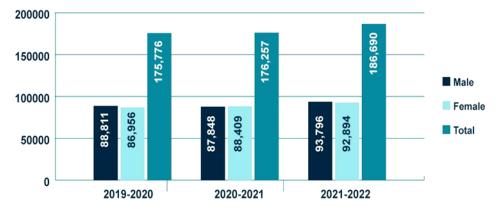
Source: Schools Division Office

Figure DS-13: Enrollment in Public Kindergarten Schools; Quezon City: SY 2019-2020 to SY 2021-2022

to an increase in kindergarten enrollment. (See Figure DS-13.)

The total enrollment in public elementary and secondary schools as of SY 2021-2022 was 411,485, a 3.64% increase from 397,034 in SY 2019-2020.

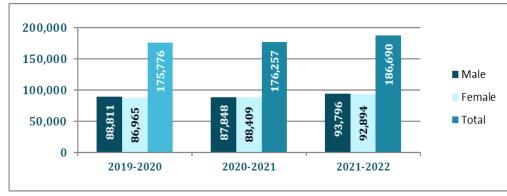
Elementary students accounted for 224,795 (54.63%) of total enrollment. There were more male enrollees (116,189, 51.69%) than females (108,606, 48.31%). An increase of 3,537 students from the 221,258 elementary students enrolled in the 2019-2020 school year. (*See Figure DS-14.*)



Source: Schools Division Office

Figure DS-14: Enrollment in Public Elementary Schools; Quezon City: SY 2019-2020 to SY 2021-2022

Enrollees at the public secondary, Junior High School (JHS), and Senior High School (SHS) levels, on the other hand, account for 45.37%, or 186,690 students, of the total enrolled in SY 2021-2022, an increase of 10,914 students from 175,776 in SY 2019-2020. Male students enroll in high school in greater numbers than females. (*Refer to Figure DS-15.*)



Source: Schools Division Office

Figure DS-15: Enrollment in Public Secondary Schools (JHS & SHS);

Quezon City: SY 2019-2020 to 2021-2022

The increasing trend in secondary enrollment over the last two (2) years can be linked to the full implementation of Senior High School. According to the DS-18, 85.04% (158,755) of the 186,690 high school pupils for SY 2021-2022 are in Junior High School, with the remaining 14.96% (27,935) are in Senior High School.

Table DS-19: Enrollment in Public Junior and Senior High School Quezon City: SY 2020-2021 to SY 2021-2022

Grade Level	5	SY 2020-202	1	SY 2021-2022			
Grade Level	Male	Female	Total	Male	Female	Total	
Junior High School	77,098	77,306	154,404	79,733	79,022	158,755	
Senior High School	10,750	11,103	21,853	14,063	13,872	27,935	

Source: Schools Division Office

District II has the most pupils/students (133,094 or 29.33%) in both public elementary and secondary schools, accounting for 29.73% and 28.76% of total enrollment, respectively, while District III has the fewest.



Figure DS-16: Percent Distribution of Elementary and Secondary Schools Enrollment by District; Quezon City: SY 2021-2022

Source: Schools Division Office

In response to RA 11650 and DepEd Order 44, S. 2021 or Policy Guidelines on the Provision of Educational Programs and Services for Learners with Disabilities in the K-12 Basic Education Program, Schools Division Office - Quezon City is committed to providing more Inclusive Learning Resource Centers and SPED programs in all public elementary and secondary schools in order to fully support learners. Special children are those who have mental retardation, giftedness and talent, learning disabilities, deafness, blindness and low vision, physical disabilities, health problems, or severe disabilities who struggle to master the fundamental educational curriculum. These children require a modified or functional curriculum, and those whose performance is so excellent that they need a specialized program.

As of 2022, there are 52 public elementary schools and 12 public high schools that offer Special Education Programs. Of the total students for both levels, 3,535, or 0.86%, are special children and/or children with disabilities, up 1,352 or 61.93% from 2,183 in the 2019-2020 school year. For the school year 2021-2022, 88% of the 3,535 SPED pupils are in elementary school, with the remaining 12%, or 440, attending secondary school.

The combined Enrollment Participation Rate (EPR) in public and private schools declined from 88.91% in SY 2019-2020 to 73.86% in SY 2021-2022 at the elementary level, and from 98.99% and 92.32% in SY 2019-2020 to 80.36% and 54.81% in 2021-2022 at the secondary level.

In particular, the EPR for private elementary and senior high schools declined somewhat from 22.52%, 24.34%, and 17.12% in SY 2019-2020 to 12.45%, 15.38%, and 16.58% in SY 2021-2022. Similarly, the EPR at public elementary and secondary schools (JHS and SHS) declined from 66.39%, 74.65%, and 75.2% in SY 2019-2020 to 61.41%, 64.98%, and 38.23% in SY 2021-2022, respectively. (*Refer to Table DS-20*).

Table DS-20: Participation Rate in Public and Private Elementary and Secondary Schools; Quezon City: SY 2019-2020 to SY 2021-2022

		Elementary	,			Secondary			
Í	SY 2019-	SY	SY			Y 2019-2020 SY 2020-2021		SY 2021-2022	
	2019-	2020- 2021	2021- 2022	JHS	SHS	JHS	SHS	JHS	SHS
Public & Private	88.91	71.58	73.86	98.99	92.32	75.93	53.19	80.36	54.81
Public	66.39	59.03	61.41	74.65	75.2	59.95	42.05	64.98	38.23
Private	22.52	12.56	12.45	24.34	17.12	15.98	11.14	15.38	16.58

Source: Schools Division Office

In the Preschool Level, Daycare, and Kindergarten, 66,749 or 39.24% of the 170,034 projected 2022 population (based on the 2015 Census Survey) ages 3-5 years old are enrolled in public kindergarten schools and day care centers in the school year 2021-2022. The pre-school enrollment rate fell from 74.12% in SY 2019-2020 to 54.72% EPR in SY 2021-2022.

For the school year 2021-2022, a total of 24,430 children, representing 14.36% of the projected 170,034, were enrolled in public day care centers and supervised neighborhood play programs under the Social Services and Development Department's Early Childhood Care and Development (ECCD) initiative. Additionally, 42,319 children, or 24.88% of 5-year-olds, were enrolled in public kindergartens.

It is important to note that there are also preschool children attending private learning centers operated or managed by non-governmental organizations (NGOs) and people's organizations (POs). These enrollments have not yet been fully accounted for in the current data.

3.3.3. Academic Performance Indicator

The National Achievement Test (NAT) is a standardized set of examinations taken by learners from public and private schools in Grades 3, 6, 10 and 12. The test is designed to determine their academic levels in five (5) major subjects; Mathematics, English, Science, Filipino and Heograpiya, Kasaysayan, at Sibika (Hekasi) for elementary and Mathematics, English, Science, Filipino and Araling Panlipunan for secondary. It is administered by the Department of Education's (DepEd) National Testing and Research Center and the results are intended to guide the efforts towards the improvement of the quality of education and to provide appropriate intervention for the learners

Achievement rate for the Elementary Level in SY 2017-2018 went up from 40.64% to 48.10% in SY 2021-2022. Likewise for the Junior High School level (Grade 10) which increased from 48.65% in SY 2017-2018 to 49.64% in SY 2022-2023. It was observed however, that there is a decrease in the achievement rate in the Senior High School Level (Grade 12) from 39.14% in SY 2018-2019 to 37.56% in SY 2022-2023.

The attainment of 75% and 70% target from SY 2020-2021 in the elementary and secondary level respectively cannot be ascertained since NAT was not administered by the DepEd Central Office due to pandemic. The low performance of learners in the National Achievement Test may be attributed to one or a combination of these factors: Lack of instructional materials, the need for teacher retooling, learner's lack of test taking skills, and learner's lack of preparation and motivation to achieve.

Another academic performance indicator is the Cohort Survival Rate (CSR). This is the percentage of pupils/students in the beginning grade who reached the final grade in the required number of years for the elementary and high school level.

The cohort survival rate for public and private elementary and secondary levels have increased from 51.94% and 55.52% in SY 2020-2021 to 100% and 89.59% respectively, in SY 2021-2022. (*Refer to Table DS-21*).

Table DS-21: Cohort Survival and Drop-Out Rate in Public and Private Elementary and Secondary Schools; Quezon City: SY 2020-2021 and SY 2021-2022

and the second	Eleme	entary	Secondary		
Indicator	SY 2020-2021	SY 2021-2022	SY 2020-2021	SY 2021-2022	
Cohort Survival Rate	51.94%	100%	55.52%	89.59%	
Drop-out Rate	0.85%	0.72%	1.38%	0.83%	

Source: Schools Division Office

Another success measure is the dropout rate, which is defined as the percentage of students that leave school throughout the school year. The combined dropout rate in public and private elementary and secondary schools fell from 0.85% and 1.38% in SY 2020-2021 to 0.72% and 0.83% in SY 2021-2022. This suggests that one out of every 100 elementary and secondary students enrolled is likely to drop out. Financial concerns, a lack of personal interest, illness/disability, an inability to deal with schoolwork, adolescent pregnancy, and a change of domicile or employment are all possible reasons for dropping out.

3.3.4. Classroom-Student Ratio

The overall normal classroom-student ratio based on two shifts is 1:45 in public elementary schools and 1:40 in secondary schools for both junior and senior high school (JHS and SHS).

However, the current classroom-to-student ratio varies by district and school grade level. According to the numbers, the number of classrooms available at the elementary and secondary school levels is inadequate. In elementary, deficiency exists solely in District II, where the classroom-student ratio is calculated to be 1:52, whereas in secondary, Districts II and V have classroom-student ratios of 1:53 and 1:43 respectively. This indicates that a single classroom can accommodate up to 53 and 43 pupils in each session, compared to the recommended ratio of 1:40. The table also reveals that most districts surpass the optimal classroom-student ratio at both the primary and secondary levels. The classroom deficit is rendered much more significant given that both public elementary and high schools hold two shifts or sessions each day.

Fortunately, the situation is better in other districts, such as Districts I, III, and IV, at both levels. This is supported by the observation that there are excess classrooms in the other districts. Except for Districts II and V, the overall real or existing number of classrooms is 7,038 (4,170 in elementary and 2,868 in secondary), which is more than the required number of classrooms of only 5,301 (2,968 in primary and 2,333 in secondary schools (*See Table DS-22*).



Table DS-22: Elementary and Secondary School Classroom-Student Ratio by District; Quezon City: SY 2021-2022

			Elem	entary					Seco	ndary		
District	None	Enrollment	nt No. of Classroom				Nort	Enrollment		No. of CI	assroom	
Disctrict	No. of School	SY 2021-2022 K-6	Actual 1:45	Required 2 Shifts	Need 2 Shifts	Classroom Student Ratio	No. of School	SY 2021-2022 7-12	Actual 1:40	Required 2 Shifts	Need 2 Shifts	Classroom Student Ratio
1	22	34,652	860	385	0	1:20	14 (3)	30,055	593	376	0	1:26
II	13	79,410	760	882	122	1:52	7 (1)	53,684	511	671	160	1:53
III	17	24,905	563	277	0	1:22	8 (1)	14,246	288	178	0	1:25
IV	13	27,550	522	306	0	1:26	14 (4)	24,430	618	305	0	1:20
٧	18	63,715	924	708	0	1:35	11 (2)	42,021	490	525	35	1:43
VI	12	36,882	541	410	0	1:34	9 (2)	22,254	368	278	0	1:30
Total	95	267,114	4,170	2,968	122	1:32	63(12 SHS)	186,690	2,868	2,333	195	1:33

Source: Schools Division Office

To address the deficiency, particularly in Districts II and V, the City issued Executive Order No.55, Series of 2022, establishing the Taskforce on Quezon City Public School Classrooms, with the goal of addressing the deficiency in general and providing a conducive learning environment for improved learning outcomes. Initially, ten (10) schools that are unable to undertake complete face-to-face classes for SY 2022 -2023 were identified to properly address their concerns.

3.3.5 Teacher-Student Ratio

Based on the total enrollment and the actual number of teachers, the over-all teacher-student ratio is 1:35 in public elementary schools and 1:27 in public secondary schools. This is within the standard teacher-student ratio of 1:45 in all school districts

Table DS-23: Elementary and Secondary School Teacher-Student Ratio by District; Quezon City: SY 2021-2022

		Elemer	ntary		Secondary					
		Enrollment	No. of Teachers			Enrollment	No. of Teachers			
District	No. of School	SY 2021-2022 K-6	Actual	Teacher- Student Ratio	No. of School	SY 2021-2022 7-12	Actual	Teacher- Student Ratio		
1	22	34,652	1082	1:32	14 (3)	30,055	1,030	1:29		
II	13	79,410	2130	1:37	7 (1)	53,684	1,831	1:29		
Ш	17	24,905	793	1 :31	8 (1)	14,246	570	1:25		
IV	13	27,550	797	1:34	14 (4)	24,430	941	1:26		
V	18	63,715	1820	1:35	11 (2)	42,021	1,643	1:26		
VI	12	36,882	1068	1:34	9 (2)	22,254	800	1:28		
Total	95	267,114	7690	1:35	63 (12 SHS)	186,690	6,815	1:27		

Source: Schools Division Office

3.3.6. Textbook-Student Ratio

The COVID-19 pandemic in 2022 has led to the suspension of face-to-face learning engagements between students and teachers within schools. As a result, in recent academic years, both students and educators have relied on Printed and Digital Learning Modules, with the implementation and adaptation of Modular Distance Learning as an urgent response to ensure the continuity of education.

However, the availability of textbooks has not kept pace with the needs of the enrolled students, falling short of the standard 1:1 Textbook-Student Ratio. According to data provided by the Division of City Schools, only 143,632 textbooks and learning materials were procured for the elementary level, and 102,630 for Junior High School, highlighting the gap in resources.

To address the challenges posed by the new learning modality, the Quezon City government has taken proactive steps to support both students and teachers. This support includes the provision of essential supplies, data allowances, tablets, and laptops. In 2022, the city distributed 5,593 laptops to public school teachers, and it continues to provide an additional 1,000 units each year. Additionally, public school teachers receive a quarterly P2,000 rice subsidy and P400 longevity pay for every five years of continuous service.

To further aid students, Quezon City supplied 176,000 tablet computers to elementary and secondary students during SY 2020-2021, followed by an additional 70,054 tablets in SY 2021-2022. These initiatives underscore the city's commitment to ensuring that education remains accessible and effective despite the ongoing challenges.

3.3.7. Educational Programs

Educational programs for both public and private schools at the elementary and secondary levels adhere to the curricula prescribed by Republic Act 10533, also known as the Enhanced Basic Education Act of 2013. This legislation established the K-to-12 Program, which includes kindergarten and 12 years of basic education: six years of primary education, four years of junior high school, and two years of senior high school.

Senior High School (SHS) offers specialized upper-secondary education, consisting of Core Subjects and Track Subjects, with 15 and 16 subjects, respectively. Each track is designed to cater to different strands or specializations, including: (1) the Academic Track, with strands in Accountancy, Business and Management (ABM), Science, Technology, Engineering and Mathematics (STEM), and Humanities, Education, Social Sciences (HUMSS) and Liberal Arts; (2) the Sports Track, which includes Safety and First Aid; (3) the Arts and Design Track, focusing on Arts Assessment and Guidance; and (4) the Technical-Vocational and Livelihood (Tech-Voc) Track, which aligns with TESDA training and regulation-based specializations.

In addition to formal education, services like the Alternative Learning System (ALS) are offered to individuals who have not completed elementary or secondary education. ALS serves as an alternative or parallel learning system, providing flexible educational opportunities for those unable to access formal schooling. It encompasses both non-formal and informal sources of knowledge and skills. The number of out -of-school youth and adults enrolled in ALS programs, including those based in schools, barangays, NGOs, and Extension Centers, increased by 19.32% from 10,866 in SY 2020-2021 to 12,966 in SY 2021-2022, with 7,065 (54.49%) male and 5,901 (45.51%) female participants.

The Madrasah education program, which caters to Muslim students, is offered in 19 public schools, including 15 elementary and 2 secondary schools. This program, conducted on weekends, provides basic education in Islamic values and the Arabic language. Currently, there are approximately 1,160 enrolled students (525 male and 635 female), guided by 48 Muslim teachers, known as Azatids. The program aims to integrate the traditional Philippine education curriculum with the Madrasah system, ensuring educational parity across regions and cultures.

Further educational support in Quezon City is provided by the Quezon City University (QCU). The foundation for QCU was laid in 1988 when the Quezon City Council passed an ordinance to establish a technical committee tasked with conducting studies on the creation of a city university. After extensive discussions and deliberations, the Quezon City Polytechnic University (QCPU) was officially established on March 1, 1994, through City Council Ordinance No. SP-0171. Initially, QCPU was created with the specific purpose of training and developing skilled and technical workers. The university introduced three-year associate programs in the 1994-1995 academic year, offering specialized training in fields such as Automotive Technology, Electrical Technology, Welding, Refrigeration and Air-Conditioning Technology, and Fashion Technology.

Over the years, QCPU evolved through various ordinances—SP-544, S-97; SP-1030, S-2001; and SP-1945, S-2009—which strengthened its charter and management structure. By the 2005-2006 academic year, QCPU expanded its offerings to include bachelor's degree programs in Entrepreneurial Management, Industrial Engineering, and Information Technology, with a BS in Electronics Engineering introduced in the 2010-2011 school year.

In 2019, QCPU underwent a significant transformation when it was converted into Quezon City University by virtue of SP-2812, also known as the Quezon City University Charter. This milestone marked the university's shift towards a broader academic focus, with the introduction of the Bachelor in Accountancy program and the discontinuation of technical and vocational course offerings. Starting in the 2022-2023 school year, QCU further expanded its academic portfolio by adding two new programs: the Bachelor of Science in Management Accounting and the Bachelor of Early Childhood Education.

Over the past four years, QCU has experienced significant growth in student enrollment, rising from 8,074 students in the first semester of SY 2018-2019 to 10,860 in the first semester of SY 2021-2022. The lowest enrollment was recorded during the second semester of SY 2019-2020, coinciding with the implementation of the K-to-12 program. Despite the challenges posed by the COVID-19 pandemic, QCU registered its highest enrollment figures in SY 2021-2022, with 10,860 students in the first Source: Quezon City University semester and 10,447 in the second semester, underscoring the university's continued commitment to accessible and quality education.

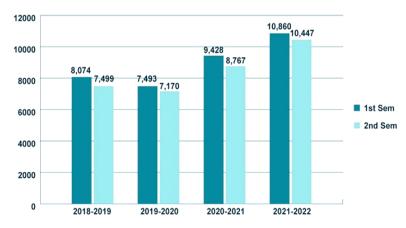


Figure DS-17: **Enrollment in Quezon City University**; Quezon City: SY 2018-2019 to SY 2021-2022

Additionally, the city government provides scholarship assistance to deserving residents through programs offered by Quezon City University (QCU) and the Quezon City Youth Development Office. The Quezon City Scholarship Program (QCSP) is structured into four distinct categories: scholarships for Senior High School students, Tertiary students, Post-Graduate students, and students enrolled in Vocational courses. Each category offers a specific scholarship grant, tailored to meet the educational needs and aspirations of the recipients. (Refer to *Table DS-24* for detailed information on scholarship amounts and eligibility criteria.)

Table DS-24: Scholarship Category, Sub-Category, Grants and Number of Scholars Quezon City: SY 2021-2022

	Scholars	hip Grant	
Quezon City Scholarship Assistance	Tuition Fee Grant per School Year (Maximum Amount)	Stipend per School Year (Maximum Amount)	No. of Scholars SY 2021-2022
Quezon City Scholarship Program			
I. Scholarship for Senior High School Students	10,000	4,000	58
II. Scholarship for Tertiary Students			
i. Academic Scholarship (Rank 1-2)	80,000	32,000	342
Academic Scholarship (Rank 3-10)	50,000	20,000	
ii. Economic Scholarship	10,000	4,000	5,887
iii. Athletic and Arts Scholarship	10,000	4,000	-
iv. Youth Leaders Scholarship	10,000	4,000	26
v. Specialized Courses Scholarship	80,000	32,000	47
III. Scholarship for Post-Graduate Students	50,000 with one-time Thesis Grant: 30,000	20,000	67
IV. Scholarship for Vocational Courses Students	One-time o	grant: 6,000	-
Quezon City University Students		-	10,463
		Total	16,890

Source: Quezon City Youth Development Office (QCYDO)

Quezon City Scholars include non-QCU **QCSP** scholars, QCU QCSP scholars, and QCU non-QCSP students. Non-QCU QCSP scholars are not enrolled in QCU, but are **QCSP** beneficiaries, QCU QCSP scholars are enrolled in QCU and **QCSP** are beneficiaries; and QCU non-QCSP scholars are enrolled in QCU, but are not QCSP beneficiaries. A total of 16,890 scholars in SY 2021-2022 benefited from the city's scholarship assistance, increase of 20.64% from 14,000 scholars in SY 2018-2019. *(See Figure DS-18)*

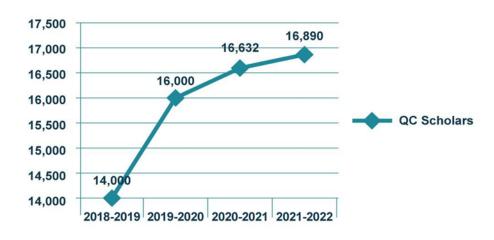


Figure DS-18: Number of Quezon City Government Scholars; Quezon City: SY 2018-2019 to SY 2021-2022

3.3.8 Educational Facilities

The number of public schools in Quezon City increased from 153 in 2018 to 158 in 2022, driven in part by the establishment of Stand-Alone Senior High Schools. Of these, 63 are public secondary schools (comprising both Junior High and Senior High Schools), and 95 are elementary schools, all of which offer preschool classes. Additionally, the city is home to three public institutions offering vocational and technical courses: Quezon City University (QCU) Main Campus in San Bartolome, QCU Batasan satellite campus, and the Quezon City Competency Assessment Center (QCCAC), formerly known as TALCAC, located in Barangay Tatalon.

In the private sector, approximately 579 schools offer various levels of education, including preparatory, elementary, and secondary, with many providing a combination of these levels. The city also boasts 94 colleges and universities, with some of the more prominent institutions being Miriam College, Ateneo de Manila University, and the state-run University of the Philippines.

Quezon City is also well-served by a network of public libraries, comprising one main "state-of-theart" library located at the City Hall Compound and 25 branch libraries spread across the city's six districts. These libraries play a crucial role in providing accessible educational resources and fostering a culture of learning in the community.

3.3.9 Special Education Fund (SEF) Utilization

The Special Education Fund (SEF) is derived from an additional one percent tax on real property, which is automatically allocated to Local School Boards. According to records from the Local School Board and the City Budget Department, Quezon City's annual approved SEF budget has exceeded ₱1 billion each year over the past four years, with the highest allocation recorded in 2020 at ₱2,902,251,031.55. The average utilization rate of the SEF over this period is 71.25% (See Table DS-25).

Joint Memorandum Circular No. 1, Series of 1998, issued by the Department of Education (DepEd), the Department of Budget and Management (DBM), and the Department of the Interior and Local Government (DILG), outlines the rules and regulations governing the utilization of the SEF by Local School Boards. Priority expenses that can be charged against the SEF include the operation and maintenance of public schools, which encompasses the organization of extension classes, non-formal education, remedial and summer classes, and the payment of existing allowances for teachers as granted by local government units, subject to existing budgeting rules and regulations.

Additionally, the SEF may be used for the construction and repair of school buildings, facilities, and equipment, as well as the acquisition, titling, and improvement of school sites. Other eligible expenses include educational research, procurement instructional materials, of books, periodicals, and information technology resources, as well as expenses related to school sports activities at the national, regional, division, district, municipal, and Source: Local School Board Secretariat; City Budget Department barangay levels. The fund also supports other Department of Education Culture and

Table DS-25: Approved and Actual Utilization of Special Education Fund; Quezon City: 2019-2022

Calendar Year	Approved Amount (Php)	Actual Expenditure (Php)	Utilization
2019	2,602,982,571.30	1,188,769,840.26	46%
2020	2,902,251,031.55	1,790,902,875.92	62%
2021	1,809,800,000.00	1,587,290,615.74	88%
2022	1,800,000,000.00	1,606,256,939.46	89%

Sports (DECS) related activities, including co-curricular programs.

3.4 SOCIAL WELFARE SERVICES

Social Welfare Services in Quezon City are primarily delivered to residents through the Social Services and Development Department (SSDD). The primary beneficiaries of these services are the city's indigent families, which include children, youth, the elderly, persons with disabilities or special needs, mendicants, women, and distressed or displaced groups. The city offers a range of welfare programs and services designed to support these vulnerable populations:

- Community Welfare Program: This comprehensive social welfare initiative aims to uplift the living
 conditions of distressed and disadvantaged families and individuals, enabling them to become selfreliant, improve their quality of life, and actively participate in national development.
- Welfare and Relief Program: This program provides immediate intervention and support to city residents facing crises due to illness, job loss, natural and man-made calamities, and other economic challenges.
- Residential and Rehabilitation Program: This program offers custodial care and temporary shelter to
 indigent and disadvantaged individuals, ensuring they have a safe and supportive environment during
 times of need.
- Vocational and Skills Training Program: An integrated assistance package that equips beneficiaries with livelihood opportunities through skills training and other pro-poor projects, empowering them to meet their basic needs and improve their economic standing.

These programs collectively aim to enhance the well-being of Quezon City's most vulnerable residents, providing them with the resources and support necessary to overcome challenges and build a better future

In 2022, the Social Services and

Development Department (SSDD) welfare extended services 221,805 to clients, comprising 89,363 males and 132,041 females, with a combined total of 401 aggregated groups. This marked a decrease of 32,234 clients, or 12.7%, from the 253,896 clients served in 2018.

The majority of clients in both 2018 and 2022 accessed the Community Welfare Program. In 2022, this program accounted for 55.64% of all services provided, assisting

Table DS-26: Number of Clients Served by Type of Welfare Services; Quezon City: 2018 & 2022

		2018			2022	
Programs/Projects	M	F	Т	M	F	Т
Community Welfare Program						
Child Welfare Program	12,149	12,072	24,221	11,967	12,703	24,670
Youth Welfare Program	3,693	3,127	6,820	2,288	2,935	5,223
Family Welfare Program	64,958	79,293	144,251	23,544	46,987	70,531
Women Welfare Program	-	4,364	4,364	-	2,512	2,512
Welfare for Differently-Abled Program	1,521	1,391	2,912	704	612	1,616*
Elderly Welfare Program	1,077	5,995	7,072	1,771	4,038	5,809
Solo Parent Welfare Program	399	7,173	7,572	902	11,946	12,949
Sub-Total	83,797	113,415	197,212	41,275	81,807	123,483
Welfare and Relief Program						
Financial Assistance Program	2,237	2,053	4,290	7,449	10,290	17,739
Disaster Relief Program	10,192	10,027	20,219	22,176	15,734	37,910
Food for Work Program	75	126	201	105	170	275
Referrals	11,156	10,388	21,544	13,906	16,334	30,240
Volunteer and Auxiliary Program	395	865	1,260	529	941	1,470
Other Collaborative Project	31	66	97	1,781	2,289	4,070
Sub-Total	24,086	23,525	47,611	45,946	45,758	91,704
Residential and Rehabilitation Program						
Molave Youth Home	1,322	134	1,456	965	50	1,015
Reception & Action Center	398	174	572	116	103	219
Bahay Aruga				85	46	131
Bahay Kalinga				119	79	198
Sub-Total	1,720	308	2,028	1,285	278	1,563
Vocational & Skills Training Program						
Skills Training Program	879	3,975	4,854	420	862	1,282
Small Income Generating Assistance	172	1,062	1,234	430	3,310	3,740
Sikap at Galing Pangkabuhayan				7	26	33
Other Special Projects	67	890	957			
Sub-Total	1,118	5,927	7,045	857	4,198	5,055
Grand Total	110,721	143,175	253,896	89,363	132,041	221,805

123,340 clients. The Welfare and Relief Program followed, serving 91,704 clients, or 41.37% of the total. The Vocational and Skills Training Program reached 5,055 clients, representing 2.28% of the total, while the Residential and Rehabilitation Program served the fewest, with 1,563 clients or 0.71% of the overall number served. (*Refer to Table DS-26* for detailed statistics.)

3.4.1 Child Welfare Services

Early Childhood Care and Development (ECCD) Services

Early Childhood Care and Development (ECCD) Services in Quezon City cater to children aged 3-4 years old and include the Day Care and Home-Based Programs, as well as the Nutrition Service Supplemental Feeding program.

In the 2021-2022 school year, a total of 24,430 children were enrolled in the city's existing 300 public day care centers and 30 Supervised Neighborhood Play programs. Of these, 23,980 children attended day care centers, while 450 participated in the Home-Based Program. Additionally, 12,719 children were enrolled in private learning centers, bringing the total number of enrollees to 37,149. This figure represents 32.81% of the estimated 113,213 children aged 3-4 years in 2022, a significant decrease from the 84,461 children enrolled in day care in 2018. The drop in enrollment can be attributed largely to the COVID-19 pandemic, which led to the closure of many learning centers operated or managed by Non-Government Organizations (NGOs) and private entities.

Furthermore, the number of 3-4 year-old children enrolled in private pre-schools was not separately accounted for, as the data gathered from the Learners Information System (LIS) of the Department of Education aggregated figures across different grade levels. Consequently, an estimated 76,064 children, or 67.19% of the 3-4 year-old population, remained unserved by day care services. Based on the current day care center-pupil ratio of 1:40, the city would require 596 day care centers operating in two shifts to adequately serve this population.

Despite the overall decline in enrollment, the number of children attending the city's day care centers alone has increased steadily, rising from 24,035 in the 2017-2018 school year to 24,430 in 2021-2022. This growth can be attributed to the SSDD's policy of capping class sizes at 40 pupils per class to ensure individualized supervision by day care teachers, with support from day care parents, as well as the construction of new day care centers. (*Refer to Table DS-26 for detailed statistics.*).

Table DS-27: Pre-School Enrolment by Sex, by District; QC SY-2017-2018 & SY 2021-2022

Daycare enrollees		SY 2017-2018			SY 2021-2022	
(3-4 yrs old)	M	F	Т	M	F	Т
City DCCS/SNPs						
1	1,921	1,899	3,820	1,792	1,803	3,595
II	2,278	2,262	4,540	2,344	2,451	4,795
III	1,866	1,874	3,740	2,035	2,040	4,075
IV	1,756	1,739	3,495	1,646	1,849	3,495
V	2,620	2,560	5,180	2,484	2,791	5,275
VI	1,649	1,611	3,260	1,593	1,602	3,195
Sub-Total	12,090	11,945	24,035	11,894	12,536	24,430
NGOs/POs	-	-	60,426	-	-	12,719
Total	-	-	84,461	•		37,149

Source: Social Services Development Department, Division of City Schools

In 2022, a total of 186 children in need of special protection (CNSP) were served by the city, comprising 71 males and 116 females. These vulnerable children received a range of critical services, including rescue operations and temporary shelter, as well as protective services. Additionally, aftercare, follow-ups, and ongoing monitoring were provided to ensure their continued safety and well-being.

Cases of Child Abuse

In 2022, the number of reported abuse cases involving children was 39, representing a slight increase of 9 cases compared to the 30 reported in 2018. In both years, the majority of the victims were female. The most prevalent types of abuse reported in 2022 were related to child custody issues, followed by neglect and sexual abuse.

The increase in reported abuse cases can be attributed to heightened public awareness regarding the repercussions of child abuse, as outlined in Republic Acts 7610 and 9262—commonly known as the Anti-Child Abuse Act and the Violence Against Women and Children Act. This heightened awareness encourages more people to report abuse, contributing to both an increase in reported cases and a greater understanding of the issues involved (*See Table DS-28*).

OACEC		2018			2022	
CASES	М	F	Т	M	F	Т
Sexual Abuse	4	11	15	4	21	25
Physical Abuse	5	4	9	6	4	10
Neglected	7	4	11	1	12	13
Abandoned	1	1	2	1	3	4
Psychological/Verbal	1	5	6	0	4	4
Abuse						
Child Trafficking	0	2	2	2	1	3
Institutionalization	1	2	3	-	-	-
Child Custody	18	67	85	57	70	127

Table DS-28: Reported Cases of Child Abuse by Sex; QC: 2018 & 2022

Source: Social Services Development Department

Additionally, in 2022, the Department of Social Welfare and Development (DSWD) assessed and recommended 188 children—86 males and 102 females—for issuance of certificates for legal adoption.

133

71

115

186

Unregistered Births/Registered late

TOTAL

The United Nations Convention on the Rights of the Child, to which the Philippines is a signatory, emphasizes that every child has fundamental rights to survival, development, protection, and participation. This includes the inherent right to life and access to basic necessities, as well as the right to a name and nationality. In alignment with these principles, every barangay is committed to ensuring that all children are registered at birth.

In support of this, City Council Ordinance No. SP-1610, S-2005, was enacted to provide exemptions from registration fees for parents or guardians whose gross annual income does not exceed ₱60,000. This ordinance underscores the child's right to a name and legal status, and it includes penalties for non-compliance. The City Civil Registry Department (CCRD) has further promoted this initiative through its

"Operation Birth Right" campaign, which encourages families to register newly born and previously unregistered children—aged 31 days and above, and below 18 years—at no cost.

To address the challenges of unregistered and delayed births, particularly during the COVID-19 pandemic, the City Civil Registry Department (CCRD) introduced the Quezon City Birth Registration Online (QC BRO) system. Launched in May 2022, QC BRO is the first web-based electronic application of its kind in the country. This innovative system allows hospitals, lying-in clinics, maternity clinics, and individuals to initiate and complete birth registrations online.

In 2022, a total of 42,950 births were registered. Of these, 36,646 (85.32%) were registered on time, 5,337 (12.43%) were registered with delays, and 967 (2.25%) were processed through the Operation Birth Right campaign. Notably, 3,746 registrations were completed through the QC BRO, highlighting the system's effectiveness in facilitating timely and accessible birth registration

Cases of Child Labor

Child labor refers to any work or economic activity performed by children under the age of 17 that is exploitative or detrimental to their health, safety, or overall development. Such labor often forces children to forego their education and deprives them of their childhood. In line with Republic Act No. 9231, known as the Elimination of the Worst Forms of Child Labor, the city government of Quezon City has enacted Ordinance No. SP-784, S-99. This ordinance penalizes business and entertainment establishments for employing children and minors. Additionally, Ordinance No. SP-1594, S-2005, prohibits the employment of minors under fifteen years of age in both public and private sectors within the city's jurisdiction.

The 2011 Survey on Children by the Philippine Statistics Authority estimated that approximately 2.1 million children aged 5 to 17 were engaged in child labor. Prior to 2019, there was no city-specific data available due to data privacy concerns and the absence of a Data Sharing Agreement. To address this gap, Mayor Joy Belmonte directed the Public Employment Service Office (PESO) to undertake the city's own profiling of child laborers and establish a comprehensive database. This city-funded initiative began in 2021, employing Government Internship Program (GIPs) beneficiaries as enumerators and encoders, thus providing employment to over 700 deserving young individuals.

In 2022, a total of 10,182 child laborers—5,449 males and 4,733 females—were profiled across 83 barangays in Quezon City. This profiling effort has led to continuous referral and intervention services. Notably, 61 parents and guardians benefited from the TUPAD Program, 20 families received livelihood support through the BikeCinnation Program, 30 parents of child laborers received livelihood training, and 15 child laborers were provided with educational assistance.

Additionally, the Department of Labor and Employment-NCR Quezon City Field Office (DOLE-NCR QCFO) confirmed that, in 2022, 20 children were removed from child labor situations in Quezon City. The city's proactive profiling and resource mobilization, along with effective inter-agency collaboration, have significantly contributed to combating child labor.

Mayor Joy Belmonte further strengthened the city's anti-child labor efforts through Executive Order No. 41, Series of 2022, which established the Quezon City Task Force for the Special Protection of Street Children and Child Laborers, also known as Task Force Sampaguita. Signed on September 9, 2022, this executive order mandated the Task Force to develop a local action plan, conduct rescues and provide post-rescue interventions, assist in profiling street children, child laborers, and their families, monitor violations of child labor laws, and conduct advocacy campaigns on Child Rights, Anti-Child Labor Law, and related legislation.

In just three months of operation in 2022, Task Force Sampaguita successfully conducted outreach operations across the city, addressing reports of sampaguita vendors, mendicants, and non-QC residents in the streets. The Task Force rescued 1,039 individuals, including 360 children in street situations (CISS). Immediate interventions were provided to rescued QC residents, while non-QC residents were returned to their local government units with food packs for their journey home

3.4.2 Youth Welfare Services

In 2022, a total of 5,245 youths (2,297 males and 2,948 females) benefited from services under the Youth Welfare Program, marking a decrease from 6,820 youths served in 2018. This decline may be attributed to the city's ongoing advocacy efforts and heightened awareness of national and local child protection laws. The youth served ranged in age from 6 to 17 years old, with 2,288 males and 2,935 females.

In accordance with Republic Act No. 9344, also known as the Juvenile Justice and Welfare Act, youth offenders under the age of 15 are released to the custody of their parents, guardians, or a responsible welfare agency, receiving appropriate interventions. The Molave Youth Home (MYH) serves as a residential and rehabilitation center for children in conflict with the law (CICL) aged 15 to 17 years. It provides temporary secure custody and care for youth offenders from Quezon City, regardless of their residential address, while they await trial.

In 2022, there were 268 reported cases of youth offenders under RA 9344, representing a significant decrease of 56.49% from 616 cases in 2018. Of these cases, 248 involved males and 20 involved females. The services provided to these youth offenders include social and treatment support, home life care, medical assistance,

values and spiritual

formation,

were

placed

Table DS-29: Number of Youth (6-17 Years Old) Served by Type;QC: 2018 & 2022

formation,			20	18			20	22	
vocational and	TYPE	MALE	FEMALE	TOTAL	%	MALE	FEMALE	TOTAL	%
skills training, non-	Organizing Youth Groups	583	549	1,132	16.60	16	330	346	6.6
•	Capacity Building	1,484	1,602	3,086	45.25	1,117	1,428	2,545	48.52
-	Skills Training	92	118	210	3.08	-	-	-	
recreational and	Youth in Need of Special Protection	734	492	1,226	17.98	386	601	987	18.82
cultural activities.	Rescue	280	183	413	6.06	281	534	815	
	- Physical abuse					71	44	115	
Additionally,	- Verbal/ Psychological abuse					26	32	58	
the Social Services	- Sexual abuse					16	292	308	
and Development	- Abandoned					3	1	4	
	- Youth with Benavioral Problem					83	60	143	
Department	- Institutional Custody					60	<i>78</i>	138	
(SSDD) provided						5	4	9	
support to other	- Child Trafficking					1	7	8	
vouth actorories	- Neglected					16	16	32	
	Touth in Street Situation	504	309	813	11.92	105	67	172	
346 youths were	- QC residents					48	37	85	
involved in	- Non-QC residents					<i>57</i>	30	87	
	Youth Offenders under RA 9344/CICL	562	54	616	9.03	248	20	268	5.11
groups; 2,545	- Diversion					144	8	152	
received capacity-	- Intervention					20	1	21	
building services;	- Filed in Court					84	11	95	
•	Rehabilitative Program					24	8	32	0.61
987 were identified as in need of	Educational Assistance	238	312	550	8.06	506	561	1,067	20.34
special protection;	TOTAL	3,693	3,127	6,820	100.00	2,297	2,948	5,245	100.00

Source: Social Services Development Department

under rehabilitative programs; and 1,067 received educational assistance. Notably, while most youth services experienced a decrease between 2018 and 2022, the provision of educational assistance saw an increase (See Table DS-29

3.4.3 Women in Especially Difficult Circumstances

In 2022, the Women Welfare Program served a total of 2,542 women, providing essential services such as rescue operations, temporary shelter, case management, and capability-building initiatives. Of these, 1,738 women received capability-building services, and 777 incidences of Violence, Exploitation, and Discrimination against Women and Children (WEDC) were reported.

The 777 WEDC cases in 2022 represent a notable increase of 277 cases from the 500 reported in 2018. This rise can be attributed to intensified information campaigns on key legislations such as Republic Act No. 9262 (Violence Against Women and Children Act), Republic Act No. 9208 (Anti-Trafficking in Persons Act), and Republic Act No. 7877 (Anti-Sexual Harassment Act), among others.

The breakdown of reported WEDC cases in 2022 reveals that violence against women was the most prevalent, with 383 cases, accounting for 49.29% of the total. This was followed by trafficking victims, with 133 cases or 17.12%, and abuse of domestic workers (kasambahays), with 4 cases or 0.51% (See Table DS-30).

Table DS-30: Reported Number and Incidence of Women in Especially Difficult Circumstances; QC: 2018 & 2022

WOMEN CASES	20	18	20:	22
WOMEN CASES	NUMBER	PERCENT	NUMBER	PERCENT
1. VAWC	290	58	383	49.29
2. Victims of Prostitution	110	22	-	-
3. Victims of Trafficking	75	15	133	17.12
4. Abused Kasambahay	25	5	4	0.51
5. Bereaved Mother	-	-	61	7.85
6. PAO	-	-	108	13.9
7. Referral for Psycho- Evaluation	-	-	73	9.4
8. Referral to Institution	-	-	15	1.93
TOTAL	500	100	777	100

Source: Social Services Development Department

3.4.4 Persons with Disabilities

The Disabled Persons Affairs Committee (DPAC) was established through City Ordinance No. SP-158, S-94, to enhance the involvement of disabled persons in policy formulation affecting their lives. In 2002, the City Council Ordinance No. SP-1141, S-2002 led to the creation of the Persons with Disability Affairs Office (PDAO), which succeeded the DPAC and reorganized the structure and functions of the former Disabled Persons Affairs Office (DPAO).

The PDAO is responsible for issuing PWD IDs and offers a range of programs to support the city's PWD community, including Capacity Building, Advocacy and Monitoring, Resource Generation and Partnership-Building, and Linkages and Referrals.

As of 2022, the estimated number of persons with disabilities in Quezon City, based on PDAO records, is 54,308. Of this population, 1,316 individuals, or 2.42%, were served by the Social Services and Development Department (SSDD). The disabilities among those served include psychological, mental, physical, orthopedic, hearing, speech, visual impairments, and multiple disabilities. The largest group

served were those with learning disabilities, totaling 366 cases or 27.81%, followed by 269 people with hearing disabilities (20.44%), and 206 with physical or orthopedic disabilities (15.65%). Additionally, the SSDD provided support to 2 clients with cancer or rare diseases, representing 0.15% of those served.

Services provided by the SSDD include Case Management, Capability Building Programs, Educational Assistance, Livelihood Skills Training, Community-Based Rehabilitation (CBR), and Provision of Hygiene Kits. Among the 1,316 PWDs served, 700 received Educational Assistance, 349 participated in Capability Building Programs, 221 benefited from Case Management, 30 engaged in Livelihood Skills Training, and 16 received support through CBR. Additionally, 300 PWDs were provided with hygiene kits in recognition of National Disability Prevention and Rehabilitation (NDPR) Week *(See Table DS-31)*.

Table DS-31: Number of PWDs Served by Type of Disability and Reported Cases of Abandoned/Neglected PWDs by Sex; QC: 2022

		Types	s of services pr	ovided		
TYPE OF DISABILITY	Case Management	Capability Building	Educational Assistance	Livelihood Skills Train- ing	Community Based Rehabilitation	TOTAL
Psychosocial Disability	17	25	15	8	-	65
Speech Disability	-	-	45	-	-	45
Mental Disability	60	24	59	-	-	143
Learning Disability	32	14	309	4	7	366
Visual Disability	55	15	23	2	1	96
Physical/Orthopedic Disability	39	62	82	15	8	206
Hearing Disability	14	202	52	1	-	269
Intellectual Disability	3	1	113	-	-	117
Cancer / Rare disease	-	-	2	-	-	2
Others	1	6	-	-		7
TOTAL	221	349	700	30	16	1,316

Source: Social Services Development Department

The Kabahagi Center for Children with Disabilities (KABAHAGI), inaugurated in 2018, is dedicated to advancing the rights of children with disabilities by fostering their holistic and inclusive development. The Center aims to create a city that is inclusive, sustainable, empowering, and participatory, where persons with disabilities have equal access to opportunities, rights, and privileges.

KABAHAGI offers a range of free services designed to support children with disabilities and their families, including comprehensive healthcare, empowerment, and livelihood programs. These services encompass rehabilitation assessments, parent training with hands-on therapy, community engagement, advocacy, and information dissemination. The Center also collaborates with educational institutions to develop future service providers through its service-learning program.

Serving children with disabilities and their families who are confirmed as indigent residents of Quezon City, KABAHAGI made a notable impact in 2022. The Center reached 865 children with disabilities, and under the guidance of skilled professionals—developmental pediatricians, rehabilitation physicians, audiologists, and psychometricians—659 children underwent thorough disability assessments.

KABAHAGI's innovative Flexicoaching and Sama-Aralan programs have been pivotal in empowering families. In 2022, the Center conducted an impressive 853 parent training programs, each consisting of 10

sessions, complemented by personalized home modules tailored to each family's needs. Specifically, 364 children with disabilities and their caregivers received training from Occupational Therapists, 223 from Physical Therapists, and 266 from Speech Pathologists.

3.4.5 Senior Citizens

The elderly population in Quezon City is a significant and vulnerable group deserving special attention and protection. To ensure that senior citizens can fully enjoy their twilight years, the city has expanded its programs to offer a range of projects that foster social interaction, articulate their needs, express their interests, and participate in developmental activities.

Under the Expanded Senior Citizens Act of 2010 (Republic Act No. 9994), which amends RA 7432 of 1992 and RA 9257 of 2003, a comprehensive array of benefits and privileges are provided to senior citizens, including:

- Free Medical and Dental Services: Access to free medical, dental, diagnostic, and laboratory services at all government facilities.
- **Discounts on Medicines and Services:** A 20% discount on medicines, medical and dental services, and diagnostic and laboratory fees in both government and private facilities.
- **Discounts at Establishments:** A 20% discount at hotels, restaurants, recreation centers, theaters, cinema houses, and concert halls.
- Transportation Discounts: A 20% discount on domestic air, sea travel, and public transportation fares.
- Discounts on Essentials: A 5% discount on basic necessities and prime commodities.
- VAT Exemption: A 12% VAT exemption on goods and services that are already entitled to the 20% discount.
- **Utility Discounts:** A 5% discount on the monthly utilization of water and electricity, provided the utilities are under the senior citizen's name.
- **Income Tax Exemption:** Exemption from individual income taxes for senior citizens considered minimum wage earners, in accordance with RA No. 9504.
- Free Training and Vaccinations: Exemption from training fees for socio-economic programs and free vaccination against influenza and pneumococcal disease for indigent senior citizens administered by the Department of Health (DOH).
- Educational Assistance: Support for senior citizens pursuing post-secondary, tertiary, post-tertiary, vocational, and technical education, as well as short-term courses for retooling in both public and private institutions.
- Continued Benefits: Continuation of benefits and privileges provided by the Government Service Insurance System (GSIS), Social Security System (SSS), and Pag-IBIG Fund.
- Express Lanes: Provision of express lanes in all commercial and government establishments; in their absence, senior citizens are given priority.
- **Death Benefit Assistance:** A minimum of Php2,000.00 death benefit assistance for the nearest surviving relative of a deceased senior citizen.

In addition to the comprehensive benefits and privileges for senior citizens, Quezon City has enacted several City Ordinances and Resolutions to further support its elderly population. These measures include:

• Ordinance No. SP 1986, S-2009: Recognizes and rewards city residents who reach the milestone age of 100 years, reflecting the city's commitment to honoring and supporting its senior citizens.

- Resolution No. SP 4629, S-2009: Encourages cinema operators in Quezon City to offer free admission to all senior citizens every Monday and Tuesday, promoting greater accessibility to cultural and recreational activities.
- Ordinance No. SP-2370, S-2014: Enhances the benefits for centenarians by increasing the financial reward to fifty thousand pesos (Php 50,000) and formally bestowing the title of 'Centenarian Citizen' to residents reaching 100 years of age.
- Ordinance No. SP-2472, S-2015: Exempts senior citizens from the initial parking fee charges in establishments, malls, hospitals, and similar venues within the city, ensuring greater ease of access and affordability.
- Ordinance No. SP-2544, S-2016: Provides death benefit assistance of at least five thousand pesos (Php 5,000) to the families of deceased senior citizens, acknowledging their contributions and supporting their loved ones in times of loss.

As of 2022, the estimated population of individuals aged 60 and over in Quezon City is 213,274, comprising 89,292 males and 123,982 females. The Office of the Senior Citizens Affairs (OSCA) has successfully registered 211,097 senior citizens with the Quezon City ID (QCID), representing 98.98% of the elderly population.

The Social Services and Development Department (SSDD) has served a total of 5,809 senior citizens under its Elderly Welfare Program, with 1,771 males and 4,038 females receiving various forms of assistance. The number of older persons requiring special attention has risen to 192 cases in 2022, up from 61 cases in 2018. This includes 37 cases of abandoned elderly individuals, 82 cases of neglect or homelessness, 8 cases of maltreatment, 2 cases of stranded seniors, and 63 cases referred for further support and intervention (See Table DS-32).

Table DS-32: Reported Cases of Older Persons in Need of Special Attention By Sex; QC: 2018 & 2022

CASES		2018		2022			
CASES	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	
Abandoned	9	21	30	19	18	37	
Neglected	7	20	27	34	44	82	
Maltreated	2	2	4	3	5	8	
Stranded	-	-	-	0	2	2	
Referred	-	-	-	29	34	63	
TOTAL	18	43	61	89	103	192	

Source: Social Services Development Department

3.4.6 Family Welfare

In 2022, the Family Welfare Program successfully reached a total of 70,531 Quezon City residents, providing a wide range of essential services aimed at improving family well-being and support. The program encompasses:

- Case Management: Personalized support and intervention for families in need.
- Family Survey: Comprehensive assessments to identify and address family needs and challenges.
- Capacity Building: Programs designed to enhance the skills and capabilities of individuals and families.

- **Networking and Coordination**: Facilitating connections between families and relevant community resources and services.
- Free PhilHealth Coverage: Health insurance provided to ensure access to medical care.
- Issuance of Certification for PhilHealth Point of Service (POS): Enabling immediate access to health services through certification.
- Rescue of People in Street Situations: Assistance and intervention for individuals facing homelessness or similar critical situations.

The program provided free PhilHealth coverage to 19,539 indigent families, including 7,760 male household heads and 11,779 female household heads. Additionally, 1,344 beneficiaries received certification for PhilHealth Point of Service (POS), comprising 413 males and 931 females.

Table DS-33: N umber of Recipients of Family Welfare Services By Sex; QC: 2022

TVDE		202	2	
ТҮРЕ	MALE	FEMALE	TOTAL	%
Case Management	477	843	1,320	1.87
Family Survey	9,760	14,670	24,430	34.64
Capacity Building	4,325	17,481	21,806	30.92
- Parent Effectiveness Seminar (PES)	3,122	16,492	19,614	
- Family Day Celebration	234	336	570	
- Empowerment & Reaffirmation on Paternal Abilities (ERPAT)	466	26	492	
- Pre-Marriage Counseling Service to would-be married couples	448	448	896	
- Skills Training	55	179	234	
Networking & Coordination	280	624	904	1.28
Free PhilHealth Coverage	7,760	11,779	19,539	27.7
Issuance of Certification to avail PhilHealth through Point of Service	413	931	1,344	1.91
Processing Center - Rescued people in street situations	529	659	1,188	1.68
Total	23,544	46,987	70,531	100

Source: Social Services Development Department

Since 2008, Quezon City has been actively participating in the Pantawid Pamilyang Pilipino Program (4Ps), also known as the Conditional Cash Transfer Program, administered by the Department of Social Welfare and Development (DSWD). This program is a cornerstone of the city's poverty reduction strategy, focusing on human capital development through targeted cash grants for health and education.

4Ps aims to uplift poor households by providing conditional cash grants that promote human development and break the cycle of poverty. The program's design emphasizes investments in health, nutrition, and education, with cash transfers contingent

upon beneficiaries meeting specific conditions. These include regular health check -ups for pregnant women, growth monitoring and vaccinations for children aged 0-5, and at least 85% school attendance for children aged 3-14 enrolled in day care, kindergarten, primary, secondary, and alternative education.

Inspired by successful models from Latin America and other developing regions, the Pantawid Pamilya Program has made significant contributions to improving school attendance, enhancing maternal and child health, and combating child labor.

As of May 2023, the program covers 132 of Quezon City's 142 barangays, representing 92.96% of the city's total barangays. Coverage was determined through a Proxy Means Test (PMT) conducted by DSWD, targeting areas with families below the poverty threshold. Notably, all barangays in District II (5 barangays), District V (14 barangays), and District VI (11 barangays) are included in the program (See Table DS-34).

3.4.7 Solo Parents

Table DS-34: Number of Pantawid Pamilya Beneficiaries Per district; QC: 2023

District	2023
I	4,091
II	9,933
III	2,890
IV	4,488
V	6,693
VI	5,054
TOTAL	33,149

In 2022, a total of 8,350 Solo Parent IDs were issued, comprising 530 male and 7,820 female solo parents. Of these, *Source: Social Services Development Department* 4,498 solo parents were informed about existing City Ordinances

and the Solo Parent Welfare Act of 2000 through advocacy campaigns conducted by the SSDD. Additionally, 101 solo parents were actively organized during the year. Overall, the Solo Parent Welfare Program served a total of 12,949 beneficiaries, providing crucial support and resources to this vital community.

Table DS-35: Number of Recipients of Solo Parent Services By Sex; QC: 2022

ТҮРЕ	MALE	FEMALE	TOTAL
Issuance of Solo Parent ID	530	7,820	8,350
Advocacy on R.A. 8972	372	4,126	4,498
Organization of Solo Parents			101*
Total	902	11,946	12,949

Source: Social Services Development Department

3.4.8 Social Welfare Facilities

Social welfare services were extended across a diverse range of facilities designed to support various sectors of the community:

- 300 Day Care Centers (DCCs), marking an increase of 4 centers from 296 in 2018, providing early childhood care and development services.
- 30 Supervised Neighborhood Play (SNP) centers, offering safe spaces for children's social and developmental activities.
- 2 Community-Based Therapeutic Rehabilitation Centers for Persons with Disabilities (PWDs), delivering essential rehabilitation services.
- 1 QC Protection Center located at Quezon City General Hospital (QCGH), functioning as a comprehensive support center for victims and survivors of gender-based violence and abuse.
- 1 Reception and Action Center for indigent and disadvantaged clients, including women in need of special protection and PWDs aged 18-59 who have been abused or abandoned.
- 1 Molave Youth Home, providing care and rehabilitation for children in conflict with the law.
- 1 Bahay Aruga, dedicated to the care of abandoned senior citizens.
- 1 Bahay Kalinga, serving as a refuge for children at risk.
- 1 Bahay Kanlungan, supporting victim-survivors of violence and abuse, including members of the LGBTQIA+ community.

- 1 Drug Treatment & Rehabilitation Center (TAHANAN), offering comprehensive services for drug dependency recovery.
- 1 Kabahagi Center for Children with Disabilities, focused on the holistic development and support for children with disabilities.

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3.4.9 Other Welfare Institutions/Organizations

As of 2022, there are 99 registered non-governmental organizations (NGOs) dedicated to providing welfare services for the youth and children sectors in the city. Additionally, 163 Private Social Welfare and Development (PSWD) agencies have been registered and licensed by the Department of Social Welfare and Development (DSWD).

The majority of these welfare programs and services are community-based, operating in close coordination with barangay and community leaders, particularly in informal settlement areas throughout the city. These activities and services are delivered in various community settings, including barangay halls, health centers, multipurpose halls, and other local facilities. The collaborative approach ensures that support is effectively integrated into the fabric of the community, addressing the specific needs of the target populations

3.5 HOUSING

3.5.1 Introduction

By population, Quezon City is the largest city in the country. The Philippine Statistics Authority (PSA) census of 2015 showed that there were 2,936,116 people living in the city. With a growth rate of 1.17%, the population was estimated to be 3,185,894 in 2022 and is expected to grow to 3,223,270 in 2023. High population results in problems like poverty, unemployment, urban blight, traffic congestion, high solid waste generation, inadequate health and educational facilities, and housing shortage. Urban governance in the City is faced with the huge challenge of matching the growth in population with corresponding growth in basic services and facilities, given the limited amount of resources at its disposal. The challenge is even

made difficult by the fact that approximately 31% of the population is poor, the sector most in need of assistance to improve their quality of life.

Section 9 (Urban Reform and Housing), Article XIII (Social Justice and Human Rights) of the 1987 Philippine Constitution provides that, "The state shall, by law, and for the common good, undertake in cooperation with the private sector, a continuing program of urban land reform and housing which will make available at affordable cost decent housing and basic services to underprivileged and homeless citizens in urban centers and resettlements areas. It shall also promote adequate employment opportunities to such citizens. In the implementation of such program the State shall respect the rights of small property owners."

Decent housing, according to the PSA, is a housing unit with permanent roofing material, strong outer walls and has a security of tenure.

The 2010 PSA survey showed that the proportion of occupied housing units with outer walls made of concrete/brick/stone increased from 46.2% in 2000 to 67.2%. Those with outer walls made of half concrete/brick/stone and half wood decreased from 32.3% in 2000 to 21.8% in 2010. Meanwhile, majority (89.2%) of the occupied housing units in 2010 had roof made of galvanized iron/aluminum, which is higher than the proportion of 77.7% recorded in 2000.

As prescribed in the Implementing Rules and Regulations (IRR) of PD 957 and Batas Pambansa 220 (BP 220) (*amended per Board Resolution No. 824, S-2008*), the minimum lot and floor area requirements (in sq. m.) for the types of housing unit and the housing project is presented in the table below:

Table DS-36: Shelter Component Minimum Lot Area (LA) & Floor Area (FA) (sq. m.)

a									
TYPE OF HOUSING UNIT		PD 957				BP 220			
		OPEN MARKET		MEDIUM COST		ECONOMIC		SOCIALIZED	
		LA	FA	LA	FA	LA	FA	LA	FA
Single Deta	nched	120	42	100	30	72	22	64	18
Duplex/Single	Attached	96	42	80	30	54	22	48	18
Row Hou	ıse	60	42	50	30	36	22	28	18

Source: Housing & Land Use Regulatory Board (HLURB)

Note:

- Saleable lots designated as duplex/single attached and/or row house lots shall be provided with housing components.
- Price of saleable lots intended for single detached units shall not exceed 40% of the maximum selling price of the house and lot package.
- Mandatory provision of firewall for duplexes/single-attached units and at every unit for row houses.
- The number of row houses shall not exceed 20 units per block/cluster but in no case shall this be more than 100 meters in length.

The minimum floor area (FA) requirement (in sq. m.) per type of housing project is the same for all types of housing units.

Affordable housing, on the other hand, is a housing unit with the most reasonable price based on the needs and financial capability of Program beneficiaries and appropriate financing schemes. It should not exceed 30% of the HH income spent on housing and utilities.

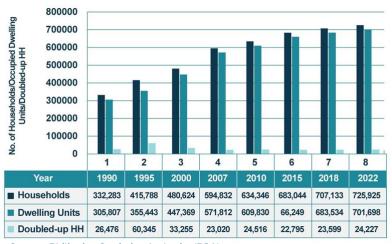
Urban housing is the single most visible problem in the city as it involves the use of exposed physical resources which are land and the dwelling structure. The urban poor consisting of informal settler families (ISFs) and slum dwellers and tenants in low-cost but poor rental dwelling units contribute immensely to the city's housing backlog. Existing government shelter programs cater mostly to ISFs. The tenants and renters in apartments and low-cost but poor rental units are usually neglected despite the fact that they spend a considerable portion of their income on rents; refraining from squatting and keeping their tenure status legitimate while also aspiring to have housing of their own. Aside from them, new households being formed every year expand the sector in need of shelter. The Local Government Code of 1991 (RA 7160) provides the statutory framework for the devolution of local public administration and service delivery responsibilities as well as revenue mobilization powers to LGUs. The Urban Development Housing Act of 1992 (UDHA or RA 7279) requires LGUs to provide socialized housing and other mass dwellings especially for the poor and underprivileged.

3.5.2 Current State of Housing in Quezon City

Households & Occupied Dwelling Units

According to the Philippine Statistics Authority (PSA), the 2010 survey revealed that Quezon City had 634,346 households residing in 609,830 dwelling units. This data indicates a housing ratio of 104 households for every 100 occupied housing units, highlighting a slight overcrowding in residential spaces. The average household size was recorded at 4.3 persons, showing a decrease from the 4.8 persons per household average in 2000.

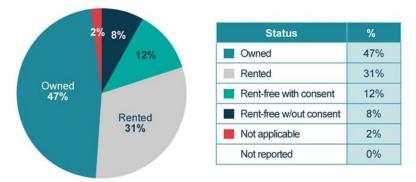
By 2015, the number of households had increased to 683,044, with the number of occupied dwelling units rising to 660,249, maintaining a similar trend in household-to-housing unit ratios. In 2022, the estimated number of households grew further to 725,925, while the total number of dwelling units reached 701,698. These figures continue to reflect a slight disparity between the number of households and available housing units in the city. (*Refer to Figure DS-19*)



Source: Philippine Statistics Authority (PSA)

Figure DS-19: Comparative Number of Households & Occupied Dwelling Units; Quezon City: 1990-2022

It is noteworthy that in 2010, 47% of the 634,346 households were either owned or were amortizing the lots they occupied, a significant increase from the 36.3% recorded in the 2000 survey, which then covered 480,624 households. Additionally, 30.8% of households were renting the lots they occupied. A further 12.1% lived on rent-free lots with the owner's consent, while 8.5%—equivalent to 53,943 households or approximately 231,955 individuals—were informal settlers residing on lots rent-free but without the owner's consent. (*Refer to Figure DS-20*)



Source: Philippine Statistics Authority (PSA)

Figure DS-20: Number of Households by Tenure Status of the Lot: Q.C. 2010

Doubled-up Households

A "doubled-up" household occurs when a single dwelling unit is shared by two or more households. Based on the projected 2015 POPCEN results for 2020-2025, the estimated number of households in 2022 was 725,925, while the number of occupied dwelling units stood at 701,698. This disparity suggests that 24,227 households are living in doubled-up arrangements. It's important to note that many of these existing dwelling units are in various states of deterioration, requiring significant improvements or even total replacement. This further exacerbates the challenges faced by these doubled-up households.

Homeless

These individuals or households are those living in parks, along sidewalks, or in any location without any form of permanent shelter.

Applying a factor of 0.1% (0.001) to the total household population, it is estimated that approximately 30 people in the city are homeless. For planning and intervention purposes, each homeless individual is considered as a separate household in need of housing support.

Unacceptable and Makeshift Dwelling Units

"Unacceptable housing units" are defined as the 5% of housing units constructed from "mixed materials," which typically include walls and roofs made of wood, cogon, nipa, anahaw, asbestos, and similar materials. These types of housing units are often associated with rural areas where such materials are readily available. According to PSA data, the number of these housing units in Quezon City has been declining by 9.14% annually, largely due to the decreased availability of these materials in urban settings. Similarly, the number of makeshift housing units has been decreasing at a rate of 8.52% per year.

In 2010, PSA data recorded a total of 13 unacceptable housing units and 2,596 makeshift, salvaged, or impoverished housing units in Quezon City. By 2015, the combined total of these types of dwellings had decreased to just 1,110 units, reflecting significant improvements in the quality of housing across the city.

Informal settlers

A significant portion of Quezon City's population in need of adequate shelter consists of informal settler families (ISFs) who occupy idle public and private lands. Public lands include parcels owned by various government agencies, designated open spaces, road right-of-ways, aqueducts, and high-risk areas such as dumpsites, as well as easements along transmission lines, rivers, and creeks. For those residing in danger zones or on sites designated for government infrastructure projects, relocation is the primary intervention strategy.

According to the Housing Community Development and Resettlement Department (HCDRD), formerly known as the Urban Poor Affairs Office (UPAO), the census-survey conducted as part of ongoing monitoring revealed an increase in the number of ISFs from 2008 to 2010. However, a declining trend was observed from 2011 to 2013, primarily due to extensive relocation efforts targeting ISFs in high-risk areas, particularly those along river and creek easements prone to flooding. Additionally, the HCDRD undertook efforts to update and clear the ISF database, contributing to this decrease.

Despite these efforts, there was a significant increase in the number of ISFs residing in danger areas, waterways, and near infrastructure projects from 2011 to 2015. This surge was attributed to several factors, including in-migration (movement within the city from one barangay to another), natural population growth, and other unforeseen circumstances. Following this period, the number of ISFs in these areas decreased from 2015 to 2018.

In 2014, there was a slight increase in the total number of ISFs, with the figure reaching 196,818 ISFs housed in 155,184 structures. However, from 2015 to 2018, a significant decrease was observed, with the number of ISFs dropping to 195,061 in 2015, 193,403 in 2016, 190,718 in 2017, and 188,549 in 2018.

In 2019, the total number of ISFs rose again, reaching 213,978 housed in 163,144 structures. However, from 2020 to 2022, a modest but noticeable decrease occurred, with the number of ISFs recorded at 210,984 in 2020, 210,501 in 2021, and 209,350 in 2022. Despite these declines, the 2022 figure remains higher than the 2018 census count. (*Refer to Table DS-37*).

Table DS-37: No. and Percent Distribution of Informal Settlers

Quezon City by District: 2019-2022

District	2019		202	2020		21	2022	
District	No.	%	No.	%	No.	%	No.	%
I	25,119	11.74	25,765	12.22	24,020	11.41	23,157	11.06
II	57,115	26.69	57,440	27.22	58,121	27.61	59,661	28.50
III	20,670	9.66	19,654	9.32	19,118	9.08	18,105	8.65
IV	36,013	16.83	30,094	14.26	28,443	13.52	30,953	14.78
V	37,708	17.62	31,124	14.75	32,254	15.32	32,884	15.71
VI	37,353	17.46	46,907	22.23	48,545	23.06	44,590	21.30
TOTAL	213,978	100.00	210,984	100.00	210,501	100.00	209,350	100.00

Source: Housing Community Development & Resettlement Department (HCDRD)

It is important to note that the census data from July 2010 was exclusively conducted by HCDRD (then UPAO), while subsequent data were drawn from consolidated reports by HCDRD and other local and national government agencies.

The needs of these informal settler families (ISFs) primarily revolve around resettlement or on-site upgrading. This can be achieved through a combination of tenurial security, infrastructural improvements for 152,463 ISFs, and structural enhancements for an additional 9,828 ISFs. (*Refer to Table DS-38*)

Table DS-38: Summary of Shelter Needs (2022-2027)

Shelter Needs	Present Needs (2022)	Future Needs (2023-2027)	Total
New Housing Units Due To			
Housing Backlog Doubled-up households Unacceptable housing units Homeless Displaced Units	24,227 1,110 730 56,877		24,227 1,110 707 56,877
Sub-total	82,944		82,944
Formation of New Households		25,237	108,191
Total	82,944	25,237	108,191
Upgrading Needs			
Structural (2% of formal pop'n)			9,828
Tenurial/infrastructural			<i>152,473</i>

At the district level, from 2019 to 2022, the majority of informal settler families (ISFs) were concentrated in District II, accounting for 26.69%, 27.22%, 27.61%, and 28.50% of the total ISFs in the city during those respective years. Districts VI and IV followed in terms of ISF population density. (*Refer to Table DS-36*).

When considering the distribution of ISFs across the city, 93,552 families, or 44.69%, are occupying private properties. Meanwhile, 56,877 families, or 27.17%, are living in danger areas or on government infrastructure sites. An additional 58,921 families, representing 28.14%, reside on government lots, within government projects (including designated Areas for Priority Development [APD] sites), and in some open spaces. (See Table DS-39).

Table DS-39: Magnitude of Informal Settlers by Area Classification. Ouezon City. 2015-2022

by Alea Classification, Quezon City, 2019-2022								
Area Classification					Year			
Location	2015	2016	2017	2018	2019	2020	2021	2022
1.a. Danger Areas						Î		
Waterways	15,577	14,313		12,694	13,435	12,453	12,200	11,251
Transmission Lines	7,895	7,472		7,296	7,296	7,296	7,322	6,887
Dumpsite	907	907		510	510	510	510	510
Under The Bridge	710	710		334	334	334	175	15
Landslide zone	296	296	44.450*	296	296	296	296	296
1.b. Government Infra			44,450*					
Sidewalk	2,534	2,534		2,264	3,041	3,077	3,077	3,000
RROW / Road lot	6,743	6,354		6,223	6,304	6,107	6,081	6,119
MNTC / Republic Ave.	3,806	3,806		3,806	18,175	18,175	18,175	17,599
MWSS	10,842	10,085		9,995	10,471	10,456	10,488	11,200
2. Government Properties	35,426	36,831	36,831	36,016	36,459	35,854	37,852	41,674
3. Government Projects	2,638	2,563	2,563	2,107	2,107	1,973	2,726	1,824
4. Area for Priority Development (APD)	13,269	13,269	13,269	12,867	12,867	12,867	12,867	12,796
5. Open Space	2,392	2,392	2,392	2,340	2,340	2,340	2,420	2,627
6.Private properties	92,026	91,871	91,213	91,801	100,343	99,246	96,312	93,552
Grand Total	195,061	193,403	190,718	188,549	213,978	210,984	210,501	209,350

Source: Housing Community Development & Resettlement Department (HCDRD)

Dwelling Units Needing Improvement

Structures requiring improvement due to deterioration and obsolescence are also factored into the city's overall housing requirements. Based on an estimate of 2% of the total housing stock—excluding informal settler dwellings—it is determined that 9,828 housing units are in need of upgrades or repairs to meet acceptable living standards.

Summary of Shelter Needs

In summary, the city requires a total of 108,191 new housing units to address the current housing backlog and accommodate population growth across all segments. Additionally, 9,828 housing units, excluding those of informal settlers, require improvements due to structural deterioration. Furthermore, there are 152,473 informal settler families (ISFs) occupying lands that are not slated for immediate clearing.

For this significant group of ISFs, a combination of upgrading options is necessary, including the stabilization of land and housing tenure, as well as the enhancement of infrastructure and housing structures. These interventions are critical to improving living conditions and addressing the city's comprehensive housing needs. (Refer to Table DS-40).

3.5.3 Sources of Housing Supply and Tenure Types

Socialized and Economic Housing

According to Department of Human Settlements and Urban Development (formerly HLURB) Board Resolution Nos. 968 and 969, Series of 2018, and Department Order (DO) No. 2022-003, the price ceilings for Socialized Projects in the National Capital Region (NCR) are set as follows:

Table DS-40: Price Ceilings for Socialized Projects, NCR, 2018

Socialized Co	ndominium Projects	Socialized Subdivision Projects		
₱700,000.00	for units measuring	₱480,000.00	22 sq. m. with loft of at least 50% of the	
	up to 22 square		base structure, or 24 sq. m.	
	meters			
₱750,000.00	for units measuring	₱530,000.00	24 sq. m. with loft of at least 50% of the	
	up to 24 square		base structure, or 28 sq. m.	
	meters			
		₱580,000.00	28 sq. m. with loft of at least 50% of the	
			base structure, or 32 sq. m.	

Additionally, the revised economic housing price ceiling, as outlined in Department Order No. 2022-003, is set at \$2.50 million

Open Market

Condominiums

Investing in a condominium unit in Quezon City is considered by some to be both a financially sound and personally rewarding decision. Many developments are strategically located in or near key districts and are close to popular shopping centers such as Cubao and Eastwood City, offering residents convenient access to essential amenities and leisure activities. Additionally, prime locations like Katipunan Avenue and Diliman are in proximity to prestigious schools.

The appeal of condominium living has grown significantly, particularly in highly urbanized areas. These high-rise residential buildings typically feature a range of recreational amenities, including swimming pools, gyms, day care centers, landscaped gardens, and 24-hour security. They are designed to be flood-resistant and earthquake-proof, meeting rigorous safety standards to withstand natural calamities.

While students often choose to rent condominiums or dormitory rooms during their academic tenure, families and newlyweds are increasingly purchasing units for long-term stability, including planning for their children's education. For investors, owning a condo in these sought-after areas offers the advantage of consistent rental income due to high demand.

Townhouses

The city boasts a rapidly growing population, yet its expansive landscape ensures that there is ample space to accommodate everyone. This vast area also supports a diverse and thriving real estate market. Among the various property options, townhouses in Quezon City are highly recommended for new residents due to their affordability and practicality.

Townhouses offer a more budget-friendly alternative to traditional house-and-lot properties while still providing the privacy and comfort of owning a standalone home. Priced similarly to modern condominiums, townhouses generally offer more space, making them an ideal choice for families. Additionally, like condominiums, townhouses are often located closer to business districts compared to traditional houses, offering residents the convenience of city living.

Quezon City offers a wide selection of townhouses, available in various prime locations including: Teachers Village and Sikatuna Village in Diliman, Visayas Avenue, Batasan Hills, Commonwealth Avenue area, Fairview, Novaliches, Matandang Balara, Tandang Sora, Cubao, Bagumbayan, etc.

Table DS-41: List of Selected Townhouses in Quezon City

Name of Townhouse / Location	Features	Price	FA	LA
Name of Townhouse / Location	reatures	(PhP M)	(sq. m.)	(sq. m.)
3-Sty. Townhouse, near Mindanao Ave., Prot 8, Bgy. Bahay Toro	3 BR, 3 T&B	8.00	101	45
3-Sty. Townhouse Sunnyside Htss Subd., Bgy. Batasan Hills	3 BR, 3 T&B	6.50	148	44
2-Sty. Townhouse, Dona Nicasia Subd. Litex Road, Bgy Commonwealth	3 BR, 2 T&B	4.55	84	47
3-Sty. Townhouse, Don Antonio Heights, Bgy. Holy Spirit	3 BR, 3 T&B	10.89	127	42
3-Sty. Townhouse, New Intramuros Village Bgy. Matandang Balara	3 BR, 6 T&B	13.50	288	98
3-Sty. Townhouse, Circulo Verde Garden Homes, Bgy. Bagumbayan	3 BR, 3 T&B	18.00	138	65
3-Sty. Townhouse, 10th Ave., Cubao	3 BR, 3 T&B	18.00	198	75
5-Sty. elegant Townhouse with Swimming Pool, Cubao	5 BR, 4 T&B	36.00	290	56
3-Sty. Unit A Townhouse, Teachers Village, Diliman	5 BR, 4 T&B	27.00	310	121
3-Sty. Solar-paneled furnished Townhouse, Teachers Village, Diliman	3 BR, 3 T&B	18.00	175	67
3-Sty. Semi-furnished Townhouse, Sikatuna Village, Diliman	4 BR, 4 T&B	35.00	340	134
2-Sty. Townhouse, Fern Village, Bgy. Fairview	3 BR, 3 T&B	17.50	237	110
2-Sty. Townhouse, West Fairview Subd., Bgy. Fairview	3 BR, 3 T&B	5.58	60	100
2-Sty. Townhouse, North Fairview near Commonwealth Ave.,	3 BR, 3 T&B	7.88	122	100
3-Sty. Townhouse, Fairmont Park Subd	4 BR, 3 T&B	12.50	258	100
2-Sty. Townhouse, Quirino H'way,. San Bartolome, Novaliches	3 BR, 2 T&B	6.21	89	50
2-Sty. Townhouse, near Quirino Hway Mindanao Ave, Novaliches	3 BR, 3 T&B	6.80	119	50
3-Sty. Townhouse, Philand Drive, Bgy. Pasong Tamo	3 BR, 3 T&B	8.50	150	67
2-Sty. Townhouse with roof deck, Dona Faustina Townhomes, Dona Faustina	3 BR, 4 T&B	17.00	240	93
Village, Tandang Sora				
3-Sty. Dona Sotera Townhomes, near Congressional Ave. Tandang Sora	3 BR, 4 T&B	16.30	217	69
2-Sty. Townhouse w/ loft, near Visayas Ave, Tandang Sora	3 BR, 3 T&B	8.20	112	60
2-sty. Townhouse near Visayas Ave. Tandang Sora	3 BR, 3 T&B	9.00	105	60

Source: Lamudi, Philippines

PhP M - Price (PhP million)

FA - Floor Area

I A - I of Area

Buyers will be pleased to find a range of housing options to suit different budgets. For instance, homes in subdivisions in Tandang Sora are priced between ₱8.20 million to ₱17 million, while those along Commonwealth Avenue range from ₱4.55 million to ₱10.89 million. In Novaliches, more affordable townhouses are available for under ₱7 million, whereas high-end townhouses in Diliman and Cubao can reach prices around ₱36 million. (See Table DS-40)

Condominium Units for Rent

Renting a condominium in Quezon City is a good option to fully experience urban living in Metro Manila. Condo units offer convenient access to key areas, and renting instead of buying provides greater financial flexibility, especially for those who may consider purchasing a house in the future. Monthly rental rates in the city vary, starting from ₱9,500 for a studio unit and reaching up to ₱35,000 for a two-bedroom flat. For renters who are considering long-term investment, rent-to-own options are also popular in Quezon City.

For those seeking a condo unit within walking distance of office towers and shopping malls, Eastwood City is a prime location. This mixed-use development combines commercial and residential spaces, offering everything residents need—workplaces, grocery stores, and leisure activities—all in one convenient setting. While Eastwood City is a well-known hub, it is far from the only area offering quality residences.

Students who are looking for housing near their colleges or universities will find ideal options along Katipunan Avenue. These condo units provide proximity to some of the city's top educational institutions, including Ateneo de Manila University, Miriam College, and UP Diliman.

The business districts of Cubao, North Triangle, and Fairview areas offer a wide range of condo options. These neighborhoods are particularly suitable for those working in the thriving business process outsourcing (BPO) industry.

Quezon City also offers condos in stand-alone, self-contained estates that function like minicommunities, complete with exclusive amenities for residents to enjoy. Whether you're looking for a spacious multi-bedroom unit or a cozy studio, the diverse options in Quezon City cater to a variety of lifestyles and preferences. (*See Table DS-42* for the list of some of the condominium units for rent in Quezon City, the features, floor area and their respective rental rates per unit)

Table DS-42: Condominium Units for Rent in Quezon City

Location	Features	FA	Rental rate
Location	i cataros	(sq. m.)	(in PhP)
Zinnia South Tower / EDSA Zinnia Road, Bgy. Katipunan Q.C.	1 BR, 1 T&B	41.00	22,000.00
Stellar Place Condominium (DMCI Homes) / Visayas Ave. Project 8	2 BR, 1 T&B	56.00	30,000.00
North Ridge Residences / Bgy. Bagong Pagasa	1 BR, 1 T&B	28.00	20,000.00
Avida Towers Vita / Vertis North, Bgy. Bagong Pagasa	1 BR, 1 T&B	35.00	19,000.00
The Residences at Commonwealth / Don Antonio Dr. Batasan Hills	2 BR, 2 T&B	57.60	25,000.00
Golfhill Terraces / Bgy. Matandang Balara	2 BR, 2 T&B	65.00	30,000.00
Sofia Bellevue / Capitol Hills Bgy. Matandang Balara	2 BR, 1 T&B	42.00	25,000.00
Vivaldi Residences / EDSA cor. Aurora Boulevard, Cubao.	1 BR, 1 T&B	35.00	20,000.00
Manhattan Plaza Tower 1 / Cubao	1 BR, 1 T&B	42.00	25,000.00
Escalades Condominium / 20 th Ave. Cubao	1 BR, 1 T&B	32.00	18,000.00
Prince Gregory Condominium / Cubao	1 BR, 1 T&B	33.00	15,000.00
Victoria Tower Condominium / Cubao	2 BR, 2 T&B	42.00	24,500.00
Infina Towers / Aurora Blvd. Bgy. Marilag,	2 BR, 1 T&B	56.00	25,000.00
One Eastwood Avenue / C-5 Service Road, Bgy. Bagumbayan	1 BR, 1 T&B	45.00	35,000.00
Eastwood Legrand Tower 3 / Eastwood City Bgy. Bagumbayan	1 BR, 1 T&B	30.00	15,000.00

Table DS-41: Condominium Units for Rent in Quezon City

Location	Features	FA	Rental rate
		(sq. m.)	(in PhP)
One Burgundy Plaza / near Ateneo, Bgy. Loyola Heights	2 BR, 2 T&B	63.00	27,000.00
Magnolia Residences / N. Domingo cor. Dona Hemady St. Valencia	1BR, 1 T&B	36.00	26,000.00
Wil Tower Mall Condominium / Eugenio Lopez Drive Diliman	1 BR, 1 T&B	24.00	25,000.00
The Redwoods / Bgy. Fairview	2 BR, 1 T&B	69.00	30,000.00
Trees Residences / Bgy. Fairview	2 BR, 1 T&B	30.00	19,000.00
Flora Vista Condominium / Bgy. Fairview	1 BR, 1 T&B	30.00	12,000.00
Hacienda Balai / Bgy. Fairview	1 BR, 1 T&B	30.00	9,500.00
The Avenue Residences / Tandang Sora	1 BR, 1 T&B	35.00	20,000.00
Haven Bldg. Condominium / Congressional Ave. Bgy. Culiat	1 BR, 1 T&B	20.00	12,000.00
Spazio Bernardo Condominium / Old Sauyo Road, Novaliches	1 BR, 1 T&B	45.00	13,000.00
Magnolia Place Condominium / Bgy. Talipapa Novaliches	2 BR, 1 T&B	50.00	24,000.00

Source: Lamudi, Philippines

Apartment Units for Rent

Renting an apartment in Quezon City is a good option for those new to the area or uncertain about their status of residency. The city offers a wide variety of residential areas, with apartments available to suit every budget.

With the city's expansive landscape where it faces fewer space constraints compared to other Metro Manila cities like Makati or Mandaluyong, many apartments in Quezon City offer nearly as much indoor space as a modest house, while still providing the conveniences typically associated with high-rise condominiums.

For example, in the Novaliches area, from Bagbag up to Fairview, you can find low-rise apartments for rent with monthly rates ranging from ₱7,000 to ₱16,000, depending on the type and floor area. In other areas, such as Masambong, Paltok, Bagong Pag-asa, and Project 6, rental rates range from ₱10,000 to ₱38,000 per month. These apartments often come with larger living spaces, yards, and even garage facilities. Meanwhile, in the bustling Cubao area, rental rates range from ₱9,500 to ₱17,000 per month.

Table below shows the list of apartment units for rent in Quezon City, the features, floor area and its respective rental rates.

Table DS-43: Apartment Units For Rent in Quezon City

Location	FA (sq. m.)	Features	Mo. Rental (in PhP)
14 Cabotage St., Bgy. Paltok	75.00	2 BR, 1 T&B	15,000.00
West Avenue cor. Cavite St., Bgy. Paltok, Q.C.	80.00	2 BR, 2 T&B	38,000.00
Fil Oz Tower Apartment / Bgy. Bagong Pagasa, QC	30.00	1 BR, 1 T&B	12,000.00
4 sty. apartment / Road 13 Bgy. Bagong Pag-asa QC	69.00	3 BR, 2 T&B	30,000.00
15-A Malac St., Bgy. Masambong	25.00	1 BR, 1 T&B	10,500.00
33-B Road 2 Bgy. Project 6 QC	50.00	1 BR, 1 T&B	15,000.00
82-B 13 th St. Bgy. Socorro, Murphy QC	100.00	2 BR, 1 T&B	21,000.00
Studio-type apartment / 16 th Ave. Bgy. San Roque, Cubao QC	16.00	1 BR, 1 T&B	12,500.00
Studio-type apartment / JP Rizal St. Proj 4 Bgy. Bayanihan, QC	18.00	1 BR, 1 T&B	9,500.00
North Rd. Bgy. Bagong Lipunan ng Crame, QC	40.00	1 BR, 1 T&B	17,000.00

Table DS-43: Apartment Units For Rent in Quezon City

Location	FA (sq. m.)	Features	Mo. Rental (in PhP)
Fully-fenced apartment / 53 Imperial St. Cubao QC	32.00	2 BR, 1 T&B	15,000.00 (apt.)
r dity-rended apartment / 33 imperial 3t. Cubao QC	32.00	Z DN, T TQD	3,000.00 (car parking)
Pasaje dela Paz Project 4, Bgy. Milagrosa Q.C.	35.00	1 BR, 1 T&B	14,500.00
Fully furnished apartment / Bgy. Central QC	40.00	1 BR, 1 T&B	28,000.00
Bgy. Teacher's Village East, Q.C.	33.00	1 BR, 1 T&B	15,000.00
Bgy. Teachers Village West, Q.C.	40.00	1 BR, 1 T&B	15,000.00
149 Sct. Fuentebella St. Bgy. Sacred Heart QC	55.00	2 BR, 1 T&B	20,000.00
R.L. Mendoza Bldg. / Kamuning, Bgy. Malaya QC	30.00	1 BR, 1 T&B	15,000.00
Apartment Studio-type / Bgy. Greater Lagro QC	18.00	1 BR, 1 T&B	7,000.00
B51 L17 Panyo Palaran St., Bgy. Greater Lagro	60.00	2 BR, 2 T&B	15,000.00
Condo-style apartment / Bgy. Bagbag QC	32.00	1 BR, 1 T&B	12,000.00
North Fairview Park Subd. (with parking lot) / Bgy. Fairview QC	45.00	2 BR, 1 T&B	16,000.00
Condo-type apartment / Bgy. Pasong Tamo, QC	45.00	2 BR, 2 T&B	10,000.00
24 Queen's Road Mendoza Village / Bgy. Sangandaan	35.00	1 BR, 1 T&B	10,000.00
Piko St. Pleasantville Subd. Bgy. Talipapa QC	25.00	1 BR, 1 T&B	9,000.00

Source: Lamudi, Philippines

Rent-to-Own Housing Scheme

Rent-to-own homes, also known as lease contracts with an option to buy, are rapidly gaining popularity in the Philippines, particularly in Metro Manila. This alternative pathway to homeownership offers a viable solution for potential buyers who may not have the immediate funds for a down payment but are eager to secure a home.

In a rent-to-own transaction, the buyer (who is also a tenant) pays a monthly rent with an additional amount that goes towards the purchase price of the property. For example, consider a house for sale in Quezon City priced at ₱5 million. If the standard rent is ₱20,000 per month, under a rent-to-own agreement, the renter-buyer might pay ₱25,000 per month—₱20,000 for rent and ₱5,000 towards the purchase of the home.

The agreement often specifies that after the agreed lease period—let's say two years—the renter-buyer must purchase the house either through cash or a housing loan. The ₱120,000 (₱5,000 x 24 months) accumulated as rent-to-own credits can then be applied to the down

payment. If the property requires a 10% down payment (₱500,000), the renter-buyer will only need to pay an additional ₱380,000, having already accrued ₱120,000 in credits. This arrangement allows the buyer time to save for the remaining down payment and improve their credit standing to qualify for a housing loan.

To enter into a rent-to-own arrangement, the renter-buyer and lessor-seller must draft a detailed contract. It is crucial to seek legal advice to ensure that all terms are fair, transparent, and legally binding for both parties. A well-drafted contract protects the renter-buyer from losing their rent credits if they breach the agreement, while the seller must return all accumulated credits if they default on their end.

However, rent-to-own transactions come with risks. Licensed brokers advise both parties to thoroughly understand the terms before signing anything, as strict adherence to the contract is essential. For buyers, the upsides are significant: they gain time to build their down payment, improve their credit, and ultimately achieve homeownership. Despite the potential pitfalls,

rent-to-own homes offer a practical and flexible route for those looking to invest in property without immediate large capital outlay.

Package Price Of Housing Unit: Php 450,000.00
Rental Period: 60 Months (5 Years)
Rental Fee: Php 1,300.00 per month

Carryover Payments : Php 60,000.00

(Php 1,000.00 per mo.)

Package Price After 5 Years : Php 390,000.00 Interest Rate After 5 Years : 5.08292% Payment Period : 30 years

Monthly Amortization
After 5 Years

: Php 2,113.41 (excluding

MRI & Fire Insurance)

Financing Institution

After 5 Years : HDMF / SHFC / In-House

Financing

Equivalent Interest Rate : 4.5% of HDMF

National Government

The National Housing Authority (NHA) plays a crucial role in supporting local government units (LGUs) with their urban development and housing initiatives. Upon request, the NHA provides technical expertise and various forms of assistance aimed at strengthening the capacity of LGUs to deliver housing benefits to their constituents. As a key player in the provision of housing, the NHA is primarily responsible for developing house and lot units in off-city resettlement areas.

Meanwhile, the City Government actively collaborates by offering financial support, as well as providing essential services such as trucking and food assistance to resettled families. This collaborative approach ensures that the housing needs of displaced or underserved populations are met, while also enhancing the overall effectiveness of local housing programs.

The number of ISFs relocated from danger areas from 2010 to 2018, 2019, 2020, 2021 and 2022 were shown in the table below, broken down as follows:

Table DS-44: Number of ISFs Relocated Off-City Per Area Classification (2010-2022)

Area Classification	No. of ISFs Relocated / Year					
	2010-2018	2019	2020	2021	2022	TOTAL
Waterways	10,918	505	121	175	459	12,178
Infrastructure	8,363	646	100	179	87	9,375
North Triangle	6,664	-	-	-	-	6,664
Fire Victims	327	-	114	22	-	463
Under The Bridge	-	-	-	-	1	1
Others	=	36	=	23	=	59
TOTAL	26,272	1,187	335	399	547	28,740

^{*}As of December 2022

Housing Community Development & Resettlement Department (HCDRD)



Source: National Housing Authority (NHA)

The NHA has designated resettlement sites for displaced Informal Settler Families (ISFs) in various municipalities and cities, including Pandi, San Jose del Monte, Norzagaray, Bocaue, and Balagtas in Bulacan, as well as Rodriguez, Teresa, Morong, and Antipolo in Rizal, and certain areas in Caloocan City. These sites serve as new homes for families displaced from danger zones and other high-risk areas.

However, the allocation of resettlement sites provided by the NHA has proven insufficient to meet the growing demand of the city's ISF population. The table below details the number of ISFs relocated to these NHA resettlement sites, categorized by area classification, highlighting the gap between the demand for and availability of relocation spaces.

Table DS-45: Number of Informal Settler Families (ISFs) Relocated to NHA Resettlement Sites (Off-City) (2010-2022)

	Area Classification							
NHA Resettlement Site	Waterways	Infra- structure	North Tri- angle	Fire Victims	Under the Bridge	Others	TOTAL	
Pandi, Bulacan	3,412	2,060		169	-	-	5,653	
SJDM, Bulacan	2,666	1,543	1,208	-	-	-	5,417	
Norzagaray, Bulacan	812	514	-	164	1	23	1,514	
Bocaue, Bulacan	664	313	-	-	-	-	977	
Balagtas, Bulacan	213	41	-	-	-	-	254	
Teresa, Rizal	170	85	-	-	-	36	291	
Morong, Rizal	1,554	521	-	130	-	-	2,205	
Rodriguez, Rizal	2,357	4,211	5,456	-	-	-	12,024	
Baras, Rizal	322	-	-	-	-	-	322	
Antipolo, Rizal	6	57	-	-	-	-	63	
Caloocan City	2	30	-	-	-	-	32	
TOTAL	<i>12,178</i>	9,375	6,664	463	1	<i>59</i>	28,740	

^{*}As of December 2022

Source: National Housing Authority (NHA)

Housing Community Development & Resettlement Department (HCDRD)

Local Shelter Program

1. Community Mortgage Program (CMP) and Direct Sale Program

The City Government plays a key role as a facilitator of the Community Mortgage Program (CMP), a

mortgage financing initiative by the Social Housing Finance Corporation (SHFC). This program is designed to assist legally organized associations of underprivileged and homeless citizens in purchasing and developing land under the principle of community ownership. primary objective is to empower residents of blighted or depressed areas to secure ownership of the land they occupy or choose to relocate to, thereby enabling them to improve their neighborhoods and homes within the limits of their financial capacity.



Through the CMP, residents are not only given the opportunity to secure the land they live on but are also supported in improving their communities and homes, all within the bounds of their financial capacity. The program is structured into three key stages:

- Land Acquisition: Assists communities in purchasing the land they occupy, ensuring they have a permanent and secure place to live.
- Site Development/Community Upgrading: Provides funding for the development of basic infrastructure
 and services, such as roads, drainage and utilities, which are essential for creating a livable and
 sustainable community.
- House construction: Supports residents in building or improving their homes, enhancing their living conditions and contributing to the overall upliftment of the neighborhood.

According to records from the Housing Community Development and Resettlement Department (HCDRD) as of December 2021, a total of 300 city-originated CMP projects have been completed, benefiting 13,778 families. Additionally, there are 56 ongoing CMP projects at various stages of development, reflecting the continued commitment to providing affordable housing solutions to the city's underprivileged communities.

Table DS-46-A: Number of CMP Taken-Out Projects and Number of Beneficiaries, by Year (1990-2021)

YEAR	No. of Projects	No. of Beneficiaries			
1990-2010	216	9,144			
2011	20	957			
2012	8	516			
2013	4	159			
2014	10	470			
2015	11	736			
2016	7	401			
2017	9	407			
2018	8	672			
2019	3	185			
2020	2	39			
2021	2	92			
TOTAL	300	13,778			

Source: Housing Community Development & Resettlement Department (HCDRD)

Other CMP and Open Market Projects

In addition to city-initiated efforts, various Non-Government Organizations (NGOs) and other government agencies have also played a significant role in mobilizing Community Mortgage Program (CMP) projects within Quezon City. From 2001 to 2018, the Subdivision Administration Unit and Regulation Division (SAURD) processed and approved 316 CMP projects, encompassing a total area of 1,587,702 square meters and benefiting 32,110 families.

For open market housing projects under Presidential Decree No. 957 (PD 957), from 2001 to 2018, SAURD approved 138 projects covering a total of 2,675,363.93 square meters, resulting in the creation of 10,636 saleable lots. These projects cater to a broader market, providing opportunities for homeownership to those beyond the scope of socialized housing.

Direct Sale Program

The Direct Sale Program, managed by the City Government, is specifically designed to assist informal settler families (ISFs) residing on city-owned properties in acquiring legal ownership of the land they occupy. This is achieved through direct payment schemes with monthly amortization spread over 25 years. As of June 2019, the City has successfully completed 25 Direct Sale projects across various barangays, benefiting 6,086 families.

Under the past administrations, the City has also facilitated the segregation and issuance of land titles to beneficiaries, with 730 families now holding Transfer Certificates of Title (TCTs). This initiative not only provides security of tenure but also empower ISFs by transforming them into legitimate property owners. (*See Table DS 46-B*).

Table DS-46-B: Awarded Projects Under Direct Sale Program (as of December 2022)

NO	BARANGAY	DIST	PROJECT (LOT/BLK)	BEN	стѕ	DOA S	TCT Trans
1	Alicia	ı	Block 55 Bago Bantay (Blk 55 Psd-13-001644)	30	10	3	1
2	Alicia	- 1	Block 54 Bago Bantay	1	1		
3	Baesa	VI	ASAMBA*		294	131	94
4	Baesa	VI	Samahang Sitio Pajo 1.6 Has HOA, Inc. (Lot 290-B Fls 3004-D)	325	325	84	35
5	Bagong Silangan	Ш	Asosasyon ng Pinagkaisang Residente ng Asprer, Inc. (Lot 64-A Psd-10962)	491	269	0	0
6	Bagong Silangan	Ш	Covenant Village HOA, Inc.* (Lots 27-A & 27-B)	341	354	81	20
	Bagong Silangan		Bgy. Bagong Silangan HOA (Lot 106 Psd 24733)	790	701	338	210
	Bagong Silangan	Ш	Sambasila HOA (Lot 102-O (LRC) Psd 2676)	43	38	8	0
	Bagumbuhay	Ш	F. Castillo	84	25	84	10
10	Bahay Toro	Т	Shorthorn Neighborhood Association (Lot 16 Blk 57)	52	50	38	27
11	Bungad	Т	Lot 21 Block 17 Old Tenant NA* (Lot 21 Bsd 04-000245)	100	92	47	20
12	Escopa III	Ш	Escopa PUD Urban Redevelopment (Lot 7-G-1 Psd 5133)	542	355	80	45
13			SIRNAI (Lot 1 Blk 10 Psd 168289)		310		
14	Fairview	V	SAPAMANAI (Lot 1 Blk 10 Psd 168289)	1,125	460		
15			RABOSNA (Lot 1 Blk 10 Psd 168289)		42		
16	Kaligayahan	V	Pangasinan Urban Poor Association (Lot 4 Blk 3 Pcs 3424)	60	58	20	2
17	Kaligayahan	V	Samahang Tawid Sapa Dos HOA Ph. I (Lot 876 Tala Estate)	360	342	219	141
18	Kaligayahan	V	SAPIKA, Inc. Tawid Sapa II Phase II (Lot 871 Tala Estate)	384	371	67	31
19	Kaligayahan	V	Hope for Justice Tawid Sapa II Ph. III (Lot 385-A-1 (LRC) Psd 39114)	87	83	72	7
20	Manresa	- 1	Manresa	93	83	41	0
21	Nova Proper	V	Emerald Ext. Neighborhood Assn. (Lot 1 Blk 3 (LRC) Psd 102635)	36	36	0	0
22	Payatas	- II	SANDIG, Inc. (Lot 113-D-4-D Psd 9900)**	210	154	0	0
23	Quirino 2-B	Ш	Tampoy Homeowners Association (Lot 72-C-2 Psd 77552)	37	29	25	19
24	San Antonio		Nagmamahal, Inc.* (Lot 5 (LRC) Psd 247844)	153	161	116	40
25	San Jose	I	Samahang Magkakapitbahay* (Lot 1 Blk 376 Psd 30328)	179	196	79	28
26	San Vicente	IV	San Vicente	1	1		
27	Sta. Lucia	V	Samahang M. Aquino Neighborhood (Lot 2 Blk 13 Pcs-5063)	91	80	4	0
	TOTAL 5,912 4,920 1,537 730						

 $Source: Housing\ Community\ Development\ \&\ Resettlement\ Department\ (HCDRD)$

2. Quezon City Socialized Housing Program (Formerly "BistekVille" Housing Program)

The Quezon Task Force on Socialized Housing and Development of Blighted Areas, commonly known as Task Force Housing, was established in 2010 to lead and coordinate the efforts of multiple city departments in addressing housing and community development needs. This includes contributions from

engineering, social services, planning and development, housing, and resettlement sectors. The Task Force has been instrumental in spearheading the creation of the innovative in-city housing initiative known as "BistekVille" (BV), now recognized as the Quezon City Socialized Housing Program. This initiative is a collaborative effort, with the Housing, Community Development, and Resettlement Department (HCDRD) partnering with non-governmental organizations (NGOs) and housing financial institutions.

The primary goal of the Quezon City Socialized Housing Program is to eliminate slum areas and create thriving, organized, and livable communities. The program focuses on transforming informal settlements into well-structured neighborhoods equipped with multi-purpose facilities that enable the government to deliver essential public services, such as healthcare, livelihood support, and daycare education. This comprehensive approach not only improves the living conditions of the city's most vulnerable populations but also addresses urban blight, resulting in broader benefits for surrounding areas.

To date, the Quezon City Socialized Housing Program has successfully initiated 31 housing projects across the city. Of these, 20 project sites have been completed, delivering a total of 4,549 housing units. An additional 11 project sites, comprising 1,229 units, are currently under various stages of development. These efforts underscore the city's commitment to creating sustainable, inclusive communities that provide secure housing and a better quality of life for its residents.

Table DS-47: QC Socialized Housing Projects

QC SOCIALIZED HOUSING PROJECTS	37
On-site Projects	26
Off-site Projects	5
Terminated Projects	6
Completed Projects (before December 2022)	20
On-going Projects (beyond December 2022)	11
TOTAL NUMBER OF UNITS (As per plan)	5,778*
Developed lots only	325
Socialized one-storey loftable	96
Socialized one-storey with loft	965
Socialized two-storey walk-up loftable	590
Socialized two-storey walk-up non-loftable	230
Socialized three-storey walk-up loftable	423
Socialized three-storey walk-up non-loftable	2,266
Socialized five-storey walk-up	313
Socialized 12-storey walk-up	315
Economic units	255
PROJECT STATUS AS OF DECEMBER 2022	
Completed units	4,549
Units for construction	1,229

Source: Housing Community Development & Resettlement

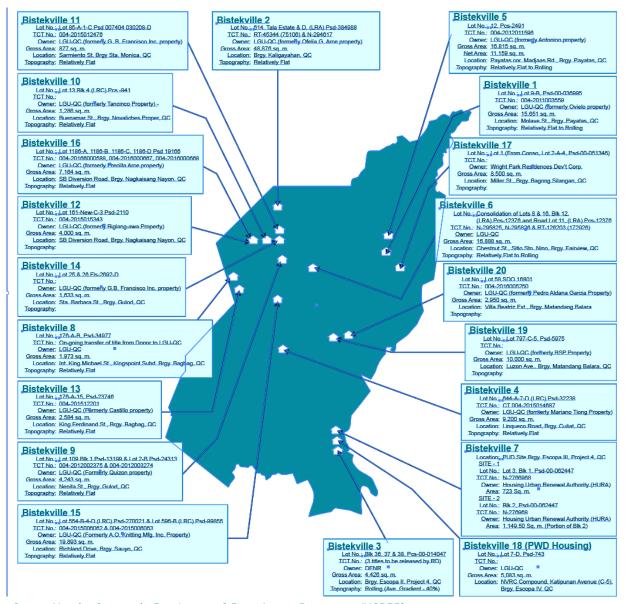
Department (HCDRD)

*Adjusted from the previous 6,427 units

3.5.4 Affordability Levels

Household Income and Expenditure

The Philippine Statistics Authority (PSA) conducts the Family Income and Expenditure Survey (FIES) every three years to gain insights into household income and spending patterns, which are crucial for shaping social and economic policies. From 1985 to 2000, the FIES provided detailed disaggregated data at the city level. However, starting in 2003, the survey results were aggregated only for the National Capital Region (NCR) and the entire Philippines.



Source: Housing Community Development & Resettlement Department (HCDRD)

Figure DS-21: Socialized Housing Project Sites (BV1 to BV20)

According to the 2009 Final Results of the FIES - Small Area Estimates, Quezon City families had an estimated monthly income of PHP 29,441, which is 99.2% of the Metro Manila average and 171.5% of the national average. Monthly expenditure was PHP 26,169, representing 101.6% of the Metro Manila average and 178.4% of the national average. Notably, in 2021, the PSA released FIES data specifically for Quezon City, marking a return to city-level reporting not seen in previous years (See Table DS-48).

Table DS-48: Average Household Income and Expenditure QC, NCR and Philippines (2000-2012)

Year	Income			Expenditure			
Teal	QC	NCR	PH	QC	NCR	PH	
2021 ^P	35,764	34,824	25,600	26,891	26,802	19,067	
2018	***	38,333	26,083	***	30,750	19,917	
2015	***	35,417	22,333	***	29,083	17,917	
2012	***	31,583	19,583	***	27,083	16,083	
2009	29,441	29,670	17,167	26,169	25,747	14,667	
2006	***	25,916	14,394	***	21,500	12,263	
2003	***	22,204	12,324	www	18,159	10,308	
2000	32,757	25,025	12,093	29,577	22,204	9,903	

***No city disaggregation for year 2003, 2006 and 2012-2018 $^{\rm p}$ preliminary results

Source: PSA- FIES

Potential Percentage of Income Available for Housing

In 2021, the average monthly family income in Metro Manila was ₱34,824, with an average monthly expenditure of ₱26,802. In comparison, families in Quezon City reported a slightly higher average monthly expenditure of ₱26,891.

A significant portion of family income is allocated to essential needs such as food, shelter, utilities (including water, electricity, gas, and other fuels), and transportation.

Analyzing the spending patterns in the National Capital Region (NCR) for 2021, it is observed that 19.7% of the total family expenditure was directed toward housing and utilities, amounting to ₱5,298. This figure is notably 5.0% higher than the national average, highlighting the relatively higher cost of living in Metro Manila. (*Refer to Table DS-49* for detailed data.)

Table DS-49: Percent Distribution of Total Family Expenditure by Expenditure Group: Philippines & NCR (2021)

Expenditure Group	Philippines	NCR	QC
Food and Services for Processing Primary Goods for	42.6	40.1	38.9
Food and Non-Alcoholic Beverages			
House Rent/Rental Value	14.7	20.1	19.7
Water, Electricity, Gas and Other Fuels	9.5	10.7	10.6
Miscellaneous Goods and Insurance	7.5	6.7	6.3
Transport	5.6	4.8	5.9
Education	1.5	1.3	1.1
Health	3.3	2.5	3.1
Furnishings and Routine Household Maintenance	1.9	1.9	2.4
Durable Furniture and Equipment	2.5	1.9	1.9
Special Family Occasion	2.0	1.0	0.5
Clothing and Footwear	1.5	1.0	1.0
Communication	1.5	1.5	1.7
Tobacco	1.2	0.8	0.8
Recreation and Culture	2.4	2.9	3.1
Alcoholic Beverages and Alcohol Production Services	0.6	0.5	0.5
Accommodation Services	0.0	0.0	0.0
Other Vegetable-Based Products	0.0	0.0	0.0
Other Expenditure	1.8	2.2	2.4
Total	100.0	100.0	100.0

Non-essential expenditure items are potential sources which could be made available for housing: Alcoholic Beverages, Tobacco, Recreation and Culture, Accommodation Services, Miscellaneous Goods and Insurance and Other Expenditures

Housing Loans Available From the National Government

Package for a Home unit

Package Price : Php 450,000.00

Cashout : Php 10,000.00 (for miscellaneous expenses

: Meralco, Maynilad, Annotations, Notary Certified True Copy... Etc)

Loanable Amount : Php 450,000.00

Payment Period (Max.) : 30 Years Age Limit Max : 70 Years Old

Individual Loans

Pag-IBIG Housing Loan Program (In-House Program of the Pag-IBIG Fund)

The Pag-IBIG Fund, also known as the Home Development Mutual Fund (HDMF) was established on June 11, 1978 by virtue of Presidential Decree No. 1530 to serve the two (2) basic needs of the Filipino workers: 1) a national/government savings program; and affordable housing/shelter financing. It enables the four (4) sectors of society (i.e., the borrower/member, the bank, the industry and the government to collaborate in developing a savings scheme that provides Filipinos with an affordable way to own a house. Several housing loan programs were provided, among them includes:

1. End-User Home Financing Program

- Increased Loanable Amount: The maximum loanable amount has been doubled from ₱3.0 million to ₱6.0 million, providing borrowers with greater financial flexibility.
- Reduced Interest Rates: Interest rates have been significantly lowered, now starting at just 6.5% per annum, down from the previous 11.5%, making home ownership more affordable.
- **Risk-Based Interest Rates:** The program now incorporates risk-based interest rates, ensuring loan terms are more accurately aligned with the borrower's financial profile.
- **Enhanced Underwriting Process:** The adoption of a Borrower Evaluation System has been introduced to improve the underwriting process, offering a more comprehensive assessment of borrowers.

2. Affordable Housing Program (AHP) / Abot-Kamay Pabahay Program

- Targeted Beneficiaries: This program is specifically designed for minimum wage earners and Overseas Filipino Workers (OFWs), ensuring that housing loans are tailored to meet the financial capacity of these groups.
- Flexible Loan Amounts: Borrowers can avail of housing loan amounts up to ₱580,000 for socialized housing or up to ₱750,000 for socialized condominium units. Regular applicants with above-average income, on the other hand, can borrow up to P6 million.

Competitive Interest Rates:

- The applicable maximum loanable amount and interest rates depend on the income cluster to which the member belongs. Members earning not exceeding PhP 15,000.00 within NCR or PhP 12,000.00 outside NCR belong to Cluster 1. Meanwhile, members not exceeding PhP 17,500.00 within NCR or PhP 14,000.00 outside NCR belong to Cluster 2
- Cluster 1 members can enjoy a loanable amount not exceeding the socialized housing loan ceiling set by Pag-IBIG (the current ceiling is at PhP 580,000.00) with a 3% interest rate for the first 5 years of the loan term. Meanwhile, Cluster 2 members can enjoy a loanable amount of up to P PhP 750,000.00 with a 6.5% interest rate for the first ten (10) years of the loan term.

3. Institutional Loan Programs

• Direct Developmental Loan Program

- Developmental Financing: Offers easier terms and conditions for developers, facilitating the development of residential subdivisions, medium-rise buildings, or the construction of housing units.
 - . Flexible Use of Funds: Loans can be utilized for various development purposes, including land

development and the construction of housing units, supporting the growth of housing projects.

. Wholesale Loan Rates:

1-Year Fixing: 6.125% 2-Year Fixing: 6.750%

3-Year Fixing: 7.875% (Rates as of

September 1, 2013)

• Group Housing Loan Program (GHLP)

- Collaborative Development: This program encourages the participation of project proponents by facilitating land development and house construction on land owned and provided by them.
- Beneficiary-Centered: Units developed under this program are offered for sale to project beneficiaries, ensuring that the housing units are accessible to those who need them most

• Community Mortgage Program (CMP)

The loan entitlement amounts for CMP have been revised and increased uniformly across all regions, including both Metro Manila, highly urbanized cities, and other areas, with no distinction made between locations. These updated figures ensure broader access to financing options for all eligible borrowers.

The CMP loan will bear 6% interest per annum based on the outstanding

Table DS-50: CMP Loan Windows

Purpose	Maximum Loan Amount	Monthly Amortization	
Land Acquisition	100,000.00	685.30	
Site Development / Community Upgrading	30,000.00	205.59	
House Construction	120,000.00	834.60	
Loan Package	250,000.00	1,725.49	

balance and will be payable over a maximum period of 25 years in equal amortizations.

Table DS-51: CMP Subsidy Implementation

Capital Subsidy	Technical Subsidy
Terms of the Loan 6% interest Loan amortization pay- ments (straight amount – 25 years to pay)	Technical Support: Assistance in loan requirements compliance

Source: www.shfc.gov.ph

High Density Housing Program (HDH)

The High-Density Housing (HDH) Program, launched by the Social Housing Finance Corporation (SHFC) in 2013, was created in response to the P50 billion Housing Program Fund initiated by the Aquino administration. This program specifically targets informal settler families (ISFs) residing along waterways and other high-risk areas in Metro Manila. The eligibility of beneficiaries is rigorously validated and certified by the Department of Interior and Local Government (DILG).

The HDH Program provides financing assistance to organized communities in these danger zones, facilitating the development of multi-storey housing projects within the National Capital Region (NCR). By adopting the Community Mortgage Program's (CMP) "Community-Driven Approach," the program empowers communities to actively participate in the creation of a "People's Plan," which serves as the blueprint for their housing projects.

Key features of the loan include:

 Interest Rate: The loan carries an interest rate of 4.5% per annum, calculated on the outstanding balance.

- Repayment Terms: The loan is structured to be repaid over a period of 30 years, with the following amortization schedule:
 - First 10 Years: Monthly amortizations start at ₱1,072.86 in the first year, with a 10% annual increase until the 11th year.
 - Years 11 to 30: From the 11th year onwards, the monthly amortization is fixed at ₱2,782.71, which includes Mortgage Redemption Insurance (MRI) and Fire Insurance.

This comprehensive financing model not only provides secure and affordable housing but also promotes long-term community development and resilience among some of the most vulnerable populations in Metro Manila.

Table DS-52 HDH Subsidy Implementation

Capital Subsidy	Technical Subsidy
Terms of the Loan	Technical Assistance Subsidy
4.5% interest Graduated for the first 10 years and fixed amount starting on the 11th up to 30th Tenurial Arrangement Usufruct on Land – to sell to the community when they are already capable	Subsidy Fund (10% of the Project Cost) • for taxes & permits • for CSO service fees • for insurance • for payment of professional fees Capacity Building and Estate Management

Source: www.shfc.gov.ph

• In-House Financing of LGU-QC

The financing scheme is specifically designed for qualified beneficiaries who are informal settler families (ISFs) residing in on-site housing projects located along waterways or other danger areas in Quezon City. These projects must be officially declared and approved by the Quezon City Council.

Loan Terms

• Interest Rate: The loan carries an annual interest rate of 5.1%, calculated on the outstanding balance.

- Repayment Schedule: The loan is structured to be repaid over a period of 30 years, with the following amortization plan:
 - Years 1 to 5: Monthly payments start at ₱1,500 during the first year, with a 10% increase each year until the 5th year.
 - Years 6 to 30: From the 6th year onwards, the monthly amortization is set at ₱2,500, exclusive of Mortgage Redemption Insurance (MRI) and Fire Insurance.

This scheme is designed to provide affordable and sustainable housing solutions to ISFs, ensuring long-term security and stability for residents of high-risk areas.

Local Housing Funds

Idle Lands Tax

In alignment with Section 43 of R.A. 7279, also known as the Urban Development and Housing Act (UDHA) of 1992, Quezon City has implemented the collection of the Socialized Housing Tax. This initiative is further reinforced by Local Finance No. 1-97 of the Department of Finance and the enactment of Ordinance No. SP -2095, S-2011, passed by the Honorable City Council.

The Socialized Housing Tax is levied at a rate of 0.5% on the assessed value of all lands within Quezon City that exceed One Hundred Thousand Pesos (₱100,000). This tax serves as a crucial funding mechanism to support the city's socialized housing programs, aimed at addressing the housing needs of low-income families and contributing to the broader goals of urban development and housing reform

Socialized Housing Tax

In addition, the City has also imposed the collection of the Socialized Housing Tax as provided for under Section 43 of R.A. 7279 otherwise known as the Urban Development and Housing Act (UDHA) of 1992, Local Finance No. 1-97 of the Department of Finance and thru Ordinance No. SP-2095, S-2011 of the Sangguniang Panlungsod. Said tax is equivalent

to one half percent (0.5%) on assessed value of all lands in Quezon City exceeding One Hundred Thousand Pesos (P 100,000.00).

Socialized Housing Special Account

A special account was established through Ordinance SP-2226, S-2013, enacted by the Sangguniang Panlungsod. All proceeds collected under various Quezon City Housing Programs—including the Community Mortgage Program (CMP), Direct Sale, Socialized Housing Tax, Idle Land Tax, and others—are deposited into this account.

The funds accumulated in this special account are earmarked exclusively for socialized housing purposes, ensuring that resources are directed toward initiatives that provide affordable housing solutions for the city's low-income residents. This dedicated funding mechanism reinforces Quezon City's commitment to addressing the housing needs of its most vulnerable communities

Balanced Housing Development

Republic Act (R.A.) 10884 is an act that strengthens the Balanced Housing Development Program by amending Section 18 of R.A. 7279, also known as the Urban Development and Housing Act of 1992. This amendment expands the obligations of real estate developers to contribute to socialized housing.

Previous Requirements: Under R.A. 7279, only subdivision developers were mandated to allocate an area for socialized housing equivalent to at least twenty percent (20%) of the total subdivision area or total project cost. This development was required to be within the same city or municipality, wherever feasible, and had to comply with the standards set by the Housing and Land Use Regulatory Board (HLURB), now known as the Department of Human Settlements and Urban Development (DHSUD), along with other existing laws.

Key Changes Introduced by R.A. 10884: R.A. 10884 extends the scope of previous policy to include not only subdivision developers but also condominium project developers. The updated requirements are:

- Subdivision Projects: Developers must now allocate at least fifteen percent (15%) of the total subdivision area or project cost for socialized housing.
- Condominium Projects: Developers must allocate at least five percent (5%) of the total condominium area or project cost for socialized housing.

Developers have the flexibility to comply with these requirements through various methods:

- 1. **Development of New Settlements:** Creating new housing areas specifically designated for socialized housing.
- Slum Upgrading or Renewal: Improving or renewing areas designated for priority development through zonal improvement programs or slum improvement and resettlement programs.
- Joint-Venture Projects: Partnering with local government units (LGUs) or any of the housing agencies to develop socialized housing.
- 4. Participation in the Community Mortgage Program (CMP): Engaging in the CMP, a government program that assists informal settlers and low-income families in acquiring land and housing.

Resources for Socialized Housing Development

1. Land Requirement and Inventory

Land Area Needed:

The priority of this shelter plan is to deliver socialized housing to the poor and low-income segments of the population. The following assumptions are foundational to the planning process:

- 40 sq.m. Gross Area Allocation: Each household resettled in a socialized housing subdivision or resettlement site is allocated 40 square meters.
- 1-Hectare Land Allocation: One hectare of land is allocated for every 450 households.

Target Population:

The primary focus is on relocating households from danger zones and addressing homelessness, which currently affects 44,075 families. Based on estimates:

- 75% (33,056 households) will be accommodated in socialized housing or resettlement projects.
- 25% (11,019 households) will opt for medium-rise housing (MRH) or high-density housing (HDH).

Land Requirement:

- 156.71 hectares are required for households to be relocated from danger zones and those that are homeless.
- 23.69 hectares are needed to accommodate the housing backlog, which includes 28% of doubled-up households and those with unacceptable housing units.
- 44.12 hectares are necessary to house 28% of new households formed from 2019 to 2023.

In total, **227.97 hectares** are required to address the socialized housing needs arising from the housing backlog and population growth.

2. Infrastructure Development

Road Construction:

The city government has initiated significant road construction projects in recent years to connect communities and growth centers. This has made previously hard-to-reach areas more accessible, which is essential for the establishment of new housing projects.

Utility Services:

The city's power, water, and communication utility companies are well-equipped to meet the current and future demands of the population, ensuring that new housing developments will have adequate infrastructure support.

3. Financing the Socialized Housing Program

Funding Requirements:

To estimate the funding needed for the city's socialized housing program, the following cost assumptions are used:

- P 250,000 per household for those resettled in socialized housing or resettlement sites.
- P 450,000 per household for those housed in medium-rise (MRH) or high-density housing (HDH).

Projected Costs:

- P 13.22 billion is required for relocating households from danger areas, with 75% moving to resettlement sites and 25% to MRH/HDH.
- P 3.05 billion is needed to address the housing backlog.
- P 4.96 billion is required to house 28% of the new households formed from 2019 to 2023, assuming a 50-50 split between socialized housing subdivision units and MRH/HDH.

The total funding required to meet the socialized housing needs is P 21.19 billion.

Possible Funding Sources:

- National Housing Assistance/Funding:
 The city's housing projects are often linked with the Social Housing Finance Corporation (SHFC) due to the high costs of land acquisition and project development. Additional support may be available through the Home Mutual Development Fund (HDMF), commonly known as the Pag-Ibig Fund.
- Bond Flotations:
 The 1991 Local Government Code grants local government units (LGUs) the authority to raise financial resources. This includes creating indebtedness and

accessing credit facilities to fund infrastructure and socio-economic development projects, including housing.

Additional Funding Sources:

LGU Budget for Housing:
 The annual budget for the city's housing program is limited, given the substantial housing needs. The city is actively working to generate revenue through measures such as collecting idle land taxes and imposing a 0.5% socialized housing tax.

Public-Private Partnerships (PPP):

LGUs have the corporate power and authority to form partnerships with the private sector, including landowners and private developers. These partnerships can facilitate the development of blighted properties near project areas. Such initiatives not only address housing needs but also significantly increase property values by removing blight.

3.5.5 Local Shelter Organization

Housing delivery by the city government is done through a number of its offices/instrumentalities. These include:

Housing Community Development & Resettlement Department (HCDRD)

The HCDRD, formerly known as the Urban Poor Affairs Office, is the primary agency responsible for socialized housing in Quezon City. This department implements various Community Mortgage Programs (CMP) and Direct Land Sale initiatives. It conducts comprehensive surveys of informal settlements and maintains an inventory of Informal Settler Families (ISFs) in the city. Additionally, the HCDRD plays a crucial role in organizing and supporting people's organizations, providing technical and other forms of assistance to help these communities upgrade their living conditions.

Housing and Urban Renewal Authority (HURA)

Established by City Council Ordinance No. SP-1236, S-2003, the HURA is a key agency for shelter delivery in Quezon City. Its mandate

includes the development of housing projects for marginal and low-income families, as well as urban renewal and redevelopment initiatives. The HURA is governed by a Board of Directors, chaired by the City Mayor, and includes highranking city officials such as the City Treasurer and City Administrator, who also serve as Corporate Secretary and Corporate Treasurer, respectively. The Head of HURA serves as the President/ General Manager, overseeing the authority's operations.

Local Housing Board

The Local Housing Board, created through City Council Ordinance No. SP-1111, S-2002, plays a strategic role in the city's housing policy. The Board is tasked with formulating, developing, and ensuring the implementation of housing policies, including the provision of resettlement areas and the protection of the underprivileged and homeless from unjust evictions and demolitions. The Board's membership includes the City Mayor as Chairman, the Vice-Mayor as Vice-Chair, representatives from People's Organizations (POs) and Non-Government Organizations (NGOs), members appointed by the Mayor, City Council representatives, and the Head of HCDRD, who also serves as the Board Secretary. The Board was officially convened on April 14, 2011.

Task Force on Socialized Housing and Development of Blighted Areas

Created in June 2010 by then City Mayor Herbert M. Bautista, this Special Task Force is dedicated to transforming blighted areas into decent communities and providing necessary assistance to families affected redevelopment. The Task Force is chaired by the Secretary to the Mayor and includes key city officials such as the Chief of Staff of the Mayor, Head of HCDRD, City Engineer, City Planning and Development Officer, Head of the Social Services and Development Department (SSDD), and Head of Task Force COPRISS. This Task Force spearheaded the creation of the "BistekVille" housing projects,

which aim to create slum-free communities by transforming blighted areas into well-organized housing developments that provide decent and affordable housing to ISFs, particularly those living in danger zones.

Task Force COPRISS

Task Force COPRISS is an ad hoc body that serves as the anti-squatting group of the Quezon City government. Its primary responsibility is to prevent and dismantle new and ongoing illegal constructions. The Task Force also provides manpower assistance during relocation operations, ensuring the smooth transition of affected families.

Social Services Development Department (SSDD)

The SSDD is responsible for providing immediate food and material assistance to families affected by housing development and relocation projects. It also coordinates the "Balik-Probinsya Program," which supports the relocation of families back to their provinces if they choose to participate in this program.

Private Sector, NGOs, and POs

Housing delivery in Quezon City is recognized as a shared responsibility that extends beyond government institutions. involving active participation from the private sector, non-government organizations (NGOs), people's organizations (POs), and other civil stakeholders. This multi-sectoral society approach ensures that housing initiatives are more inclusive, sustainable, and responsive to the diverse needs of the community.

Role of NGOs and POs

The POs and NGOs in Quezon City have a proven track record in community development, consistently demonstrating their capacity to mobilize resources, implement projects, and contribute to the overall development of the city. Over 400 POs and NGOs have secured accreditation with the City Council, allowing them to formally engage in the planning and execution of development projects. Fifty of these organizations hold positions in the City Development Council, directly influencing policy and program decisions.

NGOs play a critical role in shelter delivery, particularly in empowering communities through self-organization and improving living conditions. Many NGOs act as originators in Community Mortgage Programs (CMPs), a testament to their integral role in housing initiatives. The Housing Community Development and Resettlement Department (HCDRD) lists several NGOs that have made significant contributions to these efforts, including:

- . Gawad Kalinga Foundation
- Habitat for Humanity
- · Pusong Makabayan Foundation, Inc.
- · Foundation for Development Alternatives, Inc.
- . Universal Component Foundation
- Crown Circle Builders
- Kristong Hari Foundation
- · Golden Grains Livelihood Foundation, Inc.
- Share Foundation, Inc.
- · Welfare for the Community, Inc.
- . Center for Urban Poor Services, Inc.
- Center for Housing and Human Ecology Development Foundation, Inc.
- Center for Housing Innovative and Component Services, Inc.

These organizations not only facilitate the development of affordable housing but also contribute to the holistic improvement of communities by addressing various social, economic, and environmental challenges.

Role of the Private Sector

The private sector is an indispensable partner in community development, particularly in housing delivery. Known for its efficiency, innovation, and vast resources, the private sector has played a significant role in the growth and development of Quezon City. Private companies are increasingly willing to participate as key players in housing initiatives, contributing their expertise, funding, and technological capabilities to create more sustainable and livable communities.

By fostering strong partnerships among the government, private sector, NGOs, and POs, Quezon City can continue to make significant strides in addressing its housing challenges. This collaborative approach not only leverages

the strengths of each sector but also ensures that housing solutions are equitable, inclusive, and reflective of the needs and aspirations of the city's diverse population

3.6 SPORTS AND RECREATION

Urban life demands spaces where residents can engage in sports and recreation to balance the pressures of city living. Quezon City recognizes the importance of these areas in fostering physical and mental well-being, providing its residents with numerous opportunities to rejuvenate and participate in athletic and recreational activities.

3.6.1 Outdoor Sports and Recreation Facilities

One of the city's flagship facilities is the Amoranto Memorial Sports Complex in District IV, a hub for outdoor sports enthusiasts. This complex offers a range of amenities, including a velodrome, badminton and tennis courts, both covered and open basketball courts, a swimming pool, shooting range, volleyball courts, and a multi-purpose hall. The complex serves as a training ground for local athletes to hone their skills.

In 2022, the complex underwent significant renovations, adding four new facilities that have bolstered Quezon City's capacity to host national and international athletic events. The makeover introduced the Amoranto Sports Arena, which now boasts a seating capacity of approximately 3,500 for basketball competitions and large-scale events, a 10-lane Olympic-size swimming pool, a tennis court, and a multi-level parking building. These enhancements make the complex a premier destination for sports and public gatherings.

Apart from Amoranto, Quezon City is home to other notable sports facilities, albeit with limited public access. These include the Smart-Araneta Coliseum and the QC Celebrity Sports Plaza, which cater to more exclusive audiences. The city also features several golf courses, such as the Capitol Hills Golf and Country Club, Maru International Golf Range, Rod Taylor Sports Company, Inc., GPL

International, Inc., the Veterans Memorial Golf Course, and courses within Camp Aguinaldo and Teresa Heights Subdivision in District II.

Public swimming facilities are also widely available, with 17 pools scattered across the city as of 2022. District 5 has the highest concentration, housing seven public swimming pools. District 3 follows with three pools, while Districts 1, 4, and 6 each have two, and District 2 has one.

On the community level, basketball remains a popular sport, with most barangays boasting at least one basketball court. In 2022, there were 209 covered courts, 97 open courts, and 12 half courts throughout the city. These courts, often located near barangay halls or parish churches, double as venues for community events like markets, bingo socials, meetings, and dialogues. Where space permits, additional courts for tennis, badminton, and volleyball are also established.

Furthermore, many affluent subdivisions in the city offer their residents exclusive access to amenities like swimming pools, parks, playgrounds, and clubhouses.

For those who prefer less strenuous activities, Quezon City offers a variety of parks and playgrounds. The city's three major parks—Quezon Memorial Circle, Ninoy Aquino Parks and Wildlife, and La Mesa Eco Park—provide accessible green spaces for all social and economic groups. The Quezon Memorial Circle, managed by the city government, is continually being developed to attract more visitors, boosting local business and tourism. Ninoy Aquino Parks and Wildlife, managed by the DENR's Protected Areas and Wildlife Bureau, features a lagoon, mini amphitheater, zoo, and botanical garden, offering a serene escape from the urban environment.

Parks in Quezon City are designed to cater to a wide range of recreational activities for all ages, including bicycle lanes, picnic areas, and promenades, making them vital components of the city's recreational landscape.

3.6.2 Indoor Sports and Recreation Facilities

Indoor sports and recreation also play a significant role in the city's leisure offerings. As of 2022, Quezon City was home to 879 registered private sports and recreation businesses and facilities. This number reflects a slight decrease from 938 in 2018, primarily due to the impact of the COVID-19 pandemic, which forced the closure of many businesses. Despite this, the city still offers a robust array of indoor sports facilities, including 89 indoor sports centers featuring eight bowling lanes, 18 billiard pool halls, two badminton courts, 28 swimming pools, seven shooting ranges, five tennis/squash courts, and 21 sports plazas.

In addition to sports facilities, Quezon City also boasts a wide variety of recreational venues, such as eight indoor amusement and kiddie centers, 631 recreational facilities (including bingo halls, dance studios, videoke bars, and off-track betting stations), and 30 learning and activity centers. For entertainment, the city has 28 malls, 58 cinemas and theaters, and 132 physical fitness gyms.

These indoor and outdoor facilities combined create a vibrant recreational environment in Quezon City, catering to a diverse population with varied interests and needs. The city's commit

3.7 PROTECTIVE SERVICES

3.7.1 Police Services

Quezon City was originally under the jurisdiction of the Northern Police District, which also served the neighboring areas of Caloocan, Navotas, Malabon, and Valenzuela. However, the growing needs of the city led to the establishment of a dedicated police force. In October 1990, the Central Police District was created, later renamed the Quezon City Police District (QCPD), to focus exclusively on maintaining peace and order within Quezon City. The QCPD's headquarters is strategically located at Camp Karingal in Sikatuna Village, District IV, serving as the nerve center for its operations across the city.

As of 2022, the QCPD's total police force stands at 4,012 personnel, marking an increase of 177 officers, or 4.61%, from 3,835 in 2020. This growth reflects the city's commitment to strengthening its law enforcement capabilities in response to its expanding population and urban challenges. The QCPD's manpower is composed of 202 Police Commissioned Officers (PCOs), 3,646 Police Non-Commissioned Officers (PNCOs), and 164 Non-Uniformed Personnel (NUPs), each playing a vital role in the district's comprehensive approach to public safety and security.

Of the total police personnel in Quezon City, 3,302 are males and 710 are females. With the city's 2022 population standing at 3,121,477, this results in a police-population ratio of 1:778. This ratio falls short of the standard police-population ratio of 1:500, which is recommended for urbanized areas like Quezon City. The current ratio reflects a slight increase from the 1:771 ratio recorded in 2020, indicating a growing disparity between the number of police officers and the city's expanding population.

To achieve the ideal police-population ratio, Quezon City would need to recruit approximately 2,231 additional police officers.

To effectively support and enhance the capabilities of the existing police force, Quezon City maintains a robust network of Barangay Protection Security Officers (BPSOs). As of 2022, the city has a total of 2,381 BPSOs, composed of 2,091 males and 290 females. These officers are crucial in maintaining peace and order at the grassroots level. Their duties include conducting nightly patrols ("rondas"), assisting in rescue operations, and contributing to disaster prevention and mitigation efforts within their respective barangays.

The Quezon City Police District (QCPD) operates through sixteen (16) police stations and twenty-

eight (28) Police Community Precincts (PCPs) distributed across the city. However, the current police station-to-population ratio is 1:195,092, which significantly exceeds the standard ratio of 1:100,000. This means that each police station is responsible for nearly double the population it ideally should serve. To address this gap, the city requires 31 police stations, indicating a deficiency of 15 additional stations that need to be established to meet the growing demands for public safety.

In response to these challenges, the QCPD has implemented a state-of-the-art Integrated Command Control Center (ICCC). This advanced facility has revolutionized the district's operational efficiency, enabling a consistently swift three-minute response time, known as the 3MRT (Three-Minute Response Time). This capability significantly enhances the QCPD's ability to respond rapidly to emergencies and maintain order throughout the city.

Quezon City has also made substantial contributions to bolster the QCPD's law enforcement capabilities. The city has provided the QCPD with an array of essential equipment, including 2,686 short and long firearms, 330 communication devices (comprising both base and handheld radios), and 600 vehicles, which include motorcycles and bicycles. Additionally, the QCPD has been equipped with 32 investigative tools, such as 12 composite sketch laptops, 2 digital forensics tools, 1 hard drive duplicator, 2 write-blocking devices, and a variety of audio and video equipment, along with 14 forensic software programs and devices.

To further enhance the district's capacity to handle explosives, the city has provided one Explosive Ordnance Disposal (EOD) robot and an EOD tool kit. In the area of Search and Rescue (SAR), the city has supplied one rescue vehicle, 359 SAR bags, 2 chainsaws, 80 rescue ropes, 17 megaphones, 54 rescue helmets, 54 hammers, and one portable generator. Moreover, the QCPD's protective gear inventory now includes 184 ballistic helmets (Kevlar), 1,091 body vests, 180 body-worn cameras, and 73 laptops.

These investments in technology, equipment, and personnel underscore Quezon

City's commitment to enhancing the safety and security of its residents. By augmenting the QCPD's capabilities, the city ensures a more responsive and effective law enforcement presence, thereby fostering a safer urban environment for al

3.7.2 Crime Incidence

In 2022, Quezon City saw an increase in recorded crime incidences, with 8,261 cases reported—up by 10.68% from the 7,464 cases documented in 2021. This rise follows a previous decrease in crime volume, where 2020 saw 8,857 cases, a significant drop of 27.54% from the 12,223 cases recorded in 2019.

The city's average monthly crime rate in 2022 was 22.21 per 100,000 population, which is slightly lower than Metro Manila's average of 22.98 per 100,000 population. Despite the increase in crime incidents, the city made notable strides in crime solution efficiency, improving from 56.88% in 2021 to 77.51% in 2022, reflecting a more effective law enforcement response.

A breakdown of the 2022 crime volume reveals that 28.59% (2,359 cases) were classified as index crimes, while the remaining 71.41% (5,902 cases) were non-index crimes. Index crimes, which include crimes against persons and property, are significant indicators of the overall crime situation due to their regular occurrence. Non-index crimes encompass offenses such as estafa, vagrancy, trespassing, seduction, coercion, gambling, and public scandal, among others.

Over the past four years, the three most prevalent crimes in Quezon City have consistently been theft, robbery, and rape. In 2022, theft accounted for 1,079 cases, or 45.74% of the total reported crimes, followed by robbery with 394 cases (16.70%), and rape with 280 cases (11.87%). Notably, rape cases increased from 235 in 2021 to 280 in 2022, signaling a concerning trend that requires continued focus and intervention. (See Table DS-53)

Table DS-53: Reported Number of Crimes by Classification of Offense Quezon City: 2019 – 2022

CLASSIFICATION OF	20	19	20)20	20	21	20	22
OFFENSE	No.	%	No.	%	No.	%	No.	%
Crime Against Persons	1,280	32.36	904	34.77	592	25.65	607	25.72
Murder	137	10.70	247	27.31	112	18.92	75	12.36
Homicide	34	2.66	44	4.87	16	2.70	15	2.47
Physical Injuries	800	62.50	366	40.49	229	38.70	237	39.08
Rape	309	24.14	247	27.31	235	39.66	280	46.09
Crime Against Property	2,673	67.64	1696	65.23	1,718	74.35	1,752	74.28
Robbery	706	26.41	500	29.54	446	25.93	394	22.47
Theft	1,652	61.81	918	54.17	1,007	58.66	1,079	61.55
Carnapping	315	11.78	278	16.39	265	15.41	279	15.97
TOTAL INDEX CRIMES	3,953	32.35	2,600	29.35	2,310	30.92	2,359	28.59
Violation of Special Laws	5,136	62.07	3,953	63.23	3,612	70.12	4,525	76.58
Other Non-Index Crimes	3,134	37.93	2,304	36.77	1,542	29.88	1,377	23.42
TOTAL NON-INDEX CRIMES	8,270	67.65	6,257	70.65	5,154	69.08	5,902	71.41
TOTAL CRIME VOLUME	12,223	100	8,857	100	7,464	100	8,261	100
Crime Rate	12	8.4	8	7.8	77	'.8	76.	.10
Crime Solution Efficiency	77	.81	45	5.15	56	.88	77.51	
QC Average Monthly Crime Rate	10).7	7.	.09	65.65		22.21	
Metro Manila Average Monthly Crime Rate			24	.58	21.44		22.98	

Source: Central Police District Command

3.7.3 Fire Protection and Prevention

The Quezon City Fire District (QCFD) has made notable improvements in fire protection and prevention services. In 2022, the QCFD operated 31 fire sub-stations, up from 29 in 2020. These facilities are strategically distributed across the city's six congressional districts to enhance emergency response capabilities.

Despite these advancements, challenges remain. The QCFD had 532 firefighters in 2022, supported by 39 fire brigades and 25 private fire volunteers. However, the current fireman-to-population ratio stands at 1:5,867, which is significantly below the standard ratio of 1:2,000. This discrepancy indicates that each firefighter is responsible for nearly three times the number of people they can effectively serve, highlighting a critical shortage of approximately 1,029 firefighters in the city.

Additionally, the 2022 fire sub-station to land area ratio was 1:5 sq.km., an improvement from 1:6 sq.km. in 2019 due to the addition of two new fire sub-stations. However, this ratio still falls short of the standard ratio of 1:4 sq.km., indicating a need for 40 fire sub-stations to adequately cover the city. With only 31 existing sub-stations, there is a significant shortfall of 9 fire sub-stations, underscoring the need for further expansion to meet safety standards.

Moreover, the QCFD currently operates 33 fire trucks, but with the growing demands and existing gaps in personnel and infrastructure, there is an urgent need to enhance the city's firefighting capabilities to ensure the safety and well-being of its residents.

3.7.4 Fire Incidence

In 2022, the Quezon City Fire District (QCFD) responded to 597 fire incidents, reflecting a significant decrease of 460 incidents compared to the 2019 total of 1,057. Despite the reduction in incidents, the financial impact of these fires was substantial, with reported losses amounting to ₱105,980,560.00.

Of the total fire incidents in 2022, 36.68% (219 cases) were structural fires, affecting buildings, houses, and other structures. The remaining 63.32% (378 cases) were non-structural fires, which included incidents involving grass, rubbish, forests, and motor vehicles. This distribution underscores the varied nature of fire risks in Quezon City, from urban infrastructure to natural and vehicular fires.

A significant portion of these fires—67.06%—was attributed to electrical causes, particularly those involving facilities managed by MERALCO and NAPOCOR, such as electrical posts, primary and secondary distribution lines, and transformers. The remaining 32.94% of fires were caused by non-electrical factors, including cigarette butts, smoking, and incidents related to LPG tanks and stoves.

District II, home to a large population of informal settlers, particularly in Barangays Commonwealth, Payatas, and Holy Spirit, recorded the highest number of fire incidents.

Table DS-54: Number of Reported Fire Incidence and Responded to by the QC Fire Department Quezon City: 2019 - 2022

FIRE INJOINENTS BY TYPE	2	019	20	20	2	021	2022	
FIRE INCIDENTS BY TYPE	No.	%	No.	%	No.	%	No.	%
Causes of Fire								
Electrical	766	72.50	867	78.07	628	74.48	401	67.06
Overheated home appliances			3	.27	2	.24	13	2.17
Combustible/Heat Bonfire	3	.28	3	.27	1	.12		
Open Flames/Cooking	26	2.46	34	3.06	39	4.63	49	8.20
Cigarette Butts Smoke	207	19.57	148	13.31	89	10.56	66	11.04
Fireworks/Explosive Sparks							3	.50
Flammable Liquids	2	.19	1	.09	1	.12		
LPG Tanks/Stove	1	.09	1	.09	3	.36	6	1.0
Unknown/Others	8	.76	14	1.26	29	3.44	26	4.35
Unattended Cooking Stove								
Unattended Lighted Candle	14	1.32	5	.45	10	1.19	10	1.67
Overheated Engine (Motor Vehicles)	30	2.84	24	2.16	31	3.67	15	2.51
Incendiary Device			3	.27			1	.17
Match sticks/lighter/torch			4	.36	6	.71	3	.50
Ember/Flying Ember			2	.18	2	.24	1	.17
Battery short circuit/explosion							2	.33
Under Investigation							1	.17
Turn-over Fire incident to RD & NHQ			2	.18	2	.24		
TOTAL	1,057	100	1,111	100	843	100	597	100
Motives								
Intentional	4	.38	7	.63	5	.59	1	.17
Accidental	1053	99.62	1102	99.19	836	9917	595	99.66
Under Investigation							1	.17
Turn-over Fire incident to RD & NHQ			2	.18	2	.24		
TOTAL	1,057	100	1,111	100	843	100	597	100

Table DS-54: Number of Reported Fire Incidence and Responded to by the QC Fire Department

Ouezon City: 2019 - 2022

FIRE INCIDENTS BY TYPE	2	019	20	20	20	021	20)22
FIRE INCIDENTS BY TYPE	No.	%	No.	%	No.	%	No.	%
Nature								
Structural	222	20.99	192	17.29	152	18.03	219	36.68
Vehicular	57	5.39	57	5.13	47	5.58	28	4.69
Grass	47	4.45	36	3.24	14	1.66	6	1.0
Chemical	1	.09						
Rubbish	146	13.83	108	9.72	67	7.95	55	9.20
Forest	1	.09						
Ship								
Electrical Fire	453	42.89						
Electrical Pole	130	12.29	708	63.66	528	62.66	251	42.06
Ambulant Vendor			10	.90	35	4.15	38	6.36
TOTAL	1,057	100	1,111	100	843	100	597	100
Estimated Damages (in Pesos)	29,29	3,000.00	24,370	,500.00	128,10	7,251.00	105,980	0,560.33

Source: QC Fire Department

3.7.5 Administration of Justice

The delivery and administration of justice at the local level in Quezon City is a collaborative effort involving the Office of the City Prosecutor, the Metropolitan Trial Court (MeTC), and the Regional Trial Court (RTC). These institutions play a crucial role in ensuring that justice is served efficiently and effectively within the city.

In 2022, the Metropolitan Trial Court recorded a total of 14,176 cases, representing a significant decrease of 5,028 cases, or 25%, from the 19,204 cases recorded in 2015. Out of these cases, 7,539, or 52%, were successfully disposed of, reflecting the court's ongoing efforts to streamline case resolution and reduce backlogs.

The Regional Trial Court, which handles more serious offenses, received and recorded 7,858 cases for prosecution in 2018. Of these, 5,264 cases, or 67%, were disposed of, marking an improvement in the court's case disposal rate compared to the three previous years. This increase in efficiency is indicative of the court's commitment to enhancing the administration of justice in the city. (*See Table DS-54*).

The Quezon City Hall of Justice, a central hub for legal proceedings in the city, houses a total of 80 court branches. This includes 23 branches of the Metropolitan Trial Court and 57 branches of the Regional Trial Court, each presided over by an equal number of judges. In addition, the Hall of Justice is home to one (1) Prosecution Office staffed by 105 prosecutors, who work diligently to ensure that cases are prosecuted fairly and expeditiously.

The personnel across both the courts and the Office of the City Prosecutor, including city fiscals and judges, total 1,455 individuals. Of this workforce, 607, or 41.72%, are male, while 848, or 58.28%, are female, reflecting a balanced gender distribution among the city's legal professionals.

Table DS-55: Recorded and Disposed Cases, Quezon City: 2019
-2022

ADMINISTRATION OF	202	2020			2022		
JUSTICE	NO.	%	NO.	%	NO.	%	
	Metropolitan Trial Court						
Recorded	7,934		9,687		15,007		
Disposed	7,542	95	6,537	6,537 67		94	
			Regional Tria	al Court			
Recorded	13,101		15,746		17,677		
Disposed	10,179	78	10,004	64	13,974	79	

3.7.6 Reformatory Institutions

The city operates three (3) key reformatory institutions: the Molave Youth Home, the Quezon City Jail, and the Quezon City Drug Treatment and Rehabilitation Center, also known as "TAHANAN." These facilities play a vital role in the city's efforts to rehabilitate and reintegrate individuals in conflict with the law and those struggling with substance abuse.

Quezon City Jail

The Quezon City Jail is divided into two primary dormitories: the Male Dormitory and the Female Dormitory. The Male Dormitory, located on a 0.2-hectare site within Bernardo Park, Barangay Pinagkaisahan along EDSA, housed 3,693 male inmates as of 2022. This represents an 18.10% increase from the 3,127 inmates recorded in 2021. Despite having 16 cells with a total area of 1,226.75 square meters, the facility is severely overcrowded. According to the Bureau of Jail Management and Penology (BJMP) standards, each inmate requires 4.7 square meters of space, meaning the dormitory should ideally accommodate only about 261 inmates—a stark contrast to the current population.

The Female Dormitory is situated within the Quezon City Police District Headquarters at Camp Karingal. It consists of 18 cells with a total area of 743.016 square meters and is designed to accommodate 158 female inmates based on the same BJMP standards.

The Male Dormitory is staffed by 206 personnel, comprising 173 males and 33 females. However, the present jail guard-to-inmate ratio is 1:528, far below the ideal 1:7 ratio. The escort-to-inmate ratio is similarly imbalanced at 1:127, compared to the ideal 1:1+1. The Female Dormitory, managed by 135 personnel (65 males and 70 females), also struggles with a suboptimal guard-to-inmate ratio of 1:17 and an escort-to-inmate ratio of 1:193+1, both of which are below the recommended standards.

To address the issue of overcrowding, the local government of Quezon City has constructed a new, modern jail facility on a 2.4-

hectare property located along Litex Road in Barangay Bagong Silangan. This state-of-theart facility, designed to meet United Nations standards, can accommodate a minimum of 4,400 persons deprived of liberty (PDLs), providing much-needed relief to the overburdened existing jail.

Quezon City Drug Treatment and Rehabilitation Center (TAHANAN)

The Quezon City Drug Treatment and Rehabilitation Center, or "TAHANAN," is the city's cornerstone in its fight against drug use, abuse, and dependency. Located in Diamond Hills Subdivision, Barangay Payatas, TAHANAN is a Department of Health (DOH) accredited facility with a 300-bed capacity. In 2022, the center served 320 clients (286 males and 34 females), marking a significant 31.15% increase from the 244 clients recorded in 2019.

TAHANAN's clients are primarily from District IV, with 68 clients, followed by District I with 60, and District II with 55 clients. The facility accommodates clients in dormitories, complemented by an administrative building, mess hall, medical building, and staff housing, covering an area of approximately 3,236 square meters. The center's operations are managed by 107 personnel (61 males and 46 females) who tailor programs to meet the behavioral modification needs of each client, aiming to support their journey toward recovery and reintegration into society.

Table DS-56: Number of Drug Dependents/ Clients Served at TAHANAN by District Quezon City; 2019-2022

DISTRICT	2019	2020	2021	2022
I	32	18	23	60
II	36	15	17	55
III	20	8	16	23
IV	32	21	21	68
V	34	13	20	39
VI	80	44	31	45
Non-QC residents	10	11	8	30
Total	244	130	136	320

Source: Office of the Vice Mayor

3.3.10 Culture

Despite its relatively young history, Quezon City boasts a wealth of historical sites that reflect its rich heritage and cultural significance. The Quezon City Tourism Department (QCTD) has been instrumental in identifying and preserving these landmarks, and as of 2019, the department has cataloged numerous heritage sites, monuments, and cultural properties across the city. Among the 28 recognized historical landmarks, several stand out for their historical and cultural importance.

Key Historical Landmarks

At the heart of the city, adjacent to the City Hall compound, stands the towering **Quezon Memorial Shrine**. This iconic structure is not only a tribute to the city's namesake, President Manuel L. Quezon, but also a site of significant historic events. It was here that masses were celebrated by Pope Paul VI on November 29, 1970, and Pope John Paul II on February 18, 1981. The City Museum, located at the base of the shrine, houses the remains of President Quezon, alongside various memorabilia that offer a glimpse into his life and legacy.

Other notable historical sites include:

- Gen. Fulton Monument in Barrio Bagong Silangan, marking the spot where American General Henry Ware Lawton was killed by Filipino forces during the Philippine-American War.
- Sitio Pugad Lawin near Project 8, where Andres Bonifacio and the Katipuneros launched the 1896 revolution against Spanish colonial rule.
- The resting place of Melchora "Tandang Sora" Aquino in Banlat, Barangay Tandang Sora, honoring the Mother of the Philippine Revolution.
- Balintawak Monument at the Cloverleaf Road complex, dedicated to Bonifacio and the Cry of Balintawak, a pivotal moment in the Philippine Revolution.

Additionally, **Camp Aguinaldo** and **Camp Crame** are revered as key sites of the 1986 EDSA People Power Revolution, where the peaceful uprising against the Marcos regime took place.

Museums and Heritage Sites

Quezon City is also home to a growing number of museums and heritage sites. As of 2022, the city boasts 22 museums and art galleries, up from 14 in 2021. These include five public museums and 17 private ones, each contributing to the city's vibrant

cultural landscape. Among the seven recognized heritage sites, notable examples include:

- MIRA-NILA Heritage House in Cubao, a preserved residence that offers a window into the city's architectural past.
- Quezon Heritage House, originally located at No. 45 Gilmore Street, New Manila, which has been meticulously restored and relocated within the Quezon Memorial Circle.
- Replica of President Corazon C. Aquino's Residence on Times Street, Barangay West Triangle, also located within the Quezon Memorial Circle, honoring the late president and offering insights into her life and legacy.

Religious sites of historical and cultural importance include the **Sto. Domingo Church** (Shrine of Our Lady of the Most Holy Rosary of La Naval), the **Church of the Holy Sacrifice**, and **San Pedro Bautista Church**.

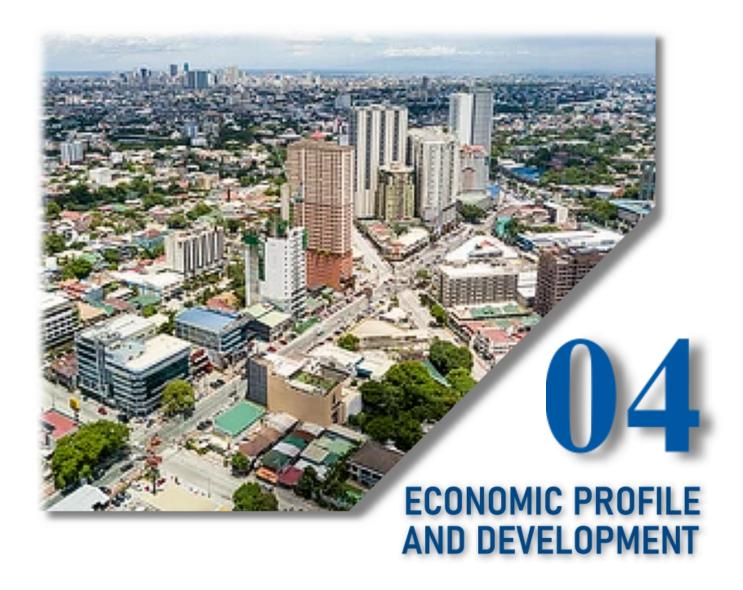
National and Institutional Significance

Quezon City remains central to the nation's governance and healthcare infrastructure, embodying President Quezon's vision of the city as the seat of the national government. The city is home to the **Batasang Pambansa** complex, where the Philippine Congress meets, as well as key national government offices such as the **Department of Social Welfare and Development (DSWD)** and the **Civil Service Commission (CSC)**.

The city also houses critical healthcare institutions, including the Philippine Heart Center, the Philippine Lung Center, the National Children's Hospital, the Philippine Children's Medical Center, the East Avenue Medical Center, and the Philippine Orthopedic Center. Educational institutions like the University of the Philippines, renowned for its sprawling campus and the iconic UP Oblation, also add to the city's cultural and educational heritage.

Promoting Cultural Heritage

The Quezon City Tourism Department, in collaboration with the Schools Division Office, actively promotes activities that foster pride in the nation's rich cultural heritage among residents and students. These initiatives are part of an ongoing educational program aimed at preserving the city's historical legacy and ensuring that future generations appreciate the rich tapestry of Quezon City's history and culture



The Economic Profile focuses on the sub-sectors of Labor and Employment, Family Income and Expenditure, Industry and Service, Tourism and Food Security.

4.1 LABOR AND EMPLOYMENT

The ability of a country's economy to create goods and services for both domestic and foreign consumption is critical to its economic stability and growth. Labor is an important factor of production, hence, efforts to improve labor force quality and make it more productive and responsive to growth are required for the economy's development. A good understanding of the size, makeup, and other features of the population segment is necessary in order to undertake sound planning. A steady supply of labor force data is critical for national and local development planning.

The Labor Force Survey (LFS) is a nationwide vehicle for gathering such data on the demographic and socioeconomic aspects of the population. It is a nationwide survey conducted quarterly by the Philippine

Statistics Authority (PSA) during the months of January, April, July, and October and has been the main employment data of the city.Based on the Labor Force Survey by PSA in 2022, Quezon City's projected working age population of 15 years old and over is 2,275,750 or 71.43% of the entire city population. The working-age population is divided into the following:

a) The economically active population or those in the labor force.

This group, which comprises the employed and the unemployed, represents 64.80% of the working age population or a total of 1,474,761 individuals in the labor force in 2022. Employed persons refers to persons in the labor force who are reported either as at work or with a job or business although not at work. Persons at work are those who did some work, even for an hour during the reference period.

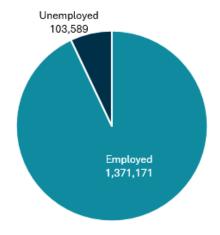


Figure ED-1: Distribution of Labor Force Population, QC: 2022

On the other hand, unemployed consists of all persons 15 years old and over as of their last birthday who are reported as; without work, i.e., had no job or business during the reference period; and currently available for work, i.e., were available and willing to take up work in paid employment or self-employment during the reference period, and/or would be available and willing to take up work in paid employment or self-employment within two weeks after the interview date; and seeking

work, i.e., had taken specific steps to look for a job or establish a business during the reference period; or not seeking work due to the following reasons: (1) tired/believed no work available, i.e., the discouraged workers; (2) awaiting results of previous job applications; (3) temporary illness/disability; (4) bad weather, and (5) waiting for rehire/job recall

Employed persons in the city in 2022 totalled 1,371,171 or a 92.98% employment rate. The unemployment rate, on the other hand, is placed at 7.02% or about 103,589 of the city's labor force population. (See Figure ED-1 and Table ED-1)

b.) The economically inactive population or those not in the labor force.

The economically inactive or those not in the labor force make up 35.20% or about 800,989 of the working age population. These are composed of students, housewives, retirees, the sick, PWDs, and others who are not looking for work

Table ED-1: Population by Employment Status, Quezon City: 2022

3.3,. 2.3.2										
Employment Status	Number	% Share								
Working Age Population 15 Years Old and over	2,275,750	100.0%								
Labor Force Population	1,474,761	64.8%								
Employed	1,371,171	92.98%								
Unemployed	103,589	7.02%								
Not in the Labor Force	800,989	35.2%								

Source: Philippine Statistics Authority Labor Force Survey (PSA-LFS)

Employment rates are shown alternately increasing and decreasing from the period 2015-2022. There was a 10% decrease (133,267) in the number of employed persons in the year 2020 mainly attributed to the Covid-19 pandemic where many businesses ceased operations and a high number of employed persons were affected by the health crisis – some have died, and some have stopped from working. However, there was an increase of 7% or an additional 87,484 employed persons in 2022. Underemployment, which is part of the employment figure, decreased slightly by 2.05% from the previous year. Unemployment, on the other hand, is likewise alternately increasing and decreasing every year. (Table ED-2).

Table ED-2: Labor Force Participation, Employment, Unemployment, Underemployment, and Not in the Labor Force, QC: 2015-2022

Year	r Labor Force Participation		Employn	Employment		Unemployment		Underemployment		Not in the Labor Force	
2015*	1,358,093	62.92	1,242,791	91.51	115,302	8.49	124,279	10.00	800,351	37.08	
2016	1,373,728	62.90	1,281,688	93.30	92,040	6.70	111,507	8.70	810,259	37.10	
2017	1,389,844	62.90	1,286,966	92.60	102,848	7.40	119,691	9.30	819,765	37.10	
2018	1,347,355	60.27	1,258,295	93.39	89,060	6.61	90,597	7.20	888,176	39.73	
2019	1,375,560	60.82	1,295,090	94.15	80,470	5.85	69,935	5.40	886,201	39.18	
2020*	1,315,768	57.50	1,161,823	88.30	153,945	11.70	106,888	9.20	927,525	42.50	
2021**	1,432,462	63.14	1,283,687	89.61	148,775	10.39	176,489	13.36	836,311	36.86	
2022**	1,474,761	64.80	1,371,171	92.98	103,589	7.02	155,128	11.31	800,989	35.20	

^{*2015} and 2020 figures are Official Census results, figures for other years are projected/estimates

Source: PSA Labor Force Survey

Being supported by the employed population are dependent population (1,748,171) composed of the following: 1) those in the dependent age below 15 years old (843,593); 2) the economically inactive (800,989); and 3) the unemployed persons (103,589). Dependency ratio is computed at 1.4:1 (dependent: worker) which means that there are two (2) dependents for every one (1) worker for a household with an average size of five (5) persons. In terms of the number of employed persons in the National Capital Region, Quezon City is the highest with 23% followed by Manila (13%), Caloocan (11%), Taguig (7%), and Pasig (6%).

The Informal Economy

Due to limited employment opportunities, many are forced to engage in small-scale entrepreneurial activities which are mostly unregistered, unregulated, and unmonitored. These are residents who engage in entrepreneurial activities working in full, part time, or seasonal basis and are usually not paying taxes. Section 4 of the Quezon City Ordinance No. SP-2512, S-2016 otherwise known as "The Quezon City Informal Economy Ordinance" classified the informal economy workers into: (1) home-based workers/own, account/self-employed; (2) vendors; (3) transportation sectors; (4) non-corporate construction workers; and (5) others such as street workers, waste workers and volunteer service workers in private and public.

On the other hand, Section 3 (a) defines Informal Economy as all economic activities by workers and economic units that are in law or in practice not covered or insufficiently covered by formal arrangements and do not cover illicit activities. To uphold the rights, ensure the protection, and promote the welfare of these workers, the city government enacted said ordinance to provide the basic framework for development programs catering to workers in the informal economy and to create the Informal Economy Development Council.

Available data for Informal Economy in the city are limited to the total numbers of vendors, tricycle drivers, street sweepers, community workers, and farmers as documented by the Market Development and Administration Department (MDAD), Tricycle Regulation Division (TRD) of the Transport and Traffic Management Department (TTMD), and Public Employment Service Office (PESO). Barangays have also contributed to the list of informal economy workers in the city.

MDAD has documented a total of 8,000 vendors operating in various parts of the city: 1,892 stallholders in the eight (8) city-owned public markets, 3,601 stallholders in 27 private markets, 1,013

^{**2021-2022} PSA-LFS Disaggregated Data for Quezon City

stallholders in 60 *talipapas*, and 1,494 hawkers in 121 temporary vending sites. The Tricycle Regulation Division (TRD) under the Traffic and Transport Management Department has registered 156 Tricycle Operators and Drivers Associations (TODA) operating 25,852 units of tricycles, with drivers and with route measured capacity (RMC) approved by the Tricycle Franchising Board (TFB).

The Public Employment Service Office (PESO), in coordination with the Department of Labor and Employment (DOLE), takes charge and documentation monitoring marginalized/disadvantaged beneficiaries in the provision of emergency short-term wage employment assistance program through the Tulong Pang-hanap buhay sa Disadvantaged/Displaced Workers (TUPAD). These TUPAD beneficiaries comprise 3,236 street sweepers, 809emergencyemployed persons including 675 community workers and 150 farmers.

Overseas Filipino Workers (OFW)

For better employment opportunities, many Filipinos are forced to seek employment abroad. Thus, Overseas Filipino Workers (OFWs) valuably contribute to the nation's economic well-being. The OFWs' foreign currency remittances constitute a hugeportion of the country's Gross National Product (GNP).

Based on Overseas Workers Welfare Administration (OWWA) membership as of 2022, OFWs from Quezon City ranked highest in the NCR with 152,152 (26.82%). Of these 86,262 (56.69%) are males while 65,425 (43%) are females and 465 (.31%) did not indicate gender. There is a slight decrease of .20% or 298 OWWA members from 2022 to 2021.

By type, land-based OFWs show a bigger number with 124,683 (81.95%) compared to sea-based 5,461 (3.59%) while 22,008 (14.46%) did not indicate are not indicated their based. Land-based OFWs as a group is slightly dominated by males with 50.04% (62,394) and 49.89% (62,199) are females while .07% (90) did not indicate their

gender. Sea-based OFWs is largely dominated by males 67.61% (3,692) and 32.36% (1,767) are females while .04% (2) did not indicate their gender.

Quezon City has the biggest number of OFW OWWA membership in the National Capital Region (NCR) with 26.82% (152,152) followed by Caloocan City with 13.80% (78,273), Manila City with 12.35% (70,082), Taguig City with 8.73% (49,553) and Las Pinas City with 6.65% (37,711).

According to records of the Department of Migrant Workers (DMW) formerly Philippine Overseas Employment Administration (POEA), in 2022, there were 19,974 OFWs new hires from Quezon City representing 23.03% of the total OFWs based in the National Capital Region (NCR) which were deployed in one hundred twentynine (129) countries. Sea-based OFWs have the bigger share of 58.43% (11,671) than the land-based with 41.57% (8,303). There were more males which comprised 65.24% (13,032) than females with 34.76% (6,942). There is an increase of 17.29% (2,944) of QC-based deployed OFWs in the year 2022.

Land-based female OFWs as a group has the bigger number with 5,729 (69%) than males 2,574 (31%). Sea-based OFWs dominates by males 10,458 (89.61%) while females 1,213 (10.39%). Majority of these OFWs is deployed in five countries the biggest is in Bahamas comprised of 10.20% (2,038) followed by Panama 8.44% (1,686), Kuwait 7.80% (1,558), Saudi Arabia 6.74% (1,34) and Marshall Islands 5.46% (1,091). By type of skill, land-based domestic cleaner and helpers has the biggest number with 2,169 (10.86%) followed by sea-based deck ratings 2,102 (10.52%), engine room officers 1.103 (5.52%), food and catering 1.074 based domestic (5.38%)and land housekeepers 925 (4.63%).

Quezon City has the biggest number of deployed OFWs among cities in the National Capital Region (NCR) with 19,974 (23.03%) followed by Caloocan 12,835 (14.80%), Taguig 6,922 (7.98%), Las Pinas 6,442 (7.43%) and Paranaque 5,493 (6.33%).

To promote the general welfare and common good of OFWs in the city, the City Mayor issued Executive Order No. 13, S-201, creating The Quezon City Migration and Development Council that crafts programs, projects, and activities for QCmigrants. Likewise, the City Council in consonance with this Executive Order enacted Ordinance No. SP-2500, S-2016, creating the Quezon City Migrants Resource Center for the purpose of upholding the rights of migrant workers and other overseas Filipinos and their families. This is hoped to be observed through the following: 1) promoting and ensuring full employment and equality of employment opportunities abroad; 2) protecting them against illegal recruitment and related cases of abuse; 3) affording them the best possible conditions by securing the efficient delivery of goods and services; 4) initiating programs and projects dedicated to advancing self-reliant socioeconomic well-being through sustainable and effective policy direction.

The Migrants Resource Center is under the supervision of the Public Employment Service Office (PESO), through its Migration Service Division, as the lead agency on migrant -related programs, projects, and activities. PESOhas documented about 13,531 OFWs based in Quezon City and 100 organized OFWs' family circles. Organized OFW groups comprise six chapters of DOLE-registered groups with 56 males and 168 females and,14 chapters of non-DOLE registered groups with 145 males and 416 females. One of the programs for OFWs is the Retooling Assistance for Employment of Returning OFWs which has 944 beneficiaries - 236males and 708 females. PESO had conducted various capacity-development activities Migrant Development Council to capacitate all its members in the formulation of programs, projects, and activities concerning matters on QC-based OFWs.

The city continuously undertakes various programs on local employment

generation, promotion, and protection which lodged with the Public Employment and Service Office (PESO). These programs include: Local Employment Facilitation 11,936 hired (5,535 males and 6,301 females); Emergency Employment 1,253 hired (432 males and 821 females); Government Internship Program (GIP) 578 hired (202 males and 376 females); Special Program for the Employment of Student (SPES) 1100 hired (426 males and 674 females); PESO Employment Information System (PEIS) 5,067 hired (1945 males and 3,122 females); Workers Hiring for Infrastructure Projects (WHIP) 3,385 hired (3,328 males and 57 females); and Job Fair 402 hired (188 males and 214 females).

The QC Small Business and Cooperatives Development and Promotions Office (SBCDPO) offers entrepreneurship seminars and livelihood technology skills training particularly on the production of processed foods, recycled paper-based products, clothing and personal care products, among others. It envisions the Micro/Small Enterprises and Cooperatives (MSEC) sector to be a key driver in Quezon City's inclusive economic growth. To contribute to this vision, the SBCDPO focuses on providing three (3) main services – Mentorship, Market, and Money or capital assistance. The Office empowers constituents through livelihood opportunities that seek to spark and enable every QCitizen's entrepreneurial spirit.

The SBCDPO conducted eight (8) of its programs and projects, namely, Pangkabuhayang QC, QC Essentials, QC E-Commerce and Digital Kit Distribution, POP QC, Kyusi Nights Bazaar, QC Fresh Market, QC Community Savings Group, and the Capability Building Program for QC Cooperatives as well as six (6)entrepreneurship and partnership trainings for the development of MSECs in Quezon City.

Overall, the number of beneficiaries assisted through SBCDPO programs reached 41,787 across all programs and 571 MSECs and livelihood groups including POP QC, Kyusi Nights Bazaar, QC Fresh Market, CSG, and Capability Building Program. Financially, Pangkabuhayang QC beneficiaries received a total of PhP 230,315,000.00 in capital assistance. Sales from POP QC, Kyusi Nights Bazaar, and QC Fresh Market reached PhP 24,007,194.00, while QC Community Savings Groups accumulated PhP 61,575,723.00 in total savings.

Aside from Pangkabuhayang QC, where fewer beneficiaries and capital assistance are expected given more employees have returned to work, SBCDPO programs assisted more OCitizens during this period, compared to the previous period from July 2021 until June 2022. With quarantine restrictions lifted, the SBCDPO's bazaars for MSECs like POP QC, Kyusi Nights Bazaar, and QC Fresh Market were reintroduced. The SBCDPO also focused on improving recurring programs such as QC Essentials, CSG, and Capability Building Program and on adding new entrepreneurship and partnership trainingprogramsincluding Digital Beauty Academy, Be Your Own Boss, QCertified Training, SME Convergence Training, Food Safety Training, and Marketing 101. These efforts helped to further hone SBCDPO's core competencies, the 3Ms of money, market, and mentorship.

The Capability Building Program for QC Cooperatives is designed to facilitate the development of the cooperatives sector in the city and enable these entities to take active roles in shaping the financial security of their members and the communities where they operate. Specifically, this program helps registration of interested facilitate the livelihood groups and engages with existing cooperatives by extending technical in collaboration with assistance, Cooperative Development Authority, such as training, marketing/promotion activities, and compliance with the requirements of regulatory agencies.

The Cooperative Development Authority (CDA) records a total of 978 cooperatives based in Quezon City. Categorized into types, the majority or more than 70% of the total number of cooperatives are Multi-Purpose (40%), Credit (19%), and Consumer (12%) cooperatives.

Transport Cooperatives and Service Cooperatives comprise 8% and 7% respectively, while Labor Service, Producers, Housing, and Federation cooperatives comprise more than 2% each. Other types of cooperatives comprising of workers, unions, marketing, advocacy, agriculture, education, and technology service comprise 3% of the total number of cooperatives in the city. (See Table ED-3),

Table ED-3: Registered Cooperatives by Type, QC: 2022

Type of	Num-	Percent-									
Cooperative	ber	age (%)									
Multi-Purpose	392	40.08									
Credit	188	19.22									
Consumers	114	11.66									
Transport	79	8.08									
Service	73	7.46									
Labor Service	26	2.66									
Producers	24	2.45									
Housing	20	2.04									
Federation-Secondary	20	2.04									
Federation -Tertiary	3	0.31									
Others (comprised of)	39	3.99									
Workers	8										
Union Tertiary	1										
Union Secondary	5										
Marketing	12										
Advocacy	7										
Agriculture	3										
Education	2										
Technology Service	1										
TOTAL	978	100									

Source: Cooperative Development Authority (CDA)

4.2 FAMILY INCOME AND EXPENDITURE

The Family Income and Expenditure Survey (FIES) is a nationwide survey of households undertaken by the Philippine Statistics Authority (PSA) every three (3) years. It seeks to understand the actual circumstances surrounding household income and spending to establish the foundations for social and economic policies.

The FIES results are widely used not only by the national and local governments but also by private businesses, research institutions, and labor organizations to understand the actual conditions of life of the people. Specifically, it discusses levels of living and disparities in income and spending patterns of families belonging to different income groups. The succeeding sections refer to the 2021 FIES.

4.2.1 Family Income

The official results of the 2021 Family Income and Expenditure Survey showed that the average income of Filipino families was estimated at Php 25,599.00 monthly. This is 1.85% lower than the monthly average income of Filipino families in 2018 of Php 26,083.00.

In the National Capital Region, average monthly income in 2021 was recorded at Php 34,821.00 lower by 9.16% from the 2018 average monthly income of Php 38,333.

The Philippine Statistics Authority (PSA) has recently released FIES data for Quezon City in 2021 which were not available in previous years. For 2021, the average monthly income of Quezon City families was recorded at Php 35,773.00, third in the Metro Manila. Among the cities in Metro Manila, families in Makati City emerged as having the highest average monthly income in 2021 with Php 48,298.00, followed by San Juan City with Php 45,781.00

Table ED-4: Average Family Income and Average Family Expenditure Philippines, NCR and Quezon City

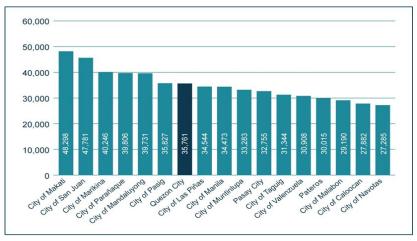
Year		erage Mont ncome (Php		Average l	Monthly Exp (Php)	penditure	Average Monthly Savings (Php)			
	RP	NCR	QC	RP	NCR	QC	RP	NCR	QC	
2021	25,599	34,821	35,773	19,067	26,799	26,898	6,532	8,022	8,875	
2018	26,083	38,333	***	19,917	30,750	***	6,166	7,583	***	
2015	22,333	35,417	***	18,000	29,083	***	4,333	6,334	***	
2012	19,583	31,583	***	16,083	27,083	***	3,500	4,500	***	

^{***} No city disaggregation for years 2012-2018 Source: PSA-FIES

4.2.1.1 Family Income per Capita Income Decile

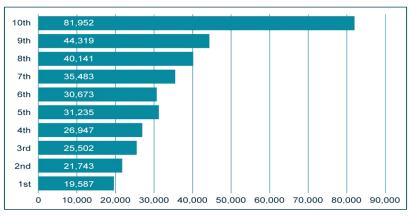
Families were grouped and ranked into per capita income deciles. The tenth or richest decile represents families belonging to the highest ten percent of the population in terms of per capita income, while the first or poorest decile represents families in the lowest ten percent.

In 2021, the average monthly income of Quezon City families ranged from Php 19,587 for the first income decile, or those considered the lowest 10 percent income group to Php 81,952 for the tenth decile, or families belonging to the highest 10 percent income group. In the same year, the average monthly income of Quezon City families in the tenth decile was about four times of those in the first decile.



Source: Philippine Statistics Authority (PSA)

Figure ED-2: Average Monthly Family Income, NCR: 2021



Source: Philippine Statistics Authority (PSA)

Figure ED-3: Average Monthly Family Income Per Capita Income Decile at Current Prices, Quezon City: 2021

Table ED-5: Average Income, Average Expenditure and Average Savings of Families by Per Capita Income Decile, Philippines (RP), NCR and QC: 2021

			INCO	ME			EXPENDITURE						
Income Decile*	RP		NCR		Q	QC		RP		NCR		QC	
	A**	M**	A**	M**	A**	M**	A**	M**	A**	M**	A**	M**	
First Decile	116,020	9,668	219,710	18,309	235,040	19,587	103,890	8,658	196,560	16,380	203,120	16,927	
Second Decile	152,140	12,680	261,440	21,787	260,920	21,743	129,870	10,823	225,670	18,806	218,210	18,184	
Third Decile	175,860	14,655	294,700	24,558	306,020	25,577	146,890	12,241	248,500	20,708	251,820	20,985	
Fourth Decile	202,660	16,888	322,440	26,870	323,360	26,947	166,640	13,887	266,900	22,242	259,140	21,595	
Fifth Decile	227,680	18,973	356,760	29,730	374,820	31,235	184,150	15,346	287,210	23,934	292,050	24,338	
Sixth Decile	261,780	21,815	382,930	31,911	368,070	30,673	207,930	17,328	296,450	24,704	275,860	22,988	
Seventh Decile	302,940	25,245	423,000	35,250	425,800	35,483	235,880	19,657	323,550	26,963	318,650	26,554	
Eighth Decile	361,620	30,135	483,350	40,279	481,690	40,141	271,780	22,648	359,140	29,928	351,410	29,284	
Ninth Decile	457,160	38,097	535,240	44,603	531,830	44,319	329,120	27,427	390,380	32,532	377,850	31,488	
Tenth Decile	813,910	67,825	898,370	74,864	983,420	81,952	511,750	42,646	621,210	51,768	678,570	56,548	
Ratio of Tenth Decile to First Dec- ile	7.	0	4.	1	4.	2	4.9	9	3.	1	3.	4	

*Per capita income decile; **A-Annually, M-Monthly Source: Philippine Statistics Authority (PSA)

4.2.1.2 Income disparity - Gini coefficient

The Gini coefficient is used to measure the income inequalities among families. It ranges from 0 to 1, with 0 indicating perfect income equality among families, while 1 indicates absolute income inequality. A higher Gini index indicates greater inequality, with high-income individuals receiving much larger percentages of the population's total income. In the same way, an increase in the Gini coefficient indicates higher income disparity among families.

In 2021, income inequality in the Philippines as measured by the Gini coefficient was reduced to 0.4119 in 2021 from 0.4267 in 2018. In the National Capital Region, the Gini coefficient also reduced from 0.3520 in 2018 to only 0.3259 in 2021. Quezon City's Gini coefficient in 2021 was registered at 0.3440.

Year	Philippines	Quezon City*		
2021	0.4119	0.3259	0.3440	
2018	0.4267	0.3520	-	
2015	0.4439	0.3908	-	
2012	0.4605	0.4028	-	
2009	0.4484	0.3953	-	

Table ED-6: Gini Coefficient, Philippines, NCR, QC: 2009-2021

4.2.1.3 Sources of income

In terms of sources of income for families in Quezon City, majority or 61.5% of the families rely on salaries/wages as their main source of income; 26.7% rely on other sources of income like cash receipts from local sources and abroad, pension and retirement, dividends and investments, interest income, house rental and imputed rent; while the remaining 11.8% rely on entrepreneurial activities such as wholesale and retail trade, small-scale manufacturing, transportation and communication services, community, social, and other services

4.2.2 Family Expenditure

Filipino families had an average monthly expenditure of Php 19,067.00 in 2021, a decrease of 4.2% from the average monthly family expenditure of Php 19,967.00 in 2018. Average monthly family



Source: Philippine Statistics Authority (PSA)

Figure ED-4: Distribution of Total Family Income by Main Source of Income, QC, 2021

expenditure in the National Capital Region also decreased by 12.8% from Php 30,750.00 in 2018 to Php 26,799 in 2021. Quezon City families, on the other hand, recorded an average monthly family expenditure of Php 26,898.00 in 2021.

In terms of expenditure patterns, food remained the biggest expenditure item of families in 2021, accounting for 42.6%, 40.1% and 38.9% in the Philippines, in the National Capital Region, and in Quezon City, respectively.

^{*}No city disaggregation from 2009-2018 Source: Philippine Statistics Authority (PSA)

Table ED-7: Percent Distribution of Total Family Expenditure by Expenditure Group, Philippines, NCR, Quezon City: 2021

Expenditure Group	Philippines	NCR	Quezon City
Food and Services for Processing Primary Goods for Food and Non-	42.6	40.1	38.9
Alcoholic Beverages	72.0	70.1	00.0
House Rent/Rental Value	14.7	20.1	19.7
Water, Electricity, Gas and Other Fuels	9.5	10.7	10.6
Miscellaneous Goods and Insurance	7.5	6.7	6.3
Transport	5.6	4.8	5.9
Education	1.5	1.3	1.1
Health	3.3	2.5	3.1
Furnishings and Routine Household Maintenance	1.9	1.9	2.4
Durable Furniture and Equipment	2.5	1.9	1.9
Special Family Occasion	2.0	1.0	0.5
Clothing and Footwear	1.5	1.0	1.0
Communication	1.5	1.5	1.7
Tobacco	1.2	0.8	0.8
Recreation and Culture	2.4	2.9	3.1
Alcoholic Beverages and Alcohol Production Services	0.6	0.5	0.5
Accommodation Services	0.0	0.0	0.0
Other Vegetable-Based products	0.0	0.0	0.0
Other Expenditure	1.8	2.2	2.4
Total	100.0	100.0	100.0

4.2.3 Poverty Statistics

4.2.3.1 Poverty Incidence

In 2021, poverty incidence 'among families' or the proportion of Filipino families with incomes that are not sufficient to buy their minimum basic food and non-food needs was estimated at 13.2%. This is 1.1% higher than the poverty incidence among families recorded in 2018.

Poverty incidence 'among population' of Filipinos was 18.1% in 2021 which is 1.4% higher than the value recorded in 2018. This translates to around 19.99 million poor Filipinos in 2021.

In the National Capital Region (NCR), poverty incidence 'among families' was recorded at 2.2% in 2021 or 0.8% higher than the figure in 2018. On the other hand, the poverty incidence 'among population' in the NCR was recorded at 3.5%, a 1.3% increase from 2.2% in 2018. This translates to around 482,500 poor Filipinos in the National Capital Region.

Quezon City's poverty incidence 'among families' in 2021 was recorded at 1.8%, an increase of 0.3% from the figure in 2018. Poverty incidence 'among population', on the other hand, was registered at 3.0%, an increase of 0.6% recorded in 2018, translating to around 94,134 poor Quezon City residents. (See Table ED-8)

Table ED-8: Poverty Incidence and Magnitude of Poor, Philippines, NCR, and Quezon City: 2018 & 2021

Statistics	Philippines		NCR		Quezon City	
Statistics	2018	2021	2018	2021	2018	2021
Poverty Incidence	(%)					
among families	12.1	13.2	1.4	2.2	1.5	1.8
among population	16.7	18.1	2.2	3.5	2.4	3.0
Magnitude of Poor						
among families	3,004,607	3,496,458	47,589	76,158	10,387	12,944
among population	17,670,206	19,992,249	302,166	482,483	74,060	94,134

4.2.3.2 Subsistence Incidence

In 2021, subsistence incidence 'among families' or the proportion of Filipino families with incomes that are not sufficient to meet basic food needs stood at 3.9%, higher by 0.5% than the rate in 2018. Subsistence incidence 'among population' is at 6 in 100 or 5.9% of Filipinos who lived below the food thresholds in 2021, This is equivalent to around 6.55 million food-poor Filipinos.

In the National Capital Region, subsistence incidence 'among' families was recorded at 0.3% in 2021. This shows an increase of 0.1% from the 0.2% recorded in 2018. The subsistence incidence 'among population', on the other hand, was recorded at 5.9% in 2021, or an increase of 0.7% from the 2018 figure. This is equivalent to 63,560 food-poor Filipinos in NCR.

Quezon City's subsistence incidence 'among families' was recorded at 0.4% in 2021, a 0.2% increase from 2018. Quezon City's subsistence incidence 'among population' was at around 23,902 food-poor Quezon City residents or 0.8%, an increase of 0.5% from 2018. (See Table ED-9)

Table ED-9: Poverty Incidence and Magnitude of Poor Philippines, NCR and Quezon City: 2018 & 2021

Statistics	Philippines			NCR		Quezon City			
Statistics	2018	2021	2018	2021	2018	2021			
Subsistence Incidence or P	Subsistence Incidence or Proportion of Food-Poor (%)								
among families	3.4	3.9	0.2	0.3	0.2	0.4			
among population	5.2	5.9	0.4	0.5	0.3	0.8			
Magnitude of Food-Poor									
among families	839,542	1,039,397	8,073	9,090	1,406	2,822			
among population	5,540,616	6,545,388	54,078	63,560	8,855	23,902			

Source: Philippine Statistics Authority (PSA)

4.2.3.3 Thresholds and income

At the national level, the average family income needed to meet the minimum basic food and non-food needs of a family with five members in 2021 was estimated at Php 12,030 per month (poverty threshold). This was higher by 11.8% from the estimated Php 10,756 monthly poverty threshold for a five-member family in 2018. In the National Capital Region, which includes Quezon City, the poverty threshold was estimated at Php 13,741 for a family of five, higher by 15% than the poverty threshold in 2018.

Table ED-10: Annual and Monthly Poverty Threshold Philippines, NCR and Quezon City: 2018 & 2021

Region/Province	Annual Per Capita Poverty Threshold (in Php)		Monthly Poverty Th	Percent Increase (Decrease)	
	2018	2021	2018	2021	
Philippines	25,813	28,871	10,756	12,030	11.8%
National Capital Region (NCR)	28,862	32,978	11,951	13,741	15.0%
Quezon City	28,682	32,978	11,951	13,741	15.0%

Source: Philippine Statistics Authority (PSA)

On the other hand, 'food threshold' or the average family income needed to meet the minimum basic food needs of a five-member family in the country was placed at Php 8,379 per month in 2021, which is higher than the 'food threshold' of about Php 7,553 in 2018. The food threshold in 2021 in NCR, and thus reflected for Quezon City, was estimated at Php 9,595 which is higher by 14.98% from 2018.

Table ED-11: Annual and Monthly Food Threshold, Philippines, NCR, and Quezon City: 2018 & 2021

Region/Province	Annual Per Capita Food Threshold (in Php)		Monthly Food 1 (in	Percent Increase (Decrease)	
	2018	2021	2018	2021	
Philippines	18,126	20,111	7,553	8,379	10.95%
National Capital Region (NCR)	20,029	23,028	8,345	9,595	14.98%
Quezon City	20,029	23,028	8,345	9,595	14.98%

Source: Philippine Statistics Authority (PSA)

4.2.3.4 Other Poverty Measures

The income gap measures the average amount of income required by the poor in order to get out of poverty expressed in the poverty thresholds. The income gap in the country was estimated at 22.% in 2021, that is, on the average, a poor family with five members needs an additional monthly income of about Php 2,719 to move out of poverty.

In the National Capital Region (NCR), the income gap was estimated at 14.7% in 2021. This means that, on the average, a poor family with five members in the NCR needs an additional Php 4,848 to move out of poverty.

For Quezon City, a poor family of five members would require an additional Php 5,804 to move out of poverty, based on 2021 data.

Table ED-12: Full Year Income Gap, Poverty Gap and Severity of Poverty Philippines, NCR, and Quezon City: 2018 & 2021

Region/Province	Philippines		NCR		Quezon City	
Region/Province	2018	2021	2018	2021	2018	2021
Income Gap	21.7	22.6	15.6	14.7	12.3	17.6
Poverty Gap	2.6	3.0	0.2	0.3	0.2	0.3
Severity of Pov- erty	0.9	1.0	0.1	0.1	0.0	0.1

Source: Philippine Statistics Authority (PSA)

4.3 FOOD SECURITY

The 1996 World Food Summit describes Food Security as a situation "when all people, at all times, have physical and economic access to sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life." This involves four dimensions that are to be fulfilled synchronously. These are:

- a) Physical AVAILABILITY of food wherein the food supply is dependent on levels of food production, quantity of food stocks, and the condition of net trade.
- b) Economic and physical **ACCESS** to food refers to the people's ability to obtain food. This includes both the consumer's financial capacity to purchase food as well as having the means to physically access locations where food is sold. Policies on incomes, expenditures, markets, and prices directly influence food accessibility.
- c) Food **UTILIZATION** relates to the nutrition aspect of food where dietary requirements for the proper maintenance of health and well-being are met through appropriate care and feeding practices, suitable food preparation, diversity of food that comprise the diet, and intra-household distribution of food.
- d) STABILITY of the other three dimensions over time is required to maintain proper nutrition. Disruptions affecting food supply stability such as adverse weather conditions, political instability, rising food prices, unemployment, or other economic factors can negatively affect the status of food security.

The Government of the Philippines has set a national goal of ending hunger for all Filipinos. To achieve this goal, the country is undertaking substantial efforts to improve the productivity of the agricultural sector. These include improving steps agricultural productivity, providing financial assistance to farmers, and investing in infrastructure. The government is also working to improve access to safe water and sanitation facilities. The Philippines is a country with a long history of agriculture, and the agricultural sector is a major source of food for the country. However, there are still many Filipinos who do not have enough to eat. This is due to several factors, including poverty, inequality, and climate change.

The major sources of food supply in the

Philippines come from the agricultural, fisheries, aquaculture, and forestry sectors. Insufficient food consumption, deficiencies, imbalances in consumption, and the inability to acquire acceptable food can all lead to hunger or malnutrition. However, food security is not simply the availability of sufficient quantities of food. It also encompasses having access to clean water sources and sanitation facilities. These factors are essential for good health and well-being, and they also play a vital role in preventing the spread of disease.

Urbanization has led to challenges in food security, as it has resulted in changes in land use, food demand, and access to food. As a highly urbanized city, Quezon City's population is growing rapidly, and the demand for food is also increasing. This places a strain on the city's food supply and makes it more difficult to ensure that everyone has access to affordable, nutritious food.

Food systems are required to ensure efficient and sustainable production, distribution, and delivery of goods from the farm to the metropolis or all its local units. This means that food systems must be able to meet the growing demand for food in Quezon City, while also ensuring that food is produced sustainably.

Some measures can be taken to improve food security in Quezon City, including:

- Increasing the production of food within the city, through urban agriculture and other initiatives.
- Improving the efficiency of the food supply chain, by reducing waste and ensuring that food is transported and stored in a safe and efficient way.
- c) Making food more affordable, by providing subsidies to farmers and consumers, and by ensuring that there is competition in the food market.
- Educating people about the importance of good nutrition, and how to make healthy food choices.

By taking these steps, it is possible to ensure that Quezon City has a sustainable and secure food supply for the future. Food security is a complex issue, and there is no single solution. It will require a combination of efforts from governments, businesses, and individuals. Investment in research and development is needed to find new ways to produce more food sustainably.

4.3.1 Food Availability

As a highly urbanized city, Quezon City has minimal agricultural activities. As a result, the city sources most of its food supply from nearby provinces. Agricultural produce is brought to the city in bulk, through trading areas or "bagsakan" and sold mostly wholesale to clients. These clients then distribute the goods to other market outlets located in various parts of the city.

The trading areas of Quezon City include the Balintawak Cloverleaf Market and Mega Q-Mart located along EDSA. The Litex Market has also emerged as a third trading area in the city while distribution or retail outlets include: 1) eight (8) public markets; 2) twenty-seven (27) private markets; 3) fifty-nine (59) *talipapas*; and 4) one hundred fifty-seven (157) supermarkets. In addition, there are available suppliers of basic goods and commodities and distribution outlets such as mini-marts and groceries strategically located around the city.

Retail outlets are distributed in all six (6) districts of Quezon City with District 1 and District 5 having the most at sixty (60) and fifty-eight (58) respectively. Trailing in the list are District 2 with eighteen (18) and District 6 with twenty-five (25) outlets. Districts 2, 5, and 6 currently do not have public markets but Districts 2 and 6 may stand to benefit more from gaining public markets due to their low number of retail outlets.

The number of supermarkets and grocery stores providing consumers with more options and better access to retail outlets has notably increased. Among the biggest retail chains with branches in the city are SM

Supermarket, SM Hypermarket, SM Savemore, Robinson's Supermarket, Puregold, Landmark Supermarket, Shopwise, Ever Supermarket, Hi-Top Supermart, and S&R Membership Shopping. The rise in competition may have caused some challenges for a few private markets as their number decreased from twenty-nine (29) in 2018 to twenty-seven (27) in 2022.

Quezon City has 4,852 establishments engaged in accommodation and food service activities as of 2022. The most common cuisines are Filipino, Chinese, American, Japanese, and other Asian and Western fare. The most popular areas for restaurants in Quezon City are Timog Avenue, Tomas Morato Avenue, Maginhawa Street, Cubao, and Eastwood City.

The food manufacturing and processing industry in Quezon City has grown significantly in recent years. According to the Philippine Statistics Authority (PSA), there were 1,639 food manufacturing and processing companies registered in the city as of 2021, up from 1,448 in 2017. This represents a growth rate of 12.9% over the past four years. The growth of the food manufacturing and processing industry in Quezon City is likely due to a number of factors, including the city's large and growing population, its proximity to major transportation hubs, and the availability of affordable land and labor. The industry is also expected to continue to grow in the coming years, as the demand for processed foods increases.

The Quezon City Government, in coordination with various national agencies including the Department of Trade and Industry (DTI), National Food Authority (NFA), Department of Agriculture (DA), and the National Meat Inspection Service (NMIS), among others, constantly monitors and controls the food supply and distribution operations to stabilize supply and demand. This is done through a variety of measures, including monitoring the prices of food products, ensuring an adequate supply of food, and promoting food security. These help to ensure that residents of Quezon City have access to affordable and nutritious food.

On Rice

Rice is a staple food in the Philippines, and the country is working to become self-sufficient in rice production. The National Food Authority (NFA) is responsible for ensuring the stability of the country's rice supply, and they do this by importing rice when necessary.

The top rice-producing provinces in Luzon are Pangasinan, Nueva Ecija, Tarlac, Pampanga, Bulacan, Cagayan, Isabela, and Mindoro. These provinces account for a significant portion of the country's rice production, and they are essential to ensuring the country's food security.

The Philippines has been ranked as one of the top rice producers in Asia, but the country has also experienced periods of rice deficit. In these cases, the NFA has imported rice from other countries to ensure that there is a stable supply of rice available.

The yearly production of rice per capita increased to 118.46 kilos in 2021, breaking the previous high set in 2018. This translates into a production index of 100.5%, which indicates that the production of rice per person in 2021 was 0.5% greater than the level in 2018.

The supply of rice in Quezon City comes from a variety of sources, including local production, imports, and government stockpiles. The demand for rice in Quezon City is expected to continue to increase in the coming years due to the city's growing population and the increasing affluence of its residents.

On Fish

The sources of fish sold in markets, flea markets, and supermarkets in Quezon City are diverse. The city's main source of fish is the Navotas Fish Port, which is the largest fish port in the Philippines. The port receives fish from all over the country, including Cavite, Batangas, Quezon, and the provinces in the Visayas and Mindanao. The fish from the Navotas Fish Port is then distributed to markets, flea markets, and supermarkets throughout Quezon City. The fish is also

exported to other countries. The diversity of the sources of fish in Quezon City ensures that consumers have access to a wide variety of fish at affordable prices. The city's proximity to the Navotas Fish Port also ensures that the fish is fresh and of high quality.

On Vegetables

Quezon City obtains the majority of its vegetables from the northern provinces of Luzon, such as Baguio, Pangasinan, Isabela, Bulacan, and Pampanga. These vegetables are brought to the city's major trading area, the Cloverleaf Balintawak Market, which has become a well-known trading site for agricultural produce from the north. Other trading areas include the Mega Q-Mart and Litex Market. Some food retailers also go directly to the major sources for supply.

The Cloverleaf Balintawak Market is a large and well-organized market that caters to both wholesalers and retailers. The market is open 24 hours a day, 7 days a week, and it is a major source of vegetables for the entire city.

The Mega Q-Mart is another major trading area for vegetables in Quezon City. It is located at the heart of the city, and is easily accessible by public transportation. The Mega Q-Mart is a popular destination for both wholesalers and retailers as it offers a wide variety of vegetables at competitive prices.

Direct sourcing of vegetables from the major sources ensures that the vegetables are fresh and of high quality. It also allows food retailers to have more control over the quality and price of the vegetables they sell.

On Livestock and Poultry

The city has two existing slaughterhouses: Novaliches Slaughterhouse and Labudahon Slaughterhouse. Live animals are sourced from nearby provinces such as Bulacan, Nueva Ecija, and Batangas. There are also non-NMIS accredited slaughterhouses operated by lechon vendors in La Loma. Chicken or fowl are also sourced from nearby provinces and brought to various public market stallholders for slaughtering.

While Quezon City does not have a city-owned slaughterhouse, all slaughterhouse operations in the city are monitored and inspected by the City Veterinary Department (CVD) to ensure that they are following national and local regulations. The Government of Quezon City is aware of the gap between the city's meat production capacity and demand. To address this, the city is planning to construct a new slaughterhouse as part of the effort to improve the city's food security. The new slaughterhouse will help to ensure that Quezon City has a reliable source of fresh, safe, and affordable meat.

The daily total production capacity from existing slaughterhouses as monitored by the City Veterinary Department shows a big market for slaughtered meat products and services and a big deficiency in supply. To cope with the city's meat requirements, many distributors and traders like public and private markets, supermarkets, and groceries get their meat supply from other sources, namely: 1) slaughtered meat from nearby cities and municipalities; 2) local processed meat suppliers/manufacturers, such as Purefoods, Monterey, Magnolia, CDO, Bounty Fresh, and other meat companies; 3) imported frozen products, with the United States, Canada, Australia, Brazil, and New Zealand being the country's major suppliers.

Table ED-13: Daily Meat Consumption, Demand and Production Capacity

Туре	Average Daily Cor sumption Per Capita (in kg.)		Average Daily Meat Demand	Production Capacity
Hogs	0.04109589		1,352 hogs	650 hogs
Cattle	0.00868493		107 cattle	58 cattle
Chickens	0.03923288		77,421 chickens	8,449 chickens

Sources: PSA; Quezon City Veterinary Department

Risk of Supply Disruption

Food insecurity is a situation where people lack secure access to sufficient safe and nutritious food for normal growth and development and an active and healthy life. This can be caused by several factors, including economic, environmental, demographic, and political conditions.

The risk of food insecurity increases due to insufficient transport infrastructure that creating challenges in transporting produce from farms to markets. This leads to higher prices and reduced availability of food.

Another factor is climate change as it causes extreme weather events, such as typhoons and floods, which damage crops and livestock and lead to food shortages and price increases. For its economic aspect, insufficient income makes many people vulnerable to food insecurity due to diminished financial capacity to purchase adequate supply of food. This may lead to the deterioration of their health and well-being.

To address risks associated with food insecurity, the Quezon City Government is undertaking a number of programs and activities to improve the resiliency and stability of food supply for the citizens of the city. One of which is the Joy of Urban Farming Program which covers the provision of training, supplies, and equipment, as well as the designation and acquisition of land for urban farming and aquaculture activities that will help produce food to supplement the supply for communities in the city. As of 2022, the city already has 347 urban farms of varying sizes and locations. To strengthen and develop sustainable and innovative urban farming practices, the city established the Center for Urban Agriculture and Innovation at the Quezon City University creating a facility for training, research, and development which will lead to the potential of creating more livelihood opportunities. The city also strives to continuously build its capacity for improving its food security through the support of other agencies in the form of knowledge transfer, funding support,

and collaboration with organizations such as the Department of Agriculture (DA), Scholars of Sustenance (SOS), Consortium of International Agricultural Research Centers (CGIAR), Oxfam, and the New Zealand Government.

4.3.2 Food Affordability

Food affordability is measured by considering the ability of individuals to pay for food and the presence of government programs and policies to support food affordability. Both are highly influenced by government policies and regulations that control income levels and cost of living. Together, these two factors provide a holistic measure of food affordability. This is important because it allows for a more accurate assessment of the true extent of food insecurity. Food affordability is a critical aspect of food security, as it ensures that people have access to the food they need to live healthy and productive lives.

Food Consumption as a Share of Household Expenditure

The proportion of household expenditure on food is an important indicator of food security. A lower share of household expenditure on food indicates that households are more resilient to price increases and shocks.

Income is an important factor in food security, as it determines how much food can be purchased by households. When incomes increase, households can purchase higher-quality food. In the Philippines, the average household earned Php 282,096.00 and spent 42.9% of its total expenditure on food in 2021. This indicates that many households in the country are still in the low-income group. The average annual household earnings in Quezon City as of 2021 was Php 394,092.00 38.9% of which is for food expenses.

The Quezon City Local Price Coordinating Council has been created to enforce the Price Act of 1991, which ensures the availability of basic necessities and commodities at reasonable prices. The council also protects consumers from price manipulation and other illegal acts such as profiteering by some

businesses, especially during times of emergency and calamities.

To make food more affordable to residents, Quezon City has partnered with neighboring provinces and the Department of Trade and Industry (DTI) to organize food caravan projects. These projects allow farmers and food suppliers to sell their goods directly to residents at the City Hall. The direct sale eliminates the middlemen, making food more affordable for residents. Quezon City hopes to expand this program through coordination with other cities.

4.3.3 Food Security, Safety, and Quality

Food security, safety, and quality are essential for the health and well-being of people. A comprehensive and effective food control system is needed to ensure that food is safe to eat and that it meets the quality standards set by the government. Government food regulatory agencies at the national and local levels are responsible for setting these standards, regulating food establishments, and ensuring that food businesses comply with the law. The following agencies are responsible for the conduct of inspections, implementation, and ensuring compliance with laws on food security, safety, and quality.

National Agencies

- National Food Authority (NFA) for rice, corn and other grains
- National Meat Inspection Services (NMIS) for meats
- Bureau of Fisheries and Aquatic Resources (BFAR) for fresh fish, and other sea foods including those grown by aquaculture
- Bureau of Animal Industry (BAI) for food derived from animals including eggs and honey production
- National Dairy Authority (NDA) for milk production and post-harvest handling
- Bureau of Plant and Industry (BPI) for plant foods
- Philippine Coconut Authority (PCA) for

- Sugar Regulatory Administration (SRA) for sugar cane production and marketing
- Fertilizer and Pesticide Authority (FPA) for pesticides and fertilizers used in the production of plants and animal foods
- Others: Department of Health (DOH), Food & Drug Administration (FDA), Department of Trade and Industry (DTI), Food Development Center (FDC) under NFA, Bureau of Agricultural and Fisheries Standards (BAFPS), Bureau of Quarantine (BOQ), National Epidemiology Center (NEC), Research Institute of Tropical Medicine (RITM), National Center for Disease Prevention and Control (NCDPC), National Center for Health Promotion (NHCP)

Local Government Offices:

- Quezon City Health Department (QCHD)
- Quezon City Veterinary Department (QCVD)
- Market Development and Administration Department (MDAD)

These agencies work together to ensure that the food supply in the country is safe and of high quality. Personnel from these government offices conduct inspections of food establishments, test food products for safety, and investigate foodborne illness outbreaks. They also develop and enforce food safety regulations and provide education and training to food businesses and consumers. The work of these agencies is essential to protect the health and well-being of people. By ensuring that food is safe to eat, they help to prevent foodborne illness and other health problems. They also help to ensure that food is of high quality, which is important for people's overall health and well-being.

4.4 INDUSTRY AND SERVICE

Registered businesses in the city were classified using the Philippine Standard Industrial Classification (PSIC), the classification also used by the national agencies. The PSIC provides for three (3) major categories namely: Agriculture, Industry, and Services which are further subdivided into sub-classes.

The majority or about 94.17% (67,159) of businesses belong to the Service Sector, while the Industry Sector has only 5.83% (4,159) shares of the total registered businesses. There are no business operations that are registered in the Agriculture sector, which is the usual case in highly urbanized cities (See Table ED-14). The average annual growth rate for the past 10 years is computed at 1.37%.

Table ED-14: Number of Registered Business Establishments by Philippine Standard Industrial Classification (PSIC), QC: 2021-2022

Type of Business	2021	2022	Percent to Total
INDUSTRY	3,628	4,159	5.83
Manufacturing	3,270	3,499	4.91
Construction	322	589	0.82
Electricity, Gas, Steam, and Air Conditioning Supply; Water Supply; Sewerage, Waste Management and Remediation Activities	36	71	0.10
SERVICE	65,791	67,159	94.17
Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles	25,453	28,815	40.40
Real Estate Activities	8274	8,368	11.73
Professional, Scientific &Tech Activities	6254	6,308	8.84
Admin & Support Service Activities	5954	5,904	8.28
Accommodation & Food Service Activities	2,343	4,852	6.80
Finance & Insurance Activities	3,608	3,821	5.36
Transport & Storage, Information and Communication	7,420	3,350	4.70
Human Health & Social Work Activities	1,641	1,831	2.57
Education	1,170	1,203	1.70
Arts, Entertainment and Recreation	511	529	0.74
Other Service Activities	2,094	2,178	3.05
Unknown PSIC	1,069	0	0
TOTAL	69,419	71,318	100.00

Source: Quezon City Information Technology Development Department (QC-ITDD)

Table ED-15: Number of Registered Business Establishments New and Renewal, QC: 2013-2022

Year	New	Renewal	Total
2013	13,417	51,098	64,515
2014	13,679	52,965	66,644
2015	12,107	54,989	67,096
2016	12,116	57,088	69,204
2017	12,368	59,961	72,329
2018	13,117	63,146	76,263
2019	11,519	66,733	78,252
2020	8,065	66,595	74,660
2021	8,605	60,814	69,419
2022	10,381	60,937	71,318

Source: QC-Information Technology Development Department (QC-ITDD)

The city's economy continues to be dominated by small to medium-scale business establishments engaged mostly in the distribution of finished products and provision of basic services. However, The Covid -19 pandemic which started in the first quarter of 2020 has negatively impacted enterprises, for instance, in the form of low production, increasing costs, reduced sales, and labor-related challenges including remuneration or retrenchment.

Table ED-16: Number of Registered Businesses by Size, QC: 2018-2022

Business Size	2018	2019	2020	2021	2022
Micro	59,343	60,401	55,707	54,108	51,490
Small	10,858	11,128	11,603	9,618	12,699
Medium	4,875	5,383	5,917	4,573	5,744
Total MSMEs	75,076	76,912	73,227	68,299	69,933

Source: QC-Information Technology Development Department (QC-ITDD)

Facing the wrath of the health crisis, most of these firms faced difficulty in surviving the challenges. The severely affected businesses opted for or were forced to stop their operations. As evidence of this, there was a significant decrease in the number of registered businesses particularly in 2020 and 2021, showing negative growth rates of 4.60% and 7.20%, respectively.

However, in 2022, the city's trade economy was able to recover slowly as businesses recorded an increase of 2.73% with a total of 71,318 entrepreneurs opting to register their businesses in the city. One of the biggest trends to emerge during the Covid-19 pandemic is that of small businesses going online which created different opportunities to address the many challenges. Indeed, for many small businesses, the Internet remains a lifeline, helping them to stay in business during the pandemic.

Table ED-17: Number and Percentage of Non-Renewing Business Establishments Quezon City: 2013-2022

Year	New	Renewal	Total	Non- Renewal	Percentage of Non- Renewing Businesses	Business Retention Rate
2013	13,417	51,098	64,515	11,604	17.99%	82.01%
2014	13,679	52,965	66,644	11,550	17.33%	82.67%
2015	12,107	54,989	67,096	11,655	17.37%	82.63%
2016	12,116	57,088	69,204	10,008	14.46%	85.54%
2017	12,368	59,961	72,329	9,243	12.78%	87.22%
2018	13,117	63,146	76,263	9,183	12.04%	87.96%
2019	11,519	66,733	78,252	9,530	12.17%	87.83%
2020	8,065	66,595	74,660	11,657	15.61%	84.39%
2021	8,605	60,814	69,419	13,846	19.94%	80.06%
2022	10,381	60,937	71,318	8,482	11.90%	88.10%
Average	11,637	59,432	70,970	10,675	15.19%	84.81%

Source: QC-Information Technology Development Department (QC-ITDD)

Every year, some 15.19% of the total registered businesses do not renew their permits in the succeeding year. These non-renewing firms are those that have shut down operations due to bankruptcy, mismanagement, or transfer of business operations to other cities or to rural areas, while some may have just continued operation without securing the required permits. Business Retention Rate in the city is equivalent to 84.81% on the average.

4.4.1 Services

Table ED-17 indicates that, for 2022, the majority (94.17%) of registered businesses belong to the Service Sector. The biggest shares are those business firms engaged in Wholesale/Retail Trade activities which total 28,815 or 40.40% of the total registered businesses. Wholesale/Retail Trade is also the number one business revenue source of the city and has shown to have the highest increase in numbers among the sectors over the past years. Such is evidenced by the existence of numerous shopping malls where many retail stores operate. These malls include several SM Malls, the Ayala Malls (Trinoma, UP town Center and Fairview Terraces), the Robinson Malls (Fairview, Magnolia and Galleria) and Ever Gotesco Malls, Eton Centris, Gateway Mall, Fishermall, as well as supermarkets, groceries and convenience stores located in various part of the city. There are also home-based stores such as sari-sari stores, bakeries, and carinderias mostly located in medium- and high-density residential areas. Many of these establishments engaged in the Wholesale and Retail trade and concentrated in Districts 1 and 4.

The second biggest share in the Service Industry is in Real Estate Activities with 11.73% (8,368) concentrated in Districts 1 and 4; followed by Professional, Scientific, and Technical Activities at 8.84% (6,308); and Administrative and Support Service Activities with 8.28% (5,903) mostly located in Districts 3 and 4.

Accommodation and Food Service activities rank fifth with 6.80% (4,852) which are mostly found in Districts 1, 3, and 4, particularly in Banawe, Quezon and West Avenues, SM North, Trinoma, Cubao Commercial Area, Eastwood City, SM Centerpoint, and South Triangle areas. The other types comprise of: Financial and Insurance activities with 5.36% (3,821); services engaged In Transport and Storage (transport companies/operators, trucking/hauling services, forwarding/freight services), Information and Communication 4.70% (3,350); Human Health and Social Work activities comprising of hospitals, clinics, laboratories, etc. at 2.57% (1,831); Education composed of the colleges, universities, vocational schools and other training institutions with 1.68% (1,201); Arts, Entertainment and Recreation including radio and TV networks, call centers etc. with 0.74% (529); and Other Service activities like beauty salons, dress shops, tailoring shops, among others at 3.05% (2,178).

4.4.2 Industry

The industry sector has a 5.83% share of the total businesses numbering to 4,159 in 2022. This is composed of Manufacturing businesses – printing/publishing, assembly of motor vehicles, fabrication of metal, steel and aluminum products, etc.; followed by the Construction businesses – construction of buildings, site preparation and development, Architectural and Engineering works, etc.; and lastly the Electricity, Gas, Steam, and Air Conditioning Supply, Water Supply, Sewerage, Waste Management and Remediation activities.

Industrial development of Quezon City was hampered in the years 1995 through 2000 due to national policy on dispersion of heavy industries outside the National Capital Region. The presence of heavy industries in urban areas greatly affects the environment and health of the people, its pollutive and hazardous elements immensely contributed to air pollution and climate change. The transport activities of these heavy industries also affect the flow of traffic in Metro Manila. These are the prime reasons why the national government came out of dispersion policy. Light industries which are less pollutive and hazardous

are retained in urban areas. As provided for in Section 21 and Section 22 of Quezon City Comprehensive Zoning Ordinance SP-2502, S-2016 has allotted a Low Intensity Industrial Zone (I-1) and Medium Intensity Industrial Zone (I-2) where non-pollutive and non-hazardous manufacturing and processing establishments are permitted to operate in these zones. The City Council though this Zoning Ordinance had removed the Heavy Intensity Industrial Zone (I-3) Zone for pollutive and hazardous industries in consonant with the national dispersion policy.

The existing city industries concentrated in traditional industrial zone of Balintawak-Munoz which is part of the city's growth area. In 2019, the City Planning and Development Department had conducted survey of industries in this area covering six (6) barangays. Baesa has the biggest number of industries with a total of (41) followed by Apolonio Samson (32), Sangandaan (8), Balonbato (5), Bahay Toro (3), Unang Sigaw (1). These type of industries are manufacturing plants, assemblers and warehousing of industrial products. These are located along major and inner roads such as EDSA, Baesa, Mendez, North Diversion-Quirino, Howmart-Oliveros Drives, Carlos Street, Fema-Seminary Roads, Marcel Drive, and Tandang Sora Avenue Extension. Most of the heavy industries are converted into industrial warehouse due to national dispersion policy and some were relocated in other regions proximate to Mero Manila particularly in Region III-Central Luzon and Region IV-A Calabarzon. Other concentration of city industries is in Barangay Bungad, Balingasa, Manresa, Libis, Bagumbayan and Novaliches-General Luis area.

The city has undertaken various efforts to improve services including processes on business registration which have been simplified and made easier through:

 Accelerating business permit application through the Quezon City Biz Easy Online Unified Business Permit Application System (OUBPAS)

- Granting relief to taxpayers through extended tax deadlines, amnesty, staggered payment, and waiver of penalties
- Amplifying ease of doing business through the online business tax assessment system
- Delivering convenience via the Automated Document Delivery System
- Online liquor permit system
- Online occupational permit system
- Instituting electronic payment through the QC Pay Easy and opening of more satellite offices, use of over-the-counter payments in accredited banks internet banking, automated teller machines and mobile money service providers.
- Improving quality of information through the Enhanced Tax Mapping Systems Project (Etaxmaps)
- Building the tax base through the Intensified Real Property Inventory and Tax Mapping Operations (IRePITMO)
- Operationalizing the Philippine Business Registry (PBR) which utilizes an online integrated system connecting various concerned national government agencies like DTI, BIR, SEC, HDMF, SSS and Philhealth, among others, in the registration of new businesses. The QC government was also the first LGU in the country to operationalize the PBR.
- Signing of Memorandum of Agreement: DTI BNRS-QCG OBPAS Integration
- Signing of Memorandum of Agreement:
 QCG and 142 Barangays Integration of Barangay Clearance Fees in the OBPAS
- Documents Digitization Management System Initial Phase
- Passage and Implementation of the following:
 - Ordinance No. SP-2219 s-2013, the QC Economic Development Incentives Code of 2013, which is currently being updated, seeks to encourage and to

accelerate inflow of investments – the entry, expansion, modernization of the service and industry sectors in various areas of the city. It provided for the creation of an Economic Development and Investment Board (EDIB), the policy making body tasked to promote, regulate, and monitor investments in the city; and a Local Economic Investment Promotions Office (LEIPO) that shall serve as the implementing arm/Technical secretariat of the Board and is tasked to coordinate the drafting of the QC Investment Priorities Plan and ensure compliance with the plan.

- Ordinance adopting a Magna Carta for Micro Small Business Enterprises in QC (Ordinance No. SP-2360 s-2014) has the following development objectives:
 - * Business Environment (BE) create an enabling business environment that is conducive to the establishment, innovation, development and sustainable growth of MSEs and entrepreneurship in the city;
 - Access to Financing (A2F) enable MSEs and entrepreneurs to conveniently access appropriate and affordable financial services and assistance;
 - Access to Markets (A2M) enable MSEs and entrepreneurs to maintain their current markets and penetrate new markets; and
 - Productivity and Efficiency (P & E) enable MSEs and entrepreneurs to be innovation active and improve their capacities to develop, produce and deliver competitive products and services for the local, national and international markets.
 - * Creation of the QC Small Business Development & Promotion Office (QC-SBDPO) –Ordinance No. SP-2364 s-2014) – it created QC-SBDPO to serve as implementing arm of the Micro and Small Enterprises Development Council (MSED Council) and shall also

function as the Technical Secretariat of the MSED Council.

City plus factors

The city continues to attract investors with its various plus factors, namely:

- Expansive land. The city has 160 sq. kilometer urban landscape spread over one-fourth of Metropolitan Manila.
- Reasonably priced real estate. Real estate land value and taxes are lower compared to other cities providing cost effective location.
- Strategic location. At the heart of Metro Manila, the city is accessible from major highways and thoroughfares and mass transit system of Metro Manila.
- Young manpower pool. About 1/3 of the city's population is less than 15 years old and educating this young population are the numerous colleges, universities, and training centers like the prestigious University of the Philippines, Ateneo de Manila, Miriam College, and other high quality learning institutions in the city.
- Large consumer market. The city has the largest population in the country, providing a big consumer market for investors.

Other factors that are continuously being improved/ maintained include the close private partnership with various business sectors, and strategies/ programs undertaken by the city to include efficient assistance services such as expeditious processing of business permits, appropriate infrastructure, improved communication, stable policies, and provision of various incentives.

The city also makes available the following national and local incentives which largely applied for firms that are registered with the Philippine Economic Zone Authority (PEZA), the Tourism Infrastructure and Enterprise Zone Authority (TIEZA), and the Board of Investments (BOI).

National Incentives:

- 100% foreign equity in all investments except those reserved for Filipinos by mandate of the Philippine Constitution;
- Income Tax Holiday for six (6) years for pioneer

firms and four (4) years to non-pioneer firms;

- Tax credit on raw materials, supplies and semi-manufactured products;
- Special Investors' Resident Visa;
- Employment of foreign nationals;
- Granting of Special Economic Zone status to tourism development zones and tourism estate and other incentives provided for under the Special Economic Zone Act of 1995 (RA 7916); and
- Private sector participation thru the Public-Private-Partnership (PPP) arrangement with the national implementing agencies and the local government units (LGUs).

Local Incentives:

- 10% discount on prompt annual payment of Business Taxes;
- 50% discount on business taxes to business enterprises with capital of not
- more than P3M (Barangay Micro Business Enterprises BMBEs Law: RA No. 9178)

4.5 TOURISM

Tourism is an important sector of the Philippine economy. It is currently the largest- and fastest-growing industry in the world and has been utilized by countries and local governments as one of the foundations of the economy. In 2022, the travel and tourism industry in the Philippines contributed almost 6.2% to the Philippine Gross Domestic Product (GDP). The Department of Tourism (DOT) recorded 2.65 million tourists visiting the country in 2022, showing recovery from the effects of travel prohibitions due to the height of the COVID-19 pandemic. It resulted in a high 1519.4% growth from the 163,879 visitors in 2021 due to the gap in allowed flights and travel restrictions from the previous year.

South Korea has been the largest source of visitors to the Philippines up until 2020 with a total of 338,877 visitors despite the increasing pressure on travel due to Covid-19. From 2021-2022, the trend shifted in favor of American visitors, having overtaken South Korea which was further affected by the stricter travel restrictions in 2021. This continued until 2022 despite the recovering tourism

Table ED-17: **Distribution of Tourist Arrivals by Type of Tourist, NCR and Philippines: 2018-2022**

·							
YEAR	Foreign Tourist	Overseas Filipi- nos	Total	% Growth Rate			
	Tourist	1100					
2018	7,096,594	71,873	7,168,467	8.27			
2019	8,188,477	72,436	8,260,913	15.24			
2020	1,398,455	84,080	1,482,535	-82.05			
2021	146,098	17,781	163,879	-88.95			
2022	2,025,413	374,346	2,653,858	1519.4			

Source: Department of Tourism (DOT)

industry. Other noticeable visitor population in 2022 include tourists from Australia, Canada, United Kingdom, Japan, Singapore, India, Malaysia, and China. In 2022, the country attracted 2,653,858 visitors with the lifting of most restrictions on international flights in the country.

Table ED-18: **Distribution of Tourist Arrivals** by Type of Tourist, Philippines: 2022

Nationality	Total	% Share
American	505,089	19.03
South Korean	428,014	16.13
Australian	137,974	5.20
Canadian	121,413	4.57
British	101,034	3.81
Japanese	99,557	3.75
Singaporean	53,448	2.01
Indian	51,542	1.94
Malaysian	46,805	1.76
Chinese	39,627	1.49

Source: Department of Tourism (DOT)

The usual purposes of tourist visits to the country were to spend holidays, to visit friends and relatives, for official/business trips, educational/studies, religious and civic missions, conventions, incentives, health/medical treatment/consultation, and shopping among others. In 2022, the leading purpose of visit is for Holiday/Pleasure/Vacation, with a 56.49% share, based on the available tourist arrival data.

Compared to other major neighboring cities in the NCR, Quezon City gets only a limited share of the region's tourist market due to its distance to entry points, airports, and seaports, and the existence of a few accommodation facilities such as internationally managed hotels. Currently, there are efforts to boost the industry through promotional efforts for Meetings, Incentives, Conferences & Exhibitions (MICE) gatherings and for strengthening the existing cultural heritage events and spots within the city.

As of 2022, Quezon City has 38 Department of Tourism (DOT)-accredited hotels including provisional accreditations with an estimated total of 4,862 hotel rooms. Meanwhile, there are a total of 69 accredited Mabuhay Accommodations with an estimated 5,554 rooms available.

Table ED-19: Number of DOT-Accredited Hotels and Mabuhay Accommodation Quezon City: 2022

Type of Accommoda- tion	with Full Accreditation	with Provisional Accredita- tion
Hotels	36	2
Mabuhay Accommo- dation	32	37

Source: Department of Tourism (DOT)

According to DOT's Statistics, Economic Analysis and Information Management Division, the average length of stay of guests is 7.21 nights, with a presumed occupancy rate of 67.52% in accredited hotels in Quezon City. The overall average occupancy rate of hotels in Metro Manila for 2021 was also placed at 60.97%, a significant increase from 49.97% in 2020.

Quezon City's Local Tourism Development Plan aims to transform the city into a "premier urban destination and the showcase of sustainable urban tourism development in the Philippines". It identified tourism districts for development and promotion. These are areas with inherent advantage and unique character which have become known for and particularly possess potentials for attracting tourists and visitors.

According to the plan, urban design, structural, and aesthetics enhancement specific to these areas shall be adopted to turn these areas into attractive and viable tourist attractions. The plan cites nine (9) identified tourism district areas: Civic Center District, Lifestyle District, Eastwood City Cyberpark, Knowledge Community District, Cubao Growth Center District, Quezon City China Town, La Loma District, Sergeant Esguerra Avenue District, and Maginhawa Art and Food District.

As of 2022, five (5) are declared through legislation – Mginhawa Arts and Food Hub (Ordinance No. SP-2439, s-2015), Quezon City Chinatown at Banawe Street (Ordinance No SP-2453 s-2015), Cubao Growth Center (Ordinance No.2796, s-2018), Lifestyle District (Ordinance No. SP-2946, s-2020) and La Loma District (Ordinance No. SP-2961, s-2020). There is still a need to pursue the declaration of the three (3) remaining tourism districts.

Tourism is considered a powerful growth engine for economic development. It produces huge exchange movements and accommodates big investments. The city capitalizes on the following tourism marketing points/assets:

QC as a Wellness Center

Quezon City houses several internationally renowned specialty hospitals and the largest number of hospitals, with the biggest bed capacity in the country that can form the base of a thriving health and wellness industry. The bed-to-population ratio of 1:348 is above the required standard of 1:1000.

As of 2022, there are 49 hospitals in the city, 15 of which are government-owned and 34 are privately operated. Some of these hospitals are: 1) St. Luke's Medical Center, an internationalstandard hospital facility; 2) Philippine Heart Center, a well-equipped, specialty hospital in cardiovascular; 3) National Kidney and Transplant Institute (NKTI), a premier, ISO-certified facility for renal disease and organ transplantation; 4) Lung Center of the Philippines, a specialty hospital for pulmonary diseases; and the Philippine Orthopedic Hospital. The city is also a pioneer in stem cell therapy, a popular upscale medical treatment which is offered at the NKTI and St. Luke's Medical Center. The city has an abundance of wellness and physical fitness centers, diagnostic facilities, dental health and beauty clinics, rehabilitation centers, nursing homes, health spas, and alternative healing centers.

Other hospital facilities in the city include the Providence Hospital at West Triangle, Commonwealth Hospital and Medical Center at the Neopolitan Business Park, the Metro North Medical Center at Mindanao Avenue, the World Citi at Aurora Boulevard and the newly improved Fe del Mundo Medical Center at Banawe Street.

Such development stimulates the growth of medical tourism in the city. These medical institutions not only provide good medical care but also serve as sites for training and learning or as venues for summits and seminars in the medical field. Though the number of medical/hospital facilities has increased, the quality of services, however, still needs to be greatly improved to face the challenge of global competition.

Quezon City as ICT Capital

With its power to deliver virtual travel experience and online impersonal communication for the "global villagers", information communication technology (ICT) provides tourism

in person-to-world experience, a window-shop to the world. ICT empowers tourism, with a developed e-commerce system already taking over the entire country. As suh, tourism finds an effective marketing ally in ICT.

Business Process Outsourcing (BPO) continues to be one of the major economic drivers of the country, in the region, and in the city, as it contributes heavily to the Gross Domestic Product (GDP) and employment generation. As of 2022, there are 295 information technology (IT) parks/ centers/buildings operating in the country and registered with the Philippine Economic Zone Authority (PEZA). Majority or 175 of these firms are located in the NCR, 32 of which are in Quezon City. The city comes second to Makati which has the most number of IT parks and buildings (44) and is followed by Taguig City (28) in the top 3. Other noticeable competition in this industry from other cities within the NCR include Pasig and Mandaluyong.

With a total of 126.78 hectares, Quezon City ranked number one in terms of declared area with the PEZA and devoted to IT operations. The city's biggest IT Parks are Eastwood City Cyberpark which is also the first IT Park in the country, UP Science and Technology Park (North)/Ayala Techno Hub, Eton Centris, Araneta Cyberpark, and the Vertis North Ayala Park. Moreover, many IT developments have also been integrated into various mall complexes.

With the continuous growth of the IT industry in the city, employment is projected to increase in the succeeding years. The most recent employment data gathered from the different IT-related enterprises in Quezon City as of 2022 reflected a total of 617,448 persons employed in these enterprises.

Quezon City as Shopping Mecca of the Country

Quezon City can be called the shopping mecca of the country due to the massive shopping malls and complexes sitting center stage in practically every dense community cluster. Among these are five (5) giant SM Malls, Robinson Malls, Ever Gotesco Mall, Gateway, the giant Trinoma Shopping Complex, the Eastwood City Mall, Eton Centris Mall, the Ayala Fairview Terraces Mall, the Walter Mart, and the newly developed UP Town

Center. All these shopping centers are international standards that can cater to locals as well as local and foreign tourists. Inside these malls are modern recreational and entertainment facilities such as amusement centers, physical fitness centers, modern cinemas, and restaurants from fine dining to fast food. Meanwhile, the city is also home to other tourism facilities and activities that would also attract tourists.

Table ED-20: Philippine Registry of Cultural Properties, Quezon City: 2022

CULTURAL PROPERTY				
11 th World Scout Jamboree Memorial Rotonda and	Iglesia Ni Cristo Central Temple			
Tomas Morato Monument				
Acacia Tree (St. Theresa's College)	Immaculate Heart of Mary Parish			
Amoranto Sports Complex	Indian Rubber Tree (San Francisco High School)			
Ang Sigaw ng Pugad Lawin	Kamagong Tree (Veterans Memorial Medical Center)			
Apolonio Samson Marker	Katipunan Tree (Metro Manila College)			
Armed Forces of the Philippines Medical Center	La Loma Lechon Festival			
Balara Filtration Plant Park	La Mesa Eco Park			
Bantayog ng mga Bayani	Maginhawa Art and Food Festival			
Basilica Minore de Santuario de San Pedro Bautista	Melchora "Tandang Sora" Aquino National Shrine			
Bonifacio Monument	Mira-Nila Heritage House, Gardens and Library			
Botong Tree (Jose Abad Santos Memorial School)	Museo Ni Quezon			
Camp General Emilio Aguinaldo	Narra Tree (Fe Del Mundo Medical Center)			
Camp General Rafael C. Crame	National Defense College of the Philippines			
Carriedo Fountain	National Shrine of Our Lady of Lourdes			
Church of the Holy Sacrifice	National Shrine of Our Lady of Mount Carmel Parish			
Department of Agriculture Building	Philippine Science High School			
Diocesan Shrine of Our Lady of Mercy	Quezon Avenue			
Dita Tree (Batasan Hills)	Quezon City General Hospital			
Duhat Tree (Kaligayahan Elementary School)	Quezon City Hall			
Eastwood City	Quezon City High School			
EDSA People Power Monument	Quezon City Science High School			
Galak Niño Festival of Bago Bantay	Quezon Heritage House (Manuel L. Quezon)			
General Licerio Geronimo Monument	Quezon Memorial Circle			
Holy Cross Parish				

Table ED-21: List of Quezon City's Sister Cities

International Sister Cities	Local Sister Cities
Chiba City, Japan	Baler, Aurora Region III
Daly City, California USA	Cotabato City, Cotabato Region XII
Fort Walton Beach, Florida USA	Davao City, Region IX
Guam, USA	General Santos City, Region XII
Kenosha, Wisconsin USA	Iloilo City, Iloilo Region VI
Maui County, Hawaii USA	Naga City, Camarines Sur Region V
New Wesminster, British Columbia Canada	Puerto Princesa City, Palawan Region IV-B
Rishon Lezion, Israel	Pura, Tarlac Region III
Salt Lake City, Utah USA	Roxas City, Capiz Region VI
Shenyang City, China	Sadanga, Mountain Province CAR
Taipei City, China (Taiwan)	Wao, Lanao del Sur BARMM
Yangon Region, Myanmar	La Trinidad, Benguet CAR
Yuci City, China	

Sister-city Agreements

Tourists and potential investors are also expected to visit the city as a result of sister-city agreements facilitated by city officials. The city has entered tie-ups that promote socio-economic and cultural exchange activities with sister cities within and outside the country. The city, however, is encouraged to forge more ties with highly urbanized or more industrialized cities in other countries to learn and gain an advantage from the agreement. The city has existing international and local sister cities as listed in *Table ED-21*.

There are three (3) embassies in Quezon City is home to three (3) embassies, each situated in distint areas of the city: The Embassy of Columbia is located in the vibrant Araneta Center Cubao, the Embassy of Guatemala is nestled within the peaceful neighborhood of Barangay Blue Ridge and the embassy of Cyprus is situated in the bustling Barangay South Triangle.



The Environmental Management Sector has five areas of concern – Solid Waste, Air Quality, Water Quality, Parks and Open Spaces, and Biodiversity.

5.1 SOLID WASTE

5.5.1 Domestic Solid Waste

Generation

Quezon City generates the largest volume of solid waste in the metropolis, it being the most populous in the National Capital Region with its high concentration of social and economic activities. The following table shows the projected daily waste generation in the City from 2020 to 2024 based on the 2015 Census and projected population growth rate of 3.3% per year which indicated that the overall solid waste

generation has steadily increased from 2020 to 2022 primarily due to the growing population. Projections for 2023 and 2024 also show a continued upward trend.

Waste Composition

The result of the 2013 Waste Analysis and Characterization Study (WACS) conducted by the Environment Protection and Waste Management Department (EPWMD) indicated that each person in the City produced 0.88 kg. of solid waste per day. The same WACS results showed that more than 50% of the solid waste generated is biodegradable, 20.30% are recyclables, 18.75% are residuals, while 7% are special wastes.

Table En-1: Solid Waste Generation,
Quezon City: 2020-2022

Year	Waste Generation Projected Pop- per Capita per Day ulation (based on 2015 Cen-		Daily Waste Based on F Popul	Projected
	crease of 3.33%	sus)	tons	cu.m.
2020	1.1068	3,141,444	3,477	13,071
2021	1.1437	3,184,525	3,642	13,692
2022	1.1818	3,228,305	3,815	14,342
2023	1.2211	3,272,795	3,996	15,024
2024	1.2618	3,318,009	4,187	15,739

Source: Quezon City 10-Year Solid Waste Management Plan

In October 2021, parallel to the

updating of the City's 10-Year Solid Waste Management Plan and the 2013 WACS, the City Government, through the Department of Sanitation with technical assistance from the Department of Science and Technology (DOST)–Industrial Technology Development Institute conducted a waste analysis and characterization study. The study involved two types of waste characterization: as generated or more commonly known as domestic waste and end-of-pipe where *coning and quartering** method was used.

Results showed that each person in the city produced 0.44 kg. of solid waste per day, which translates to 1,304,264.20 kgs. (1,304.26 tons) of waste generated daily in 2021. For wastes that are characterized 'As Generated' or from households, 36.06% are recyclables and 34.49% are biodegradables. 24.49% ideally should go the disposal site while special wastes is at 4.96% which include Covid19-related wastes. For the end-of-pipe characterization, 40.90% are biodegradables, 29.54% are residuals, recyclables are at 20.99%, and 8.58% are special wastes. (See Figure En-1)

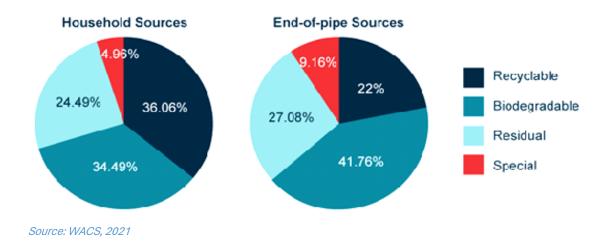


Figure En-1: Solid Waste Composition and Sources, QC: 2021

Collection

The City contracts out its solid waste collection to a private hauler which has the full responsibility to manage, administer and directly carry out the actual collection, cleaning and disposal of solid waste to the sanitary landfill. The service provider is also responsible for street sweeping activities, cleaning and clearing operations as well as enforcement of environmental laws.

The volume of garbage collected in the City from 2020 to 2022 is shown in the table below.

Table En- 2: Solid Waste Collection, Quezon City: 2020-2022

Year	Volume of Waste			
real	Tons	Cubic Meters		
2020	715,187	2,688,667		
2021	707,360	2,659,242		
2022	735,380	2,764,581		

Source: DSQC

The increasing commitment of the barangays to improve solid waste management and reduce waste in compliance with the law is to be noted with the tally of barangays with solid waste management initiatives in compliance with Republic Act (R.A.) 9003 or the Ecological Solid Waste Management Act of 2000 (See Table En-3). The Department of Sanitation and Cleanup Works of Quezon City (DSQC) reports that more than 51% of the barangays have established their own Solid Waste Management Committee. Materials recovery facilities for recyclable and biodegradable wastes are established in 78 barangays. This number has

Table En-3: Number of Barangays with Programs and Projects in Compliance with R.A. 9003, QC: 2022

RA 9003			Dis	trict			Total
Requirements	1	2	3	4	5	6	Total
With SWM Committee	14	4	23	17	11	4	73
With MRF	15	4	21	21	10	5	78
With MRS	18	1	14	14	0	2	49

Source: DSQC

increased from 57 in the 2018 data which only means that more barangays now have better understanding on the importance of MRFs in waste management.

Disposal

Payatas Controlled Disposal Facility. The city used to have its disposal facility located in Barangay Payatas, in the northeastern part and near the boundary of Rodriguez, Rizal. It has a land area of approximately 25.0 hectares and can be accessed via the two-lane concrete paved Litex Road and is surrounded mostly by informal settlements. From its original slope of 70 degrees, the dumpsite was re-sloped into a 40 degree angle, and that methane gas was extracted, converting it into electricity and preventing the spontaneous fires which used to





Figure En-2: Aerial View of the Payatas Controlled Disposal Facility

characterize it.

In 2004, the old dumpsite was reorganized as a controlled disposal facility and had its closure in December 2010. A separate sanitary landfill with stricter waste management facility was established nearby the old dumpsite in 2011. With an area of approximately 3.2 hectares, the garbage was dumped on a layer of tarpaulin to prevent seepage of leachate to the groundwater. Concession for overall operation of the sanitary landfill was granted to the Isabelita P. Mercado (IPM) Environmental Services, Inc.

The sanitary landfill was closed in December 2017 following the Environmental Management Bureau(EMB) order issued on August 2, 2017. Since then, the disposal of the city's solid wastes has been transferred to landfill facilities outside the city. Data from Metro Manila Development Authority (MMDA) indicate that in 2022, a total of 2,376,392.05 cu.m. solid wastes from Quezon City were disposed of at the 19-hectare Rizal Provincial Sanitary Landfill (SLF), previously known as MontalbanLandfill , and 40,550.05 cu.m. special wastes at the Navotas City sanitary landfill.

Post-Closure Care and Maintenance of the Payatas Controlled Disposal Facility. The city continuously facilitates post-closure care for the facility to ensure the safety of human health and the environment. As provided in the 10-Year Solid Waste Management Plan, postclosure care and maintenance activities are focused on the following: 1) Aesthetic transformation - improvement of the facility, not only visually but also the promotion of socioeconomic perspective; 2) Environment restoration - extensive design and naturalization of the site contours, soil content and vegetation; and 3) Sustainability - long-term maintenance of the facility.

The city also initiated social engineering programs such as livelihood trainings, values formation activities, and informal waste sector support for the nearby communities. Under Executive No. 50, s-2019 which created the Quezon City Task Force on Urban Revitalization,

the Payatas Controlled Disposal Facility has been identified as one of the priority areas for urban renewal. With this, its redevelopment into an Agro-eco Tourism Park was planned to promote the Facility as an urban greening area as well as to provide additional income sources and livelihood opportunities to the residents in the vicinity.

5.1.2 Special Wastes

Household Hazardous Wastes

Hazardous wastes are excluded from the scope of regular collection of solid wastes. Administrative Order No. 29, Series of 1992 of the Department of Environment and Natural Resources (DENR) defines hazardous waste as "substances that are without any safe commercial, industrial, agricultural or economic usage." It is also referred to as "by-products, side-products, process residues, spent reaction media, contaminated plant or equipment or other substances from manufacturing operations and as consumer discards of manufactured products which present unreasonable risk and/or injury to health, safety, and the environment."

With this, the city puts into operation City Council Ordinance No. SP-1483, S-2005 which requires all residents and business establishments to segregate used-up fluorescent light bulbs from the regular collection of solid wastes. Busted bulbs from households are subsequently sent to select MRFs for disposal.

Electronic wastes

Electronic wastes or e-wastes refer to any electrical or electronic equipment that are no longer working and nearing or at the end of their useful life and are ready to be discarded. These include: 1) household appliances such as televisions, radios, refrigerators, washing machines, microwaves, etc; 2) information technology and telecommunications equipment like personal computers, laptops, printers, telephones and mobile phones; 3) medical devices; 4) lighting equipment; 5) electrical and electronic tools; 6) toys and sporting goods; 7) other everyday electronic products. E-wastes are particularly dangerous with hazardous effects on the environment, as the release of fumes and

gases into the air, the discharge of liquid waste into water and drainage systems, and the reckless disposal of hazardous wastes contribute to environmental degradation.

In Quezon City, residents are encouraged to participate in the monthly trading of recyclables in selected malls in the City. With this, non-traditional materials including electronic wastes, ink cartridges, etc. are bought by recyclers.

Disaster Wastes

Disaster wastes are wastes generated directly during disasters such as typhoons, flooding, earthquakes, volcanic eruptions, conflicts, etc. and during the response and recovery processes. These include debris from damaged infrastructures, fallen trees and timber, and wastes from relief operations and post-disaster temporary shelters. These wastes pose a threat to public health and safety and further impact the restoration of the environment and delivery of humanitarian aid.

The Department of Sanitation, as a member of the Disaster Action Team of the Quezon City Disaster Risk Reduction and Management Council (QCDRRMC), provides emergency support functions during disasters. The Office has an existing contract with a private hauler that conducts special operations such as collection and transportation of river wastes, tree cuttings, fire debris, cleaning and clearing operations, and provision of transportation for personnel and equipment.

10-Year Solid Waste Management Plan

Quezon City was the first city in Metro Manila to have complied with Republic Act 9003 through the approval of its 10-year Solid Waste Management Plan (SWMP) by the National Solid Waste Management Commission (NSWMC). Through the Plan, the City gained national acclaim as the first city to put into practice the Ecological Solid Waste Management Act. Currently, the SWMP is being updated and will include a long-term and sustainable solution to the city's growing waste generation by taking into consideration modern technologies that are both environment-friendly and socially acceptable.

5.1.3 Waste Management Projects

Materials Recovery Facility (MRF) Project. – The project was established to further reduce the volume of wastes being disposed at landfills. MRF stations were set up and manned waste pickers and junk traders were organized to perform more segregation and buying of recyclable materials and other saleable goods.

Waste Reduction Initiatives

1. Community-Based Source Reduction

- Hiwa-hiwalay na Basurasa Barangay. A
 "No Segregation, No Collection" policy is
 implemented to compel the community to
 segregate their wastes at the household
 level.
- QC BasuHero Recyclables Trading Project. Through this community-wide initiative, recyclable materials generated and collected from business establishments and homeowners' associations are linked directly with identified junkshops to facilitate immediate trading for cash. This has led to the monetization of 57.160 kgs. of donated recyclable materials and has provided funds for various activities of the DSQC, including the donation of tablet computers to cancer patients' children for their online education.

2. School-Based Source Reduction

- Batang QC Eco-Savers Club. This aims to
 institutionalize a waste segregation and
 recycling program in all public elementary
 and high schools in the city to make
 recycling a part of their daily routine. The
 corresponding points recorded in the
 students' passbooks are used to "buy"
 school supplies or groceries. The activity
 has been expanded which included the
 establishment of school backyard
 composting gardening that is managed by
 students.
- Basura Monster Book Reading. Bookreading sessions, activities, and games are

- conducted to educate children on the importance of protecting our environment through proper handling of waste including information on the types of wastes and waste segregation in their own homes.
- Junior Environmental Advocates Project (JEAP). This involves an activity for the youth that seeks to mobilize sustainable environmental management through campaign for awareness and respect for laws and the environment that will eventually mold the youth into responsible and environmentally concerned citizens.

3. Institution-Based Source Reduction

- QC Hall Waste Segregation Project. This
 necessitates the implementation of
 waste segregation at source and
 recycling at the QC Hall Complex. To
 sustain the project, a Materials
 Recovery Facility (MRF) was
 constructed near Gate 3 of the
 Compound.
- Recyclables Trading Project at QC Malls.
 This is a collaborative effort of the Quezon City Government, QC malls, and recycling companies conducted monthly in selected SM Malls and in Ever Gotesco Commonwealth. The recyclables trading activity aims to provide a more convenient drop-off and buy-back center for both traditional and non-traditional recyclable wastes.

5.1.4 Complementary Programs on Solid Waste Management

Materials System/Kitchen Recovery *Wastes Collection*. The project implemented in barangays without MRFs or composting sites to address constraints in space, funds, and other factors for waste management. Through this undertaking, wastes and recyclables are collected by junkshops and partner kitchen waste collectors. In turn, this does not entail additional hauling costs on the part of the City.

- Zero Litter Campaign. This serves as a total clean-up mechanism for the city which involves the apprehension of violators as well as proper solid waste management, cleaning, and beautification, clearing of obstructions, collection of garbage, and massive IEC campaign done through distribution of letters and IEC materials.
- Green Desk Project. Selected police officers from the City's 12 police stations are deputized as Green Desk Officers to handle environmental-related cases.
- Deputized Environmental Enforcers. To sustain efforts on waste reduction, several personnel from the city government and local community, and city police officers are deputized to serve as Environment Police and Inspectors. They are tasked to conduct regular roving, fixed-posting, and night operations along major thoroughfares and in identified litter or dumping-prone areas to ensure cleanliness in the city.
- Information, Education and Communications
 Campaign for Urban Composting. This activity
 entails the conduct of orientation, training,
 and provision of assistance to barangays,
 public schools, and other interested public
 and private institutions on the establishment
 of locally available composting technologies.
- Awarding of Tri-Bikes to Homeowners' Associations. The City provides this incentive in Partnership with the National Waste Management.
- BasuHero Game. A downloadable app game for Android users is utilized to teach QC residents on the proper waste segregation. The game can also be accessed through the scannable QR code found on all tarpaulins of collection vehicles and IEC materials.
- for collecting infectious and hazardous wastes has been implemented in the city as soon as the Covid-19 pandemic began to prevent the mix of collection and disposal of infectious or hazardous wastes with regular household waste. The system also intends to minimize the spread of the virus and ensure

that QC residents and waste management workers are not put at risk. In compliance with international standards, the DSQC distributed yellow waste bags to Covid-affected barangays, facilities, and households to ensure proper segregation. Only the Special Collection Team is assigned to pick up these wastes.

- *Bulky Waste Collection*. Collection of bulky wastes such as logs, branches of trees, and other oversized garden wastes is done every Sunday, upon request by the barangay.
- **Special Cleaning Operations.** The Special Cleaning Operations Groups (SCOG) are formed to conduct cleaning and clearing operations in preparation for various events and activities.
- Recognition and appreciation are done through the giving out of various awards such as Seal of Good Housekeeping, and Recognition of Best Practices by the QC Solid Waste Management Board, among others.

Environmental Trust Fund

The Plastic Recovery Systems Fee as defined under the Plastic Bag Reduction Ordinance (Ordinance No. SP-2140, s-2012) is a regulatory fee that is imposed on consumers for the use of new plastic bags at the point of sale due to the absence of alternative reusable bags. Collected fees are then pooled into the Green Fund, a fund maintained by business establishments and intended for various environment-related initiatives.

The Plastic Bag Reduction Ordinance was amended by Ordinance No. SP-2868, S-2019, and imposed a total ban on the distribution of plastic bags and brown bags two years after the approval of said legislation. The amendment also made the collection of Green Fund no longer applicable. Meanwhile, the implementation of a total ban on the use of brown bags was temporarily postponed through Ordinance No. SP-3066, S-2021 owing to difficult circumstances brought by the Covid-19 pandemic.

The remaining Green Fund maintained by business establishments is then required to be turned over to the City through the City Treasurer's Office and is now called the Environmental Trust Fund. All proposed projects to be implemented using the Trust Fund are evaluated by the Quezon City Climate Change and Environmental Sustainability Department (CCESD) and subject to the approval of the Office of the City Mayor. As of 2021, nine (9) projects implemented by the Parks Development and Administration Department (PDAD) are funded by the Environmental Trust Fund. (See Table En-4)

Table En-4: Projects Funded Under the Environmental Trust Fund, QC: 2021

Project Title	Location (Barangay)	Amount Funded (PhP)
Improvement of Bernardo Park	Pinagkaisahan	7,310,014.57
Improvement of Capitol Homes Park	MatandangBalara	12,870,332.60
Improvement of Mapayapa II Park	Pasong Tamo	14,411,856.95
Improvement of Project 6 Park	Project 6	23,270,571.91
Improvement of Ideal Park at Abelardo St.	Commonwealth	12,824,613.52
Improvement of Don Enrique Park	Holy Spirit	20,008,637.24
Improvement of Damar Village Park	Damar	24,551,723.61
Improvement of Cresta Verde Park at Claire St., Cresta Verde Executive Subdivision	Sta. Monica	19,610,622.64
Rehabilitation of GSIS Village Parks and Play- ground Including Basketball Court	Bahay Toro	12,793,885.40

Source: Quezon City Treasurer's Office

5.2 AMBIENT AIR QUALITY

The Environmental Management Bureau - National Capital Region (EMB-NCR) is currently operating and maintaining eleven (11) manual ambient air quality monitoring stations (AQMS) strategically situated in eight (8) Metro Manila cities (See Table En-5). Of the 11 stations, the Ateneo and Muntinlupa AQMS measure general ambient air while the remaining nine (9) stations monitor roadside ambient air.

		Name of Air Quality
City	Location	Monitoring
		Station (AQMS)
Valenzuela City	ALERT Center, Malinta	Valenzuela AQMS
	Manila Observatory, Ateneo de Manila University Com-	Ateneo AQMS
Quezon City	pound, Katipunan Road	
Quezon City	National Ecology Center, East Avenue	East Avenue QMS
	National Printing Office, EDSA	NPO-EDSA AQMS
Marikina City	Marikina Sports Complex, Sumulong Highway	Marikina AQMS
City of Manila	Dep't of Health Compound, Rizal Avenue, Sta. Cruz	DOH-Manila AQMS
Mandaluyong City	Mandaluyong City Hall, Maysilo Circle	Mandaluyong AQMS
Malati Oita	Bureau of Fire Compound, Ayala Avenue cor. Buendia St.	Makati AQMS
Makati City	MMDA Compound, EDSA	MMDA-EDSA AQMS
Muntinlupa City	Bilibid Prison Compound	Muntinlupa AQMS
Pasay City	PAL Compound, Andrew Avenue	Pasay AQMS

Table En-5: Location of Air Quality Monitoring Stations, Metro Manila

5.2.1 Total Suspended Particulates (TSP)

Total suspended particulates (TSP) are comprised of small particles such as dust, metallic and mineral particles, smoke, mist and acid fumes with diameters of less than 100 micrometers which are primarily emitted by motor vehicles as well as power stations, construction activities and incinerations. *Figure En-3* shows the level of both roadside and general ambient air for 2022 from seven (7) monitoring stations measuring TSP. Except for East Avenue AQMS and Mandaluyong AQMS, results from all these monitoring stations meet the standard annual TSP long-term guideline value.

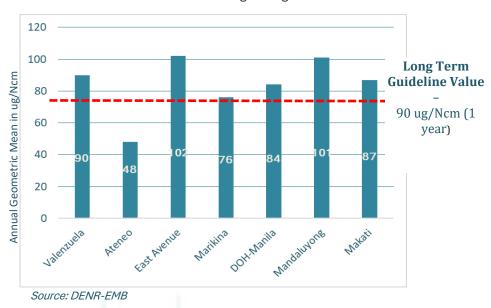


Figure En-3: TSP Concentration Annual Geometric Mean Registered at Different Monitoring Stations, 2021

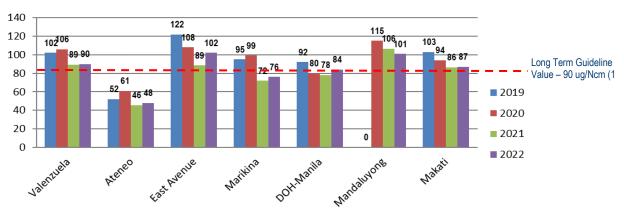
The Ateneo AQMS recorded an annual geometric mean average of 48 ug/Ncm in 2022 which is way lower than the guideline value of 90 ug/Ncm. This could be attributed to the location of the monitoring station which is inside the campus where there is presence of a thriving flora. Meanwhile, results from the East Avenue Station exceeded the long-term guideline value at annual average of 102 ug/Ncm.

From 2019 to 2022, the Ateneo AQMS has been consistent in meeting the long-term guideline value with an average annual geometric mean of 52 ug./Ncm for the 4-year period. (See Figure En-4) This is attributed to the distance of the monitoring station which is approximately 500 meters away from the main thoroughfare. Another factor to the good air quality result in the area is the

abundance of flora in the Ateneo university compound which served as buffers by capturing airborne particles.

Meanwhile, the East Avenue AQMS always exceeded the long-term guideline value except in 2021 which is a point less than the normal value. This is due to the location of the station which is near a loading and unloading area of PUVs along Matalino Street.

Compared to the previous years, the 2020 and 2021 readings showed a slight decline. The pandemic situation may have contributed to this low record since no face-to-face classes are conducted, work-from-home arrangements became an option, and mobility is limited, hence, fewer vehicles are used or pass by the locations of the monitoring stations.



Source: 2022 Regional State of Brown Environment Report; DENR-EMB NCR

Figure En-4: TSP Concentration Annual Geometric Mean Registered at Different Monitoring Stations, 2019-2022

5.2.2 Particulate Matter 10 (PM10)

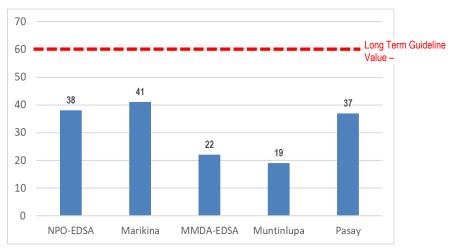
Particulate Matter of 10 microns diameter, commonly called as PM_{10} , are smaller particles that are likely responsible for adverse health effects because of their ability to reach the lower regions of the respiratory tract. The PM_{10} standard includes particles with a diameter of 10 micrometers or less. (0.0004 inches or 1/7 of the diameter of a human hair). The long-term guideline value set for PM_{10} is 60 $\mu g/N$ cm.

Potential health impacts of exposure to PM_{10} include effects on breathing and respiratory systems, damage to lung tissue, cancer, and premature death. The elderly, children, and people with chronic lung disease, influenza, or asthma, are especially sensitive to the effects of particulate matter.

 PM_{10} comes from mobile and stationary sources such as diesel trucks, woodstoves, power plants, and the like. Their chemical and physical compositions differ widely. Particulate matter can be directly emitted or can be formed in the atmosphere when gaseous pollutants such as

SO2 and NO2 react to form fine particles.

Figure En-4 shows the 2022 average reading in PM_{10} manual stations in Metro Manila. As shown, all stations did not exceed the long-term guideline value of 60 μ g/Ncm. This was because manual monitoring stations failed to achieve the 75% of scheduled sampling which means that data registered were less than 75% of the rate of data captured. There were also instances that the station may have hourly data but did not have a daily concentration which may be attributed to defective air quality analyzers and equipment.



Source: 2022 Regional State of Brown Environment Report; DENR-EMB NCR

Figure En-5: Annual Comparative Readings of PM₁ at Different Stations, MM: 2022

5.2.3 Particulate Matter 2.5 (PM2.5)

PM2.5 are fine particulate matter with a diameter of 2.5 micrometer or smaller such as soil, soil dust and sulfates that can penetrate deep into the lungs and may cause damage to lungs, heart and brain, worsen respiratory illnesses and cause a host of other health problems..

A component of the Air Quality Monitoring and Management Plan and also a climate change mitigation initiatives of the City is the installation of 20 non-reference air quality monitoring sensors that are strategically placed in schools, along roadsides, near hospital and churches and across residential, commercial and industrial areas and provide real-time air quality data. Additional 20 monitoring sensors are planned to be installed in 2023 and 2024.

Data gathered from the monitoring sensors showed that average PM2.5 concentrations in 2021 and 2022 are generally within good to fair category (ranges from 0 to 35 ug/m3) based on DENR-EMB Air Quality Breakpoints for PM2.5. (See Table En-6)

Table En-6: **Results of PM2.5 Monitoring Stations: 2021-2022**

		PM	2.5
ID No.	Location	Avei	age
INU.		2021	2022
1	Novaliches Wet and Dry Market	22.0	19.5
2	Quirio Highway cor. Mindanao Ave.	23.9	22.3
3	Quezon City General Hospital	19.1	17.8
4	Sto. Domingo Church	18.7	18.0
5	Cubao Arayat Market	27.9	29.9
6	Obrero cor. Calle Industria	23.3	24.6
7	Quezon City Public Library	15.3	14.8
8	Commonwealth Bgy. Hall	18.9	18.8
9	La Loma Police Station 1	-	19.8
10	E. Rodriguez Ave.	-	20.3
11	Silangan Bgy. Hall	-	21.1
12	Pansol Bgy. Hall	-	22.9
13	Kalusugan Bgy. Hall	-	20.0
14	N. Domingo St.	-	18.9
15	Susano Road	-	23.9
16	Balintawak Cloverleaf	-	23.8
17	Quirino Highway cor. St. Dominic	-	23.7
18	Batasan Hilla Bgy. Hall	-	23.2
19	Kaligayahan ES	-	18.0
20	KorPhil - QCU	-	16.0
	Average		20.87

Source: CCESD

5.2.4 Greenhouse Gas Inventory

Emissions inventory is an approximation of air pollutants derived from an emission factor and/or an activity indicator. It normally changes over time due to adjustments in data or modifications in source operating conditions.

The inventory initiated by the City in 2011, with 2010 as base year, showed that of the 62,480,890.21 total kgs. of carbon dioxide (CO2) measured and analyzed, stationary energy accounted for the biggest emission source in government operations with 62% share.

Meanwhile, an inventory spearheaded in the same year by the Climate Change and Clean Energy Project (CEnergy) revealed that the transportation sector was the biggest source of greenhouse gas (GHG) emissions at the community level with 99.51% share. The measured GHG emissions from fuel sales, electricity consumed, and solid wastes and wastewater generated in the city totaled 713,312,131.72 tons of carbon dioxide equivalent (tCO2e). But with 2,545.89 hectares of forest land capable of sequestering nearly 31,743 tCO2e, the City was able to bring down the total emissions to 713,280,388.86 tons. (See table En-7, Figure En-6)

Table En-7: City-wide GHG Emission Inventory Results, QC: 2016

Emission Sources	Volume	% share
Stationary Energy		
Residential – LPG and other fuels	168,472	2.1
Residential – Electricity	969,393	12.1
Commercial – Fuel Combustion	1,022,830	12.8
Commercial and Government - Electricity	1,438,137	17.9
Industries – Fuel Combustion	915,400	11.4
Industries – Electricity	283,514	3.5
Transportation	1,721,176	21.5
Waste		
Solid Waste	1,033,341	12.9
Biological Treatment	594	0
Wastewater	461,509	5.8
Total	8,014,366	100%

Source: CCESD

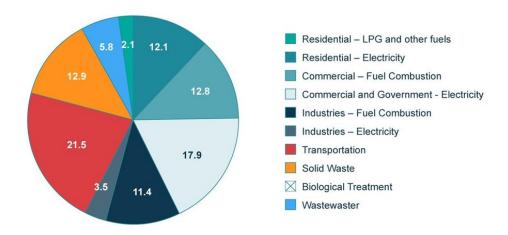


Figure En-6: City-wide GHG Emission Inventory Result: 2016

In 2016, the City as a member of the C40 Cities Climate Leadership Group, received technical assistance to make improvements to its GHG inventory through the Climate Action Planning Program. With 2016 as the base year, the GHG Inventory was updated via the Global Protocol for Community-Scale (GPC) using the City Inventory Reporting and Information System (CIRIS) Tool established by the C40 Group. The inventory, which covered both city and community level emissions, recorded a total of 8,014,366 metric tons of carbon dioxide equivalent (MTCO2e) of which 60% is attributed to the stationary energy sector, 21% from the transportation sector and 19% from the waste sector. The result also revealed that electricity consumption under the stationary energy sector accounted for the highest share of emissions.

5.2.5 Compliance to Green Building Ordinance

Quezon City is the first local government unit in Metro Manila to implement a green building code. Ordinance No. SP-1917, S-2009 referred to as the Green Building Ordinance of 2009 made it mandatory that construction of new structures and those undergoing retrofitting in the city, including movable properties and other structures, comply with minimum standards of green infrastructure in their design and construction.

Under the ordinance's implementing rules and regulations (IRR), commercial, institutional or industrial buildings with floor areas of no less than 2,000 square meters are required to comply with Green Building Standards. While conformity with the ordinance can add to the cost of construction of new buildings, it offers an incentive in the form of tax credits for land users, developers and planners making use of environment-friendly technologies in their buildings.

Since its implementation up to December 2022, only 248 Preliminary Certificates (last issued in June 2022) and 30 Final Certificates (last issued in 2021) have been issued by the Department of Building Official (DBO). This low turn-out of applicants for green certification may be attributed to the high cost of construction/retrofitting into a green building and the difficulty to comply with documentary requirements. Another reason could be that while tax incentive is provided under the Ordinance, there is no penal provision on non-compliance of owners/developers

Air Quality Programs

Commitments for Air Quality

- Commitment to the C40 Clean Air Cities Accelerator which was signed in 2019 to establish an air quality monitoring network, devise a monitoring and information system, and formulate an Air Quality Management Plan.
- Commitment to the Breathelife Campaign, led by the World Health Organization (WHO), the United Nations Environment Programme and the limate Change and Clean Air Coalition to comply with the Ambient Air Quality Guideline Value by 2030.

Air Quality Technical Assistance Programme (C40 AQ TAP) 2020-2021. A technical assistance from the C40 Cities Climate Leadership Group which involved the following: (1) an estimate of current baseline air pollution characteristics; (2) a roadmap and recommendations of air quality monitoring networks and (3) a roadmap for the development of the City's Air Quality Management Plan

Air Quality Monitoring and Management Plan. Components of the Plan include:

- The deployment of 20 non-reference air quality monitoring sensors, six automated weather stations and one reference station to set baseline data and continuously monitor the City's air quality. The sensors are strategically deployed in various locations. For 2023 and 2024, additional 20 non-reference monitoring sensors will be procured as part of the expansion program.
- The formulation of the Air Quality Management Plan is ongoing and will contain various interventions to attain identified reduction targets aligned with national standards and WHO guidelines on air quality

Air Quality Technical Assistance Programme (C40 AQ TAP) 2022-2023. The City is, once again, the recipient of the C40 AQ TAP from 2022-2024 which focuses on transport sector analysis as well as the air quality and health benefit analysis. The technical assistance will provide support in the implementation of the City Air Quality Management Plan and Enhanced Local Climate Change Action Plan 2021-2050.

Integrated Program for Better Air Quality in Asia (IBAQ). Cost Benefit Analysis was done in partnership with Clean Air Asia which involves the conduct of cost-benefit analysis to assess the City's transition from conventional to electric vehicles while also studying its impact on health and economy.

Other 'Clean Air' Programs

- Anti-Smoke Belching Program involves roadside apprehension of erring drivers and operators along with testing of motor vehicles using the certified smoke emission testing machine along roadsides. Flyers are also distributed to passing motorists to bolster the information and education campaign. Through nonstop anti-smoke belching operations, motorists are inclined to comply with set emission standards to improve the people's health and well-being, besides contributing to environmental protection.
- Green Transport Program is aimed to reduce carbon emissions by providing sustainable and environment-friendly mobility options through the enhancement of active transportation and promotion of e-vehicles and bike lanes.
- Industrial Inspection and Monitoring of Business Establishments include rigid inspection and monitoring of business establishments prior to the issuance of pollution clearance.
- Closing down of unscrupulous emission testing centers.
- Banning of open-pit burning and other similar smog-creating activities which has been a continuing program of the city.

5.3 WATER QUALITY

5.3.1 Groundwater Resource

Groundwater Levels

The groundwater levels in most areas of Metro Manila are way below the mean sea level as low as -50 meters which indicated a sharp decline over the decades. This has been the result of massive withdrawal from the aquifer system by large scale residential and industrial complexes that were established in the area.

The 2004 study of the National Water Resources Board (NWRB) in relation to the Water Resources Assessment for Prioritized Critical Areas (Phase I) showed that in Quezon City, a relatively small area adjacent to Caloocan and Valenzuela had a groundwater level of 20 meters below mean sea level and the Libis-Ugong Norte near Pasig measured 40 to 80 meters under sea level. In the mid-2000s, the drop progressed steeply as almost the whole stretch of Novaliches from Balintawak to Kaligayahan experienced levels ranging from -20 to -120 meters, which are said to be among the deepest declines happening in Metro Manila over the years. After some time, this will possibly end in much greater danger of saltwater intrusion and having groundwater unfit for human consumption in the city.

Groundwater Resource Assessment

In May 2023, the Mines and Geosciences Bureau (MGB) of the DENR conducted groundwater resource and vulnerability assessment to evaluate groundwater resources in the Pasig-Laguna watershed which includes Quezon City. Vertical Electrical Sounding (VES) surveys were undertaken in nine (9) areas and 112 groundwater wells and springs were inventoried in the city. Results of the assessment are as follows:

- Based on the interpreted VES data, a thick main aquifer was delineated in representative areas and observed within the semi-confined strata of the Guadalupe Formation.
- The pH values as well as values and concentrations of heavy metals in some groundwater samples were also found to fall outside the acceptable range.

- 3. The deeper aquifers within the city showed potential prospects for groundwater extraction but with careful and further detailed assessment as to its possible impact to the overall water storage considering the volume of daily extraction. Also, possible exploitation of these aquifers is subject to the approval of the NWRB for its alignment to national policies.
- 4. Shallower aquifers are better suited for utilization by smaller users. Productive and well-developed community spring sources and shallow well sources should be preserved as these water sources may serve as standby options and alternatives in instances of water service interruptions.

5.3.2 Natural Waterways

The city is blessed with an extensive network of rivers and creeks that serve as its naturals surface drainage system. They form part of the river basins covering the city's landscape, the largest of which are the Malabon-Navotas-Tullahan-Tinajeros River System and the San Juan-Pasig River Basin. Two major concerns that confront the city's natural waterways are pollution and the loss of creek and river easements.

Pollution of the City's River System in Relation to Pasig River

The greater part of Quezon City and its river system drains into the Pasig River. The QC area encompasses practically 80 sq.km. of San Juan River Basin, which has an area of 87 sq.km. and roughly eight to nine sq. km. of the Marikina Downstream River Basin covering an area of 17 sq. km. Aside from high population concentration in these areas, the greater majority of the city's commercial and industrial establishments are located here as well.

Pollution of the City's River System in Relation to Manila Bay

Situated in the northern part of Quezon City, the Novaliches watershed is the upstream of the Malabon-Navotas-Tullahan-Tinajeros (MaNaTuTi) River System which runs through the cities of Malabon and Navotas, and in the end empties to Manila Bay. The river system has a

combined length of 23 kms., with the widest span width of 60 meters in Navotas City. The La Mesa Dam controls the headwater of the MaNaTuTi River System, which has a catchment area of 69.25 sq. km. The area is densely populated, wherein the bulk of industrial establishments are to be found.

Sources of Water Pollution

The two common sources of water pollution are point source and non-point source. Point source refers to all identifiable causes of pollution with specific discharge point into a particular water body. Non-point sources, on the other hand, have no identifiable cause and include run-off from irrigation or rainwater that picks up contaminants from farms and urban areas.

According to a joint study by the World Bank and MWSS, domestic wastewater discharge accounts for the highest pollution load in Manila Bay. Nearly all of the wastewater generated by Metro Manila residents and collected by local independent sewerage systems are discharged through outfalls into Manila Bay. Most residential wastewater is excreted into the public drainage system either directly or through septic tanks. These septic tanks are not dislodged and the effluents released into the water bodies are basically untreated, resulting in heavy pollution all over the metropolis, mostly in high density areas.

The imminent regression of the freshwater bodies could be blamed on the wastewater effluent emanating from the industries, leaking sewers and septic tanks, as well as direct discharge of animal wastes and of polyphosphates from detergents, in addition to run-offs and improper dumping of solid wastes.

Encroachment of Creeks and River Easements

Ocular inspection of the rivers and creeks and their tributaries shows evidence that easements and riverbanks, as defined and provided for by the law, are no longer existent. Most are taken up by structures belonging to affluent and poverty- stricken families alike.

According to the latest census of the Housing, Community Development and Resettlement Department (HCDRD), a total of 11,251 households/families are occupying more than 8,800 structures along waterway easements in the city. (See Table En-8)

Physical development in certain areas also resulted in the narrowing of creeks and rivers and even loss of some segments of these waterways. There are also instances where the creek has been covered, diverted, and in few cases, reclaimed to develop building lots.

Table En-8: Number of Families and tructures
Along Rivers and Creeks: December 2022

Waterways	No. of Families	No. of Structures
Creekside (easements along creeks)	6,525	4,638
San Juan River	645	497
Identified project areas of the Pasig River Rehabilita- tion Commission	1,526	1,311
Tullahan River	1,222	1,139
Marikina River – Flood Plains	1,333	1,280
Total	11,251	8,865

Source: HCDRD

Water Quality Assessment and Monitoring

Water quality is gauged on the basis of a set of beneficial uses as defined in the DENR Administrative Order 34, S-1990. There are 33 parameters that characterize the desired water quality per water body classification. Parameters monitored include:

- Dissolved oxygen (DO), biochemical oxygen demand (BOD), total suspended solids (TSS), total dissolved solids (TDS), and heavy metals for inland surface waters.
- Fecal Coliform, nitrates, and salinity (chloride content) for groundwater as defined in the Philippine National Standards for Drinking Water (PNSDW)
- DO, Coliform, and heavy metals for coastal and marine waters.

Lack of dissolved oxygen (DO) in the river throughout the dry season is the primary reason

for its foul smell and the absence of biological life as well. Low DO levels are the end result of the irresponsible discharge of domestic and industrial wastes from communities and industrial sites.

Biological oxygen demand (BOD), on the other hand, measures the amount of oxygen consumed by microorganisms in decomposing organic matter in stream water. The higher the BOD value, the higher the risk of pollution.

San Juan River System

The San Juan River System stretches over Quezon City, San Juan City, Manila, and Mandaluyong City. The said river basin is part of the Pasig-Marikina-San Juan (PaMaRiSan) River System, one of the three major river systems in Metro Manila that empty out to Manila Bay.



Figure En-7: Map of San Juan River System

The entire San Juan River basin including its tributaries has a catchment area of about 98 sq. km which covers the lower half of Quezon City and parts of the cities of San Juan, Manila and Mandaluyong. Of the total area, more than 85% is located in Quezon City. San Juan River is approximately 10.59 kms. starting at Dario and Culiat Creeks, passing thru Manila and San Juan City and drains at the Mandaluyong City-part of

the Pasig River. Throughout the stretch of said river basin, the DENR-EMB maintains 12 monitoring stations. Of these, eight are located in Quezon City, namely: Ermitaño, Diliman, Kaliraya, Mariblo, Talayan, Caroline, Dario and Culiat Stations.

Malabon – Navotas – Tullahan – Tinajeros (MaNaTuTi) River System

Out of the 15 monitoring stations found in the MaNaTuTi River System, five are located in Quezon City namely: Sarmiento Station in Barangay Sta. Monica; Gulod Station in Gulod Bridge, Barangay Gulod; Northridge Station in Northridge Park Subdivision, Barangay Sta. Monica; Dahlia Station in Dahlia Avenue, Barangay Greater Fairview; and Fairview Station in Fairview Bridge, also in Barangay Greater Fairview.



Figure En-8: Location of the MaNaTuTi River System

Table En-9: Results of the Water Quality Monitoring Stations Located in Quezon City; San Juan River System; 2021

		Water Quality Primary Parameters			neters
Station	Location	BOD	DO	Phosphate- Phosphorus	Nitrate- Nitrogen
Ermitaño	Aurora Blvd./Broadway, Bgy. Valencia	33.67	2.94	1.68	0.16
Diliman	Umbel St., Bgy. Kalusugan	36.83	2.36	2.35	0.10
Kaliraya	Kaliraya St., Bgy. Tatalon	35.00	1.73	1.36	0.14
Mariblo	Roosevelt Ave., Bgy. Sta. Cruz	30.00	2.45	1.62	0.10
Talayan	Araneta Ave., Bgy. Talayan	100.92	2.30	1.37	0.14
Caroline	M.H. Del Pilar, St., Bgy. San Antonio	30.00	3.35	1.40	0.18
Dario	EDSA, Bgy. Bahay Toro/Apolonio Samson	33.75	2.20	1.59	0.23
Culiat	EDSA, Bgy. Culiat	27.92	3.40	1.67	0.13

Source: 2022 Regional State of Brown Environment Report; DENR-EMB NCR

Table En-10: Results of the Water Quality Monitoring Stations Located in Quezon City, MaNaTuTi River System: 2021

			Water Quality Primary Parameters					
Station	Location	BOD	DO	Phosphate- Phosphorus	Nitrate- Nitrogen			
Sarmiento	Sarmiento St. Bgy. Sta. Monica	15.83	4.25	1.31	0.38			
Gulod	Gulod Bridge, Bgy. Gulod	15.90	3.12	0.78	0.28			
Northridge	Northridge Park Subd., Bgy. Sta. Monica	10.30	5.40	0.57	0.51			
Dahlia	Dahlia Ave., Bgy. Fairview	29.58	2.03	1.32	0.14			
Fairview	Fairview Bridge, Bgy. Fairview	19.75	2.57	0.72	0.18			

Source: 2022 Regional State of Brown Environment Report; DENR-EMB NCR

As can be gleaned from Tables En-10 and En-11, the annual recorded results of BOD, DO and Phosphate-Phosphorous in all the monitoring stations located in Quezon City as well as the other monitoring stations of the two river systems, did not pass the DENR Water Quality Criterion for the year 2022. This simply signifies that both river systems are incapable of carrying aquatic life. Meanwhile, the average result of Nitrate-Nitrogen passed the minimum value in a Class C River System which is 7 mg/L for both river systems.

Programs/Projects

- Riverways Cleaning and Management Program. This seeks to spruce up and keep in good condition the
 aesthetic opulence of the city's rivers and creeks through active community involvement. The project
 has a conspicuous influence in terms of enhancing the physical environment that is indicative of a
 strong partnership with the community, above and beyond offering employment opportunities to
 underprivileged residents. For 2022, the Riverways Cleaning Operations Group (RCOG) of the DSQC
 collected a total of 4,010.77 cubic meters of wastes encompassing 213 linear kilometers of riverways.
- Adopt-an-Estero Waterbody Program. This is a collaborative undertaking among the national government through the DENR, the LGUs, estero communities, other stakeholders, and donor-partners with the intent of selecting and adopting creeks/esteros for rehabilitation and maintenance.

5.4. PARKS AND OPEN SPACES

With its big land resource, Quezon City is home to some beautiful parks and open spaces, both vast and small, where one can enjoy outdoor activities and be with nature. The inventory consists of historical parks and shrines, on top of major and extraordinary recreational areas that are unique in terms of size, features, and even biodiversity. It also includes reserves and potential areas adding to the City's expansive network of open spaces like institutional grounds such as the University of the Philippines, Ateneo de Manila University, Miriam College, the House of Representatives, golf courses, corridors or rights-of-way, and river easements.

5.4.1 Parks Development and Rehabilitation

The QC Parks Development and Administration Department (PDAD) has been actively identifying public open spaces and developing these into community parks and recreational facilities for the residents. As of December 2022, PDAD has identified 630 parks and open spaces, of which 353 are developed and 278 are undeveloped. Of the developed parks and open spaces, 226 are covered with a deed of donation while 127 are not yet donated. Out of the 278 undeveloped open spaces, 85 are already donated and 192 are not yet donated. Most of the 85 undeveloped open spaces with a deed of donation are encroached by structures mostly of informal settlers or adjacent lot owners.

District 5 has the most number of developed and undeveloped parks recorded at 97 and 61, respectively. (See Table En-11)

	Developed		Undeve		
District	With Deed of Dona-	Without Deed of Do-	With Deed of Dona-	Without Deed of	Total
	tion	nation	tion	Donation	
1	33	11	37	7	88
2	13	15	5	45	78
3	36	14	8	23	81
4	29	23	21	17	90
5	64	31	9	50	154
6	51	33	5	50	139
Total	226	127	85	192	630

Table En-11: Status of Parks/Open Spaces per District, QC: December 2022

Source: PDAD

Aside from primarily serving as breathing spaces in the city, these parks and open spaces have various amenities such as basketball courts, tennis courts, badminton courts, volleyball courts, play systems, gazebos, comfort rooms, jogging lanes, walkways, and picnic tables, among others. Some open spaces are even equipped with exercise machines which are continuously repaired and maintained so that city residents can optimize these spaces and amenities.

5.4.2 Urban Greening and Beautification

To support the Department of Interior and Local Government (DILG) in its implementation of the National Greening Program (NGP), Quezon City through the PDAD has been continuously undertaking tree planting and other reforestation activities in line with the expanded NGP. From July 2020 to July 2021, the city has facilitated the planting of a total of 3,270 different native trees and propagated 5,800 different species of native trees at the PDAD nursery.

Table En-12: Number of Trees Planted and Propagated, QC: July 2020-July 2021

Year	Number of Trees Plant- ed	Trees Propagated
2020 (July – December)	520	350
2021 (January – July)	2,750	5,450
Total	3,270	5,800

Source: PDAD

In addition to tree planting activities, PDAD also undertakes regular trimming and cutting of trees throughout the city. For the same period, the Office has facilitated the trimming of around 2,000 and cutting of more than 200 trees due to road widening, construction of road right-of-way or new structures, and as pre- and post-disaster measures. Other requests considered in cutting are when trees pose a danger to people's lives and cause destruction to properties.

5.4.2,1 Completed and On-Going Programs and Projects

 GORA Lane Project. In 2018, Quezon City became the recipient of the P98.6M support fund of the Department of Budget and Management's Green, Green, Green Local Government Support Fund -Assistance to Cities (LGSF-AC) Program.







On May 27, 2021, the City inaugurated the 5.39-kilometer Green, Open, Renewable, Access (GORA) Lane, a network of pedestrian corridors that feature improved streetscapes, better and wider sidewalks, pocket parks and parklets, way-finding signages, planting strips, lighting, and art installations. The said pedestrian network passes through Doña Hemady Ave., Scout Tobias St. and

Mother Ignacia Ave. providing residents access to three (3) major thoroughfares – Aurora Boulevard, Quezon Avenue, and EDSA. With the construction of GORA Lane, people will be encouraged to walk on safe and accessible roads as the network of corridors connects three (3) major transportation hubs – LRT-Gilmore, MRT-Kamuning and MRT-Quezon Avenue– to nearby residential and commercial districts.

- Retrofitting of Parks to be Adaptive to the Pandemic. As part of the City's pandemic recovery plan, existing parks have been retrofitted to comply with safety health protocols. Retrofitting works include the establishment of urban farming facilities and installation of hand washing areas, public toilets, physical distancing-adaptive benches, picnic tables, and play equipment.
- Updating of Parks and Open Spaces Inventory. The Covid-19 pandemic prompted the demand for
 more publicly accessible green spaces. With this, PDAD has been constantly updating its inventory
 of parks and open spaces through the assessment of their status and availability of remaining green
 spaces. With an up-to-date list, further development and rehabilitation can be introduced while the
 proper turnover of yet-to-be-donated parks and open spaces can be initiated.

5.4.3 Special Projects in the Pipeline

- Improvement of East Avenue. A follow
 -through of the GORA Lane Project
 funded by the DBM, the project aims
 to rehabilitate and improve the worn out condition of sidewalks along East
 Avenue and develop these into safer,
 more accessible, and walkable
 spaces that will greatly benefit the
 thousands of users passing through
 the area daily.
- Development of Alley 44, Jaguar St. Linear Park and Villaverde Park. As part of the continuous efforts to establish more public parks and green spaces, the city plans to develop three (3) parks that will be funded by the DBM under their LGSF-AC Program. These are:
 - Alley 44 Park. Also known as Malusog St., Alley 44 is a 54-meter -long alley that serves as a connective access from Malinis St. to Maginhawa St. in Barangay U.P. Village. Previously encroached by adjacent residential structures, the area was successfully reclaimed on the second quarter of 2020 and now the city plans to turn it into a neighborhood park.

- Jaguar St. Linear Park. Located in Barangay Fairview, Jaguar St. Linear Park is a waterway easement that will be developed into a community park.
- Villa Verde Park. Located in Villa Verde Subdivision in Barangay Sta. Monica, this partially developed open space will be rehabilitated and developed into a complete public park.

5.4.4 Major and Special Parks

Quezon Memorial Circle (QMC). The QMC is a 25-hectare public realm located at the heart of the city. It houses the shrine, museum, and remains of President Manuel L. Quezon and serves as the core and unifying element of the city's Open Space Network System/Garden City due to its strategic location and high visibility. Its major components include the following:

- Quezon Memorial Monument Pylon and Shrine - the central element of QMC and the point reference for all development programs, projects and activities
- Quezon City Experience (QCX) Museum the City's first interactive social history museum

- Parks, playground, and other recreational areas
- Meditative areas
- Venue for social interaction, socio-cultural exchange, celebrations and other public gatherings
- Venue for facilities for arts and culture and historical heritage promotion
- Environment protection showcase areas
- Economic enterprise areas

Ninoy Aquino Parks and Wildlife Center (NAPWC). The 23.85-hectare NAPWC located southwest of the Quezon Memorial Circle is the only zoological and botanical garden in Metro Manila. It is a Protected Area that serves as a shelter for various species of endemic and endangered birds, mammals, reptiles, amphibians in the open-air mini-zoo and Wildlife Rescue Center. It also serves as a venue for public education, as a training and research facility for future veterinarians and biologists, and as a source of wildlife stock for local zoos and DENRaccredited facilities for public education, breeding, and other conservation-oriented undertakings. Other amenities include cottages for conferences, seminars, and other gatherings; meetings, amphitheater; children's playground; visitor's center; a man-made lagoon for fishing; tea house; picnic sheds; a rock garden; and a craft village.

Proclamation No. 723, s-2004 of then President Gloria Macapagal-Arroyo declared the NAPWC as a protected area within the classification of a national park and a component of Republic Act (R.A.) 7586 or the National Integrated Protected Areas System Act of 1992, as amended by R.A. 11038 or the Expanded NIPAS Act of 2018. This envisions the Center as a world-class ecotourism destination and a venue for biodiversity conservation and education on Philippine endemic and rare wild flora and fauna.

La Mesa Watershed. Regarded as the "Green Lung" in the city and in Metro Manila, the almost 2,700-hactare La Mesa Watershed is the last remaining rainforest of its size in the city and in the metropolis. It was previously under the jurisdiction of the Metropolitan Waterworks and

Sewerage System (MWSS) from 1971 until 2007 when, for purposes of protecting its water quantity, quality, and security, it was declared in July 25, 2007 as Watershed Reservation under Presidential Proclamation No. 1336, s-2007. By virtue of Proclamation No. 1336, the Watershed is now under the joint administration, supervision, and control of the Department of Environment and Natural Resources (DENR) and MWSS.

Located in the northern portion of the watershed is the La Mesa Dam and Reservoir, a 700-hectare artificial lake that serves as an impounding structure supplying water for domestic and commercial uses of residents of Metro Manila.

Another attraction that offers significance in the area is the 33-hectare La Mesa Ecopark, the biggest ecological park in Metro Manila. In a multi-stakeholder partnership among the QC government, ABS-CBN's Bantay Kalikasan Foundation, and the MWSS, the park has been maintained and preserved as a natural recreational refuge with educational purposes of an outdoor classroom envisioned to bring the people back to La Mesa, as it did in the old days. The park houses facilities such as an orchidarium, butterfly garden, hanging bridge, picnic area, and an eco-trail used for activities like hiking, mountain biking, horseback riding, rappelling, ziplining, and fishing. Visitors can also enjoy the paddle boat ride in the lagoon or go swimming in its swimming complex.

UP Arboretum. One of the remaining rainforests in Metro Manila is the UP Arboretum, a sixteen (16)-hectare man-made forest within the University of the Philippines' 493-hectare campus. Being one of the dense forests in the urban area of the city, the Arboretum is host to a numerous collection of tropical plants, many of which are endemic and already endangered. It also serves as a habitat for many species of birds, reptiles, and amphibians. The U.P. Arboretum, along with the Botanical Garden, supports a diverse collection of plants and wildlife, which, while not extraordinary as compared to pristine ecosystems, can still be considered a compelling attempt at environmental preservation regardless of urban accretion and human threat.

Balara Filters Park. Situated in Barangay Pansol, the 60-hectare Balara Filters Park is one of the oldest recreational areas in Quezon City, having been first opened to the public in the early 1950s. The park occupies part of the old Balara Filtration Plant complex, one of the main treatment facilities for water coming from the La Mesa Dam. An astounding leisure spot where you get to travel back in time and be amazed at Art Deco buildings, the park features an elevated picnic grove, a mini-park for kids, the Balara Filtration Windmill, a replica of the Carriedo Fountain, the Anonas Amphitheater, buildings and other structures that stood the test of time. The park is administered by the Manila Water Company in partnership with PDAD.

Historical Parks and Shrines

The lengthy listing of historical parks includes the Pugad Lawin Shrine, Tandang Sora Shrine, Andres Bonifacio Monument, Gen. Geronimo Monument, Bantayog ng mga Bayani, EDSA People Power Shrine and Monument, and Boy Scouts Circle, among others.

Other Open Spaces

Adding to the inventory of open spaces in the city are large institutional grounds like those of the University of the Philippines, Ateneo de Manila University, Miriam College, Quezon City Hall compound, House of Representatives Complex, Veteran's Memorial Medical Center, V. Luna Medical Center, Camp Crame, and Camp Aguinaldo.

Vegetation Cover

The City Planning and Development Department initiated the mapping of vegetation cover for the assessment of areas covered by trees and corresponding percentage to the city's total land area. Geographic Information System (GIS) ArcMap is used to determine the extent of the vegetative cover in a specific area classified as tree vegetation canopy. Mapping is done using the 2011 QC aerial photo as a base map and through the process of digitizing which uses photo interpretation and analysis of the satellite imagery of Quezon City that is readily available

Based on the vegetation cover map, almost 30% of the city's land area, or more than 4,700 hectares, is covered by vegetation (See Figure En-9). District 5 has the largest area covered by vegetation with about 16% or 25,600 hectares. Notably, the majority can be attributed to the presence of the La Mesa Watershed within the City.

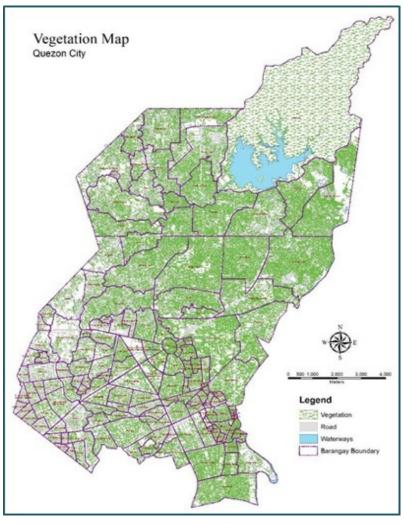


Figure En-9: Quezon City Vegetation Map: 2021

Table En-13: Total Area Covered and Not Covered by Vegetation, QC: +2021

District	Land Area (has.) *Based on 16,112 Has. L. A.	Total Area Cov- ered by Vegeta- tion (has.)	% Vegetation to city	Total Area Not Covered By Veg- etation (has)	% Not Covered By Vegetation
1	1,959.39	239.98	1.489%	1,719.41	87.75%
2	2,182.37	528.77	3.282%	1,653.61	75.77%
3	2,184.82	503.55	3.125%	1,681.26	76.95%
4	2,341.89	448.37	2.783%	1,893.53	80.85%
5	5,246.72	2,566.15	15.926%	2,680.57	51.09%
6	2,197.39	490.61	3.045%	1,706.78	77.67%
Total	16,112.58	4,777.43	29.65%	11,335.15	70.35%

Source: PDAD

Green Space

Tree canopy is part of a city's land area shaded by trees. It provides numerous advantages, such as reduced air pollution, improved social, physical and mental health, and lower rainwater runoff and erosion. However, rapid urban development has resulted in a reduction in the size of the tree canopy. According to the World Health Organization (WHO), every city shall provide a minimum of nine square meters of tree canopy per capita as the standard size of green space for healthy urban living. While there is a minimum requirement, cities must also provide considerable green space for the residents.

Quezon City needs 29,180,715.85 m² of green space, but the city already has 47,774,329.86 m² and the green space deficiency is -18,593,614.01, therefore its green spaces are more than the green space required, contributing to a potentially healthier and more environmentally friendly urban environment (See Table En-14).

Table En-14: Green Space Requirements of Quezon City, 2022

	Green Space	Projected 2022	2022 Green Space Situation (in m²)					
District Require-ment Pop			Green Space Require- ment c=(a*b)	Existing Green Space (d)	Green Space Deficiency e=(a-d)			
1	9	410,615	3,695,530.76	2,399,790.02	1,295,740.74			
2	9	766,517	6,898,649.88	5,287,675.58	1,610,974.30			
3	9	355,230	3,197,068.98	5,035,546.91	(1,838,477.92)			
4	9	480,745	4,326,703.09	4,483,692.17	(156,989.08)			
5	9	619,183	5,572,644.65	25,661,520.29	(20,088,875.65)			
6	9	610,013	5,490,118.49	4,906,104.89	584,013.60			
Total	9	3,242,302	29,180,715.85	47,774,329.86	(18,593,614.01)			

*based on Actual Population 2015, Green Space Requirement = (Population * Green Space Requirement per capital), Source: PDAD

5.0 BIODIVERSITY

Compared to other cities in Metro Manila, Quezon City has richer wildlife owing primarily to the sheer size and attributes of the city's parks and open spaces. Studies show that the city's recreational areas and

open grounds are home to a countless variety of flora and fauna, more than a few of which are classified as endemic or indigenous, exotic, endangered, highly endangered, or vulnerable.

5.5.1 Biodiversity Profiling

To promote and support urban biodiversity, the EPWMD initiated the tagging of trees in selected universities, major public and barangay parks, and public elementary and secondary schools in 2016. Other than the classification of tree species, the project includes geo-tagging fieldwork using a handheld Global Positioning System (GPS) to get the exact locations of trees. Maps were also produced using GIS software. A total of 31,893 trees were tagged for the period 2016-2018. This number became the baseline data for the City's biodiversity inventory.

On the next update of the biodiversity inventory, the diameter at breast height (DBH) and height (Ht) will also be measured to create a more detailed inventory.

Urban Biodiversity Assessment

In 2018, the city government, through the EPWMD, PDAD, and CPDD, participated in the Urban Biodiversity Program of the DENR's Biodiversity Management Bureau (BMB). The program is aimed at establishing an inventory to complement the appraisal being conducted of the city's flora and fauna. This is intended to craft a City Biodiversity Index which will serve as a manual in the assessment and monitoring of the city's greening programs to facilitate replication by other LGUs. The three (3) areas selected as the program's implementation sites are: Quezon Memorial Circle, La Mesa Watershed, and the NAPWC. *Table En-16* shows the actual number of flora and fauna (birds and bats only) that were tagged in August and September 2018 in the abovementioned sites.

Table En-15: Total Number of Trees Tagged, QC:2016-2018

Phase	Area of Coverage	No. of Trees Tagged
2016-2017	Quezon Memorial Circle	20,555
	Quezon City Hall Compound	
	Ninoy Aquino Parks and Wildlife	
	University of the Philippines – Diliman	
	Miriam College	
	La Mesa Ecopark	
	FEU-FERN College	
	Public Schools	
2018	Public Parks	11,338
	TOTAL	31,893

Source: EPWMD

Table En-16: Number of Flora and Fauna,
Quezon Memorial Circle, NAPWC and La Mesa Watershed: 2018

Area	Flora	Fauna			
Alea	Flora	Birds	Bats		
Quezon Memorial Circle	24 species 10 genera 13 families	10	46		
Ninoy Aquino Parks and Wildlife Center	42 species 39 genera 19 families	16	44		
La Mesa Watershed	43 species 19 genera 12 families	27	77		

Source: BMB-DENR

Programs and Projects

- Arbor Day Celebration Also called Tree Planting Day, this celebration involves the massive planting
 of trees and ornamental plants and other forms of relevant activities that is observed every June 25
 throughout the country. Quezon City's celebration of Arbor Day is in line with R.A. 10176, s-2012 or
 the Arbor Day Act of 2012 authorizing local government units to celebrate the day for tree planting as
 an annual event.
 - In 2021, the City held a five-day tree planting relay from June 21 to June 25 at the Payatas Controlled Dump Facility. This event was participated by select local government officials and Quezon City employees who were able to plant a total of 2,466 seedlings consisting of Caballero, Bamboo, Bignay and Ilang-ilang provided by the DENR.
- Quezon City Heritage Trees This is in line with the DENR's urban greening and tree protection program. With this and as part of the City's effort for biodiversity preservation, City Ordinance No. 2638, s-2017 was passed mandating the preservation of century and heritage trees within the jurisdiction of Quezon City to ensure these trees will live longer and that their historical legacy will be given distinction.

As of April 2022, the City has identified 11 heritage trees, the latest of which are Acacia and Duhat in Bgys. Holy Spirit and Kaligayahan, respectively (*See Table En-17*). The Acacia tree is almost 60 years and according to old-time residents, it has witnessed the growth and development of Don Antonio Heights in Bgy. Holy Spirit. Meanwhile, the 155-year-old Duhat tree was renamed to Katipunan Tree because of its significance during the 1896 Revolution. It was said that Melchora Aquino used to treat sick and wounded katipuneros under the shade of said tree. The tree also served as medical headquarters, resting and meeting place, and area for troop formation of the revolutionary forces.

Table En-17: List of Identified Heritage Trees: QC, 2022

Name of Tree	Species Name	Location/Barangay	Date of Marking	
Kamagong	Diospyrus discolor	Veteran's Memorial Medical Center, Bgy. Project 6	Jun. 25, 2009	
Duhat	Syzygium cumini	Kaligayahan Elem. Sch., Bgy. Kaligayahan	2010	
Acacia		St. Theresa's College Compound, Bgy. Lourdes	Dec. 13, 2010	
Narra	Pterocarpus indicus	Fe del Mundo Medical Center, Bgy. Doña Josefa	Feb. 11, 2011	
Sampaloc	Tamarindus indica	Narra St., Bgy. Amihan	Apr. 9, 2013	
Balete (Indian Rub-	Ficus elastic	San Francisco High School Compound,	Sept. 28, 2013	
ber Tree)		Bgy. Sto. Cristo	36μι. 20, 2013	
Potong	Barringtonia	Philippine Women's University/Jose Abad Santos	Feb. 18, 2014	
Botong	asiatica	Memorial School Compound, Bgy. West Triangle	reb. 16, 2014	
Dita Tree	Alstonia scholaris	Kalayaan C, Bgy. Batasan Hills	Jun. 23, 2015	
Kamagong	Diospyrus discolor	House of Representatives, Bgy. Batasan Hills	Dec. 6, 2015	
Acacia (Raintree)	Samanea saman	Don Antonio Heights, Bgy. Holy Spirit	Apr. 22, 2022	
Duhat	Syzygium cumini	Metro Manila College, Bgy. Kaligayahan	Apr. 22, 2022	
(Katipunan Tree)	Gyzygiuiii Guiiiiii	rictio i tariita Gottege, Dgy. Katigayanan	πμι. ΖΖ, ΖυΖΖ	

Source: EPWMD

¹ Coning and quartering method – a method where a large quantity of waste is mixed to make its characteristics more uniform, arranged into a pile (coning) and randomly select a portion – typically one quarter – which is then analyzed.



The Institutional Sector addresses three areas of concern – Local Government Organization, Government Income and Expenditure and People's Organization.

6.1 LOCAL GOVERNMENT ORGANIZATION

6.1.1 Evolution of the Quezon City Government

Its establishment on October 12, 1939 through Commonwealth Act No. 502 transformed the Quezon City government from a basic organizational structure to a complex and multifaceted governing body.

When the Metro Manila Commission (MMC) took over in 1975, Quezon City was relegated as a component of a larger, commission type government agency known as Metropolitan Manila. Its formation effectively centralized both legislative and executive functions that had previously been under the jurisdiction of local governments. As a result, all local councils within Metro Manila were abolished on December 31, 1975. The Commission assumed several key responsibilities, including:

- Central Governance: The MMC acted as the central governing body, formulating programs and policies for the entire Metropolitan Manila area. This included reviewing and approving local government programs, as well as administering its own initiatives such as fire control, garbage disposal, and traffic management.
- Legislative Authority: The Commission was granted the power to review, amend, revise, or repeal local ordinances, and to enact new ordinances and resolutions—powers that were previously the domain of the local councils. This shift effectively centralized legislative authority within the MMC, diminishing the autonomy of individual local governments.
- Executive Structure: The MMC was composed of a governor, a vice-governor, and three commissioners responsible for planning, finance, and operations. All these officials were appointees of the President, further consolidating control at the national level.
- Funding: The MMC was allocated an initial fund of Php2.5 million from the National Treasury, supplemented by proceeds from certain taxes and contributions from the component local government units (LGUs), as well as appropriations from the Annual General Appropriations Decree.

The principle of local autonomy was formally recognized for local government units across the Philippines with the passage of the Local Government Code in 1983 through Batas Pambansa Blg. 337, which was approved on February 10, 1983. However, this legislation notably exempted Metro Manila from its

provisions, allowing Presidential Decree 824, which established the MMC, to remain in effect.

It wasn't until the ratification of the 1987 Constitution that Quezon City, along with the rest of Metro Manila, fully regained its autonomy, particularly the power to legislate independently. The restoration of local autonomy was a significant development following the years of centralized control during martial law. The first local elections under the new constitution were held in January 1988, marking a return to democratic processes. In this election, residents voted for key positions including city mayor, vice mayor, and 24 councilors, with six councilors representing each of the four districts in Quezon City.

The MMC was reconstituted into the Metropolitan Manila Authority (MMA) on January 9, 1990 by virtue of Executive Order 392. Unlike its predecessor, the MMA was designed to be a more collaborative body, composed of the 17 local government units within Metro Manila. On March 1, 1995 with the signing of Republic Act 7924, the MMA was then succeeded by the Metropolitan Manila Development Authority (MMDA). While the core composition and functions of the organization remained largely unchanged, several key modifications were introduced:

- Expanded Council Representation: The Council of the MMDA was expanded to include the presidents of the Vice Mayors League and the Councilors League of Metro Manila, ensuring broader representation within the governing body.
- Leadership and Presidential Oversight: The MMDA chairperson, appointed by the President, was given a rank equivalent to that of a cabinet member. The chairperson's term of office is determined solely at the President's discretion, reflecting the strong executive oversight over the agency's leadership.
- Enhanced Funding: The MMDA received additional funding sourced from the General Appropriations Act, enabling it to better fulfill its mandate.

Quezon City falls under the territorial jurisdiction of the National Capital Region (NCR), which is governed by the MMDA. The MMDA is not a political unit of government but rather a development authority, functioning similarly to a national agency. Its primary role is to oversee the delivery of essential services across Metro Manila. The authority vested in the MMDA is limited to the promulgation of administrative rules and regulations necessary for the implementation of its plans, programs, and projects.

Due to its administrative nature, the MMDA chairperson is a presidential appointee, and one of the chairperson's responsibilities is to perform duties as may be assigned by the President. This setup underscores the President's supervisory authority over the local government units (LGUs) within Metro Manila.

However, the MMDA does not possess the power to enact ordinances, even if they are in the interest of community welfare. Legislative and police powers, including the authority to enact ordinances, rest solely with the LGUs through their respective legislative councils. This division of powers aligns with the principle of local autonomy as enshrined in the Local Government Code, ensuring that LGUs retain control over matters directly affecting their communities.

6.1.2 Existing Organizational Structure of Quezon City Government

The present organizational set-up of the local government of Quezon City comprises two distinct branches—the Executive and the Legislative.

The Executive Branch

The Executive Branch of Quezon City is a complex and structured organization, consisting of 29 departments, 22 offices, 12 units and task forces, and three hospitals, all of which are further divided into services, divisions, and sections. At the top of this organizational hierarchy is the City Mayor, who holds the highest executive authority and from whom all directives and policies emanate. Supporting the Mayor in managing the city's extensive operations are the City Administrator and the Secretary to the

Mayor, who exercise delegated authority to oversee the various line and staff departments, offices, and units.

Additionally, the Office of the Mayor directly oversees several program-based units, committees, and task forces, which are responsible for implementing specific initiatives and responding to urgent city-wide concerns.

To further enhance the efficiency and effectiveness of city management, City Council Ordinance No. 154, Series of 1990, established three Assistant City Administrator positions to assist the City Administrator in the supervision, coordination, and monitoring of the city's development programs and services. These roles are specifically designated as:

- Assistant City Administrator for Operations: Focuses on overseeing the operational aspects of city services.
- Assistant City Administrator for General Affairs: Handles a broad range of administrative functions and ensures the smooth running of day-to-day activities.
- Assistant City Administrator for Fiscal Affairs: Manages the financial operations and budgeting processes of the city.

In line with this ordinance, the position of Assistant Secretary to the Mayor was redefined and expanded. The role was divided into two distinct positions:

- Assistant Secretary to the Mayor for Internal Affairs: Concentrates on internal city operations and administrative matters.
- Assistant Secretary to the Mayor for External Affairs: Focuses on the city's external relations, including coordination with other government agencies and public entities.

The positions of City Administrator, Assistant City Administrators, Secretary to the Mayor, and the Assistant Secretaries to the Mayor for Internal and External Affairs are all co-terminous with the Mayor, and therefore are directly tied to the tenure of the appointing Mayor. Other key coterminous positions include the City Legal Officer

and the Head of the Department of Public Order and Safety (DPOS) to ensure that critical functions align with the Mayor's governance strategy and priorities.

The Legislative Branch

A significant structural change in Quezon City's governance was implemented through Republic Act 10170, which was signed into law on July 2, 2012. This legislation resulted in the apportionment of the city's second legislative district, leading to the creation of two additional districts and the expansion of the City Council by 12 seats. As a result, six legislative districts now comprise Quezon City.

The City Council—which serves as the legislative body of Quezon City—is chaired by the Vice Mayor, who acts as the presiding officer. The Council is composed of the 36 regular council members, along with the presidents of the city chapters of the Liga ng mga Barangay and the Sangguniang Kabataan, who also hold seats in the Council.

In addition to presiding over the City Council, the Office of the Vice Mayor exercises supervisory control over several special projects, reflecting the Vice Mayor's active role in overseeing key initiatives that contribute to the city's development and governance. These projects, listed in the city's internal records, further illustrate the Vice Mayor's involvement in the broader administrative and legislative processes within Quezon City.

Project Name Project Description/Objectives Quezon City Drug Treat-Takes charge of the treatment and rehabilitation of drug dependents, ment and Rehabilitation whether on voluntary or compulsory confinement. Center (TAHANAN) Sports Development Plans and supervises an integrated sports promotion and develop-Council ment program Coordinates with the 142 barangays relative to the implementation of sports projects. QC Anti-Drug Abuse Prepares/formulates plans and programs to minimize, if not eradicate Council Implements a comprehensive drug rehabilitation program ocal Area Unit (LAU)/ Administers the data banking of all approved ordinances/resolutions Computerization Unit of the City Council Implements the IT development of the Legislative Department Special Investigation Receives and evaluates all the evidence presented Committee on Adminis-Listens to the testimonies of the parties and their respective witnesstrative Cases Against Elective Barangay Offi-Prepares and submits reports in the form of a resolution, stating

Table In-1: Special Projects Supervised by the Vice Mayor

Source: Human Resource Management Department

6.1.3 QC Government Manpower Complement

cials

As of December 2022, the Quezon City government employed the services of a total of 19,909 personnel under the following types of employment status:

through the City Secretary.

Elective - These are city officials elected by the qualified voters during election period and who shall hold a term of three years and shall not serve for more than three consecutive terms in the same position. They are the City Mayor, City Vice Mayor, the 36 regular members of the City Council and one sectoral representative from the Youth (Sangguniang Kabataan) and the Association of Barangay Captains (ABC or Liga ng mga Barangay). These add up to 41 elective officials.

clearly and distinctly the facts and the law on which it is based. its

findings, conclusions, and recommendations, to the City Council,

- Permanent Issued to a person who meets all the minimum qualification standards of the
 position to which an employee is being appointed as prescribed by the Civil Service Commission
 (CSC). A personnel holding this nature of appointment enjoys security of tenure and all benefits of
 permanent government employees. The city government has 6,259 employees with permanent
 appointments.
- Co-Terminous Issued to a person whose tenure is limited to a period specified by law or whose continuity in the service is based on the trust and confidence of the appointing officer/authority or of the head of the Organizational Unit where assigned. Appointees to coterminous positions that are not primarily confidential in nature must meet the education, training and experience requirements of the positions as proposed by the respective Agency Heads and approved by the Commission. Pending the submission and approval of the agency qualification standards, the qualification requirements provided under the CSC Qualification Standards Manual shall be used as bases in the attestation of these coterminous appointments. There are 262 co-terminous employees currently working in the city government.
- *Consultant* Issued to a person with technical expertise essential to a service. At present, the city has 600 consultants.
- Contract of Service Refers to employment where the contracts of services are not covered by the civil service laws but covered by Commission on Audit (COA) rules. Contractual services rendered are not considered government services as they have no employer-employee relationship. The executive branch has 9,532 contractual personnel presently employed in support of special projects, various task forces, committees and several line departments or offices, while the legislative branch has a total of 3,170. As of December 2022, contractual personnel are at 12,702.
- *Temporary* Issued to a person who meets all the requirements of the position to which the employee is being appointed. It may only be issued in the absence of an applicant who meets all the qualification requirements of the position as certified by the appointing officer/authority. The Appointment may be subject to reappointment (renewal). There are 45 of this kind.
- Job Order or project-based position refers to intermittent or emergency jobs such as clearing of debris on the roads, canals, waterways, etc. after natural/man-made disasters/ccurrences, and other manual/trades and crafts services such as carpentry, plumbing, electrical, and the like. These jobs are of short duration and for a specific piece of work.

Table In-2: Manpower Complement, QC Government: 2019-2022

raste in 2. I tampetter completions, QC coronimenta 2010 2022							
Type of Appointment	2019	2020	2021	2022 (As of December)			
Elective	41	41	41	41			
Permanent	5,617	5,942	6,243	6,259			
Temporary	129	23	180	45			
Co-terminus	226	8	238	262			
Contract of Service (Executive)	7,168	8,443	9,621	9,532			
Contract of Service (Legislative)	3,191	3,143	3,199	3,170			
Consultant	531	544	587	600			
Job Order	973	729	776	809			
TOTAL	17,876	18,873	20,885	20,718			
No. of Plantilla Positions	8,923	9,579	6,113	10,044			
No. of filled-up Positions	5,962	5,950	3,477	6,300			

Source: Human Resource Management Department

A plantilla position refers to the Department of Budget and Management-approved list of authorized positions within a government agency. In Local Government Units, these positions are created by virtue of an ordinance. Of the 10,044 plantilla positions, 6,300 are filled while 3,744 are still vacant.

As a government unit, the Quezon City government operates in accordance with existing laws or guidelines on managing and developing human resources, as prescribed by the CSC, particularly the Omnibus Rules/Implementing Book V of Executive Order No. 292

Classification of Manpower Support

The present-day manpower support in the city government has been classified according to functional hierarchy:

- Executive/Managerial. This is the top-level executive group performing primarily management functions. This is where policies and objectives that guide the behavior and actions of the various departments and offices of the entire organization originate. The group is composed of elected officials and heads and assistant heads of the various departments and offices in control of the most important components in the organizational structure. 37 are included in this category with salary grades ranging from 25 to 30.
- **Second Level.** This group includes professional, technical and scientific positions which involve professional, technical and scientific work in a non-supervisory or supervisory capacity up to Division Chief level or its equivalent., whose salary grades are from 11 to 24.
- *First Level*. This refers to positions involved in structured work in support of office operations or clerical, trades, crafts, or custodial service positions, which involve sub-professional work in a non -supervisory or supervisory capacity. All with salary grades from 3 to 11 belong to this group.

6.1.4 Physical Plant and Facilities

In 1961, Mayor Amoranto commissioned Architect Ruperto Cecilio Gaite to design the new Quezon City Hall building, recognizing his expertise in designing several city and provincial capitol buildings across the country. The construction of Quezon City Hall began in 1964, coinciding with the 25th anniversary of Quezon City. Operating without a final budget, the project followed a "pay-as-it-goes" approach, starting with an initial budget of one and a half million pesos. After nearly a decade of construction, the new City Hall was inaugurated on January 1, 1972.

The main building, which housed the Mayor's office and all other city departments, stood at 45.72 meters (150 feet) tall with fourteen floors, making it the tallest building in Quezon City at that time. The structure covered a floor area of 1,280 square meters and was situated within a sprawling 12-hectare compound.

The Quezon City Hall Complex, located along Elliptical Road in Barangay Central, Diliman, serves as the headquarters for the local government of Quezon City. While the majority of city departments and offices are housed within the complex, some operate sub-offices, branches, stations, and satellites throughout various parts of the city to better serve the local population.

Over the years, Quezon City Hall has faced several challenges, including multiple devastating fires. In 1981, a fire gutted the three-story left wing of the building, resulting in approximately Php10 million worth of property damage. On June 11, 1988, another fire severely damaged the main building, destroying the 7th to 14th floors and causing around Php240 million in losses. A third fire occurred on August 7, 1998, damaging the fifth floor and slightly affecting the fourth and sixth floors. The most recent fire, on May 6, 2009, hit the south wing, where the accounting, fiscal, and administrative units of the City Treasurer's Office were located.

- 1 3-Sty Legislative Bldg
- 2 3-Sty Treasurer's Bldg
- 3 4-Sty with Basement Hall of Justice
- 4 Five-storey Hall of Justice
- 5 7-Sty Hall of Justice (Annex)
- 6 3-Sty with roof deck DPOS Bldg
- 7 4-Sty with roof deck DRRMO Bldg
- 8 4-Sty NGO Bldg
- 9 4-Sty with basement QC Health Bldg
- 10 8-Sty w/ basement Civic Center Bldg A
- 11 3-Sty with roof deck Civic Center Bldg B
- 12 5-Sty Bldg E
- 13 6-Sty with roof deck and upper deck Civic Center Bldg D

- 14 5-Sty with basement Civic Center Bldg E
- 15 6-Sty w/ roof deck and upper deck Civic Center Bldg F
- 16 5-Sty Parking Bldg
- 17 2-Sty Police Precinct
- 18 3-Sty QC Community Center
- 19 MRF Building
- 20 Motor Pool
- 21 2-Sty with roof deck QC Public Library
- 22 2-Sty Arugaan & Day Care Center *In the Construction phase*
- 23 Convention Center
- 24 Prosecutor's Bldg

The Legislative Building is a cornerstone of Quezon City's governance, housing the historic Session Hall on its third floor, where numerous landmark laws have been enacted. This building also accommodates the offices of the Vice Mayor, all 36 City Council members, the Sangguniang Kabataan (SK) and Liga ng mga Barangay captains, as well as the Office of the Sanggunian, the People's Law Enforcement Board (PLEB), the Quezon City Anti-Drug Abuse Council (QCADAC), and the Tricycle Franchising Board.

Adjacent to the Legislative Building is the Treasurer's Building, primarily occupied by the City Treasurer's Office and its ancillary units. This building also includes payment lounges and windows, facilitating a smooth transaction process for the city's residents.

In 2009, the Civic Centers A and B were constructed simultaneously. These buildings were strategically designed as community hubs where offices that frequently engage with the public are located. Among these are the Business Permits and Licensing Department, the Assessor's Office, the City Engineering Office, the Parks and Development Department, and the Scholarship and Youth Development Department—all critical departments that handle substantial public transactions.

Continuing the city's expansion, the three-story Civic Center Building C was completed in 2014. It houses key offices such as the City Civil Registry Department (CCRD), the Housing Community Development and Rehabilitation Department (HCDRD), and the Task Force Control Prevention and Removal of Illegal Structures and Squatting (TF-COPRISS). Additionally, the Department of Foreign Affairs (DFA) operates a branch office on the second floor, providing essential services to the public.

Alongside Civic Center Building C, other vital infrastructures were also erected, including the Non-Government Organization (NGO) Building, the Disaster Risk Reduction and Management (DRRM) Building, and the Department of Public Order and Safety (DPOS) Building. The NGO Building houses national offices like the National Bureau of Investigation (NBI), the Bureau of Fire Protection, the Quezon City Police District, and the Department of the Interior and Local Government (DILG) QC Field Office, offering essential services such as clearances and other public safety-related functions. The DRRM Building is equipped with the QC Hall Fire Station and the DRRMO Command Center, enhancing the city's disaster preparedness and response capabilities.

n 2016, Quezon City invested in education and research by constructing a state-of-the-art, two-story City Library with a roof deck, situated in front of the Main Building. This modern facility has become an invaluable resource for students of all ages, providing a conducive environment for research and learning.

The Civic Center D, also known as the Building Regulatory Office, was completed in 2017. It houses the Department of Building Official (DBO), the City Planning and Development Department (CPDD), the City

Architect Department (CArD), the Climate Change and Environmental Sustainability Department (CCESD), the Department of Sanitation and Cleanup Works of Quezon City (DSQC), and the Quezon City Citizen Services Department (QCCSD). To enhance convenience for the public, a four-story City Hall Parking Building with a deck was also constructed in the same year.

In 2018, Civic Center F, also known as the Finance Building, was inaugurated, followed by the completion of Civic Center E in 2019. Civic Center F houses the City Budget Office, the Accounting Department, and the Procurement Office, with the ground floor dedicated to the Business Permits and Licensing Office's Business One-Stop-Shop. Civic Center E is exclusively occupied by the Social Services Development Department (SSDD), which provides critical social services to the community.

Most recently, in 2022, the city unveiled the new Health Department Building, a modern four-story structure with basement parking. All operations and services of the City Health Department have since been relocated to this facility, streamlining healthcare delivery and ensuring a higher standard of service for the city's resident

Recent infrastructure developments include the construction of several key buildings within the city. The newly established Community Center now houses vital offices such as the Barangay and Community Relations Department, the Persons with Disability Affairs Office, the Bangsamoro Affairs Office, and the Office of the Senior Citizens Affairs, making it a hub for essential public services.

Additionally, the Hall of Justice complex has seen significant upgrades. The original building is currently undergoing renovation, while the Annex Hall of Justice continues to serve its purpose. A newly constructed addition, the Palma Justice Hall, further expands the city's judicial facilities.

Meanwhile, the Quezon City Convention Center is in the final stages of construction. This modern facility is designed to incorporate advanced features, positioning it as a premier venue for events and gatherings in the city.

District Action Offices

By mandate of SP-3000 S.2021, the Quezon City Government established District Action Offices to house various departments/offices and bring basic services closer to QCitizens (See Table In-3). Residents of Districts 2, 5, and 6 likewise enjoy the services of a "Mini City Hall" through the Novaliches District Center (NDC).

District Action Office Offices/Departments Botika ng Lungsod Quezon (Pharmacy) \checkmark 2 Business Permits and Licensing Department (BPLD) \checkmark 1 1 3 **√** City Civil Registry Department (CCRD) **√** 4 City Engineering Department City Epidemiology and Surveillance Unit (CESU) **√** 6 City Treasurer's Office (CTO) **√ √** 7 City Veterinary Department 8 Community Based Drug Rehabilitation Program (CBDRP) √ Department of Building Official (DBO) √ \checkmark \checkmark \checkmark 10 Department of Public Order and Safety (DPOS) 11 Department of Sanitation and Cleanup Works of QC (DSQC) \checkmark Housing Community Development and Resettlement Department ü (HCDRD) Market Development and Administration Department (MDAD) 13 14 Office for Senior Citizens' Affairs (OSCA) Office of the City Mayor (OCM)

Table In-3: Departments/Offices Available in District Action Offices, QC: 2022

Table In-3: Departments/Offices Available in District Action Offices, QC: 2022

	Offices /Danaytments		Dist	rict Ac	tion (ffice	
	Offices/Departments	1	2	3	4	5	6
16	Office of the Vice Mayor (OVM)	✓	✓	√	✓	✓	✓
17	Parks Development and Administration (PDAD)					✓	
18	Persons with Disability Affairs Office (PDAO)	✓	✓	✓	✓	✓	✓
19	Public Employment Service Office (PESO)	✓	✓	✓	✓	✓	✓
20	QC ID (Processing and Issuance)	✓	✓		✓	✓	✓
21	Quezon City Anti-Drug Abuse Advisory Council (QCADAAC)			✓			✓
22	Quezon City Bangsamoro Affairs Service (QCBAS)		√	√	✓	✓	
23	Quezon City Disaster and Risk Reduction Management Office (QCDRRMO)	✓			√	√	
24	Quezon City Drug Treatment & Rehabilitation Center (TAHANAN)			✓			
25	Quezon City Health Department (QCHD)					✓	✓
26	Quezon City Youth Development Office (QCYDO)	✓	✓		✓	✓	
27	Social Services Development Department (SSDD)	✓	√	✓	✓	✓	✓
28	Task Force Disiplina					✓	
29	Tricycle Regulatory Unit	✓				✓	
30	Validation of Vaccine Cards	✓	√			✓	✓

Source: Quezon City District Action Offices

Management System and Operations

Key innovations were conceived, introduced and practiced in different service areas. These are comprised of, but not limited to:

Strategic Planning Workshops

Strategic Planning Workshops are organization-wide planning workshops participated in by heads of departments and offices so as to assess the city's action plans and formulate interventions that would go well with the needs and expectations of city residents.

Clustering of Offices

This is being implemented to provide the City Mayor with a range of options that can be used to effect closer coordination of offices under their general supervision.

- Governance and Administration
- Economic Development
- Security, Peace and Disaster Preparedness
- Environmental Protection and Climate Change Adaptation
- Poverty Reduction and Social Development and Welfare
- Infrastructure, Housing and Urban Planning and Development

Regular Conduct of Executive Staff and Management Committee Meetings

Given the size of Quezon City, the city government officials track the direction as to where the city is going through the weekly consultative meetings. By this, the city executives are regularly kept abreast with programs and developments in other areas of the city government. This also enhances each other's gains and complements efforts to prevent needless waste of resources due to duplication. The Management Group, composed of six to seven top management members, also meets every alternating week, with all opinions and ideas unreservedly discussed and exchanged.

Resource Allocation

Achieving more with less use of human and material resources is the underlying principle of resource allocation efforts of the city government. For instance, a process that guides fuel allocation by the use of fleet cards was adopted and, in so doing, minimizing misuse and wastage.

Learning and Development

With the goals of strategically bridging competency gaps and fostering a culture of

continuous learning and professional development of the Quezon City workforce, the Learning and Development (L&D) Program was established which has facilitated the growth of 2,924 personnel through a wide range of targeted training sessions. Operating via the streamlined Human Resource Management Department (HRMD) online platform, it is tailor-fitted to a diverse array of online and in-person training sessions, workshops, and seminars to align seamlessly with the specific needs and aspirations of each division with emphasis on Mission-Critical Competencies (MCCs) within core, organizational, and leadership domains. Courses conducted under this initiative include High Impact Call Handling, Coaching and Mentoring. Policies and Procedures Recruitment and Selection, Updates in Leave Laws, Overview of Philippine Legal Framework, Department Strategic Planning Orientation, Project Management Training, Improving Ethics in Public Service, Building the Quezon City Culture Through Positive Engagement, Microsoft Application for Beginners, Managing Stress and Anxiety in the Workplace, Setting the Standards in Service Orientation for QC Frontliners, Disability Awareness and Sensitivity Training, Filipino Sign Language, Basic Records and Archives Management, and Building Strong Leadership Skills in QCG, to name a few.

Systems Improvement

Quezon City is one of the pioneers in automating its real estate assessment and payment systems, combined with the process for securing business permits. To lessen the time in business processing considerably, operational improvement was adopted using the Business One Stop Shop (BOSS) Center. At present, the official receipts for tax payment have security features that are hard to counterfeit, which complement the no-nonsense filing of anti-graft cases against erring employees before the Office of the Ombudsman.

The city government oversees and maintains two One-Stop Shops:

 The Business Permits One Stop Shop (BOSS) serves as a centralized hub for processing new business permit applications and their renewals. This streamlined facility provides a dedicated space where applicants can address all the essential requirements for launching a business in Quezon City.

At BOSS, the application process is efficiently managed through a coordinated approach: the Business Permits and Licensing Department (BPLD) handles business registration, the Zoning Administrator issues locational clearances, and the Bureau of Fire Protection-Quezon City conducts fire safety inspections. This integration ensures that all necessary approvals are obtained simultaneously.

Additionally, BOSS facilitates a convenient payment process for all fees and charges through a single Tax Bill. Once the application is approved, applicants receive their business permit and business plate promptly. For first-time applicants, a concierge is available to provide guidance and support throughout the entire process.

- The One-Stop Shop for Construction Permits (OSSCP)is a centralized facility designed to streamline the processing of construction and occupancy permits for straightforward projects. This system covers a range of structures, including:
 - o Buildings with a floor area of up to 1,500 square meters;
 - o Single-family residences up to three stories high;
 - Interior renovations within buildings that already have an occupancy permit;
 - Simple warehouses up to two stories high, intended for non-combustible materials;
 - o Commercial buildings up to two stories high.

OSSCP simplifies the permit process by providing a single point of access for all necessary approvals, ensuring efficient and effective management of construction projects.

The One-Stop Shop for Construction Permits (OSSCP) provides a comprehensive application process for obtaining locational clearance, fire safety evaluation, building permits, and occupancy permits. The system follows a streamlined, sequential evaluation process, beginning with zoning compliance, progressing through fire safety assessments, and concluding with adherence to the National Building Code.

Adjacent to the OSSCP, Meralco operates a service kiosk dedicated to handling electrical connection applications, ensuring that all related services are conveniently accessible.

To enhance the efficiency and scope of permit processing, the Building Registration One Stop Shop (BROSS) has been introduced. This upgraded system is designed to accelerate and facilitate not only business registration but also the processing of all construction-related permits, licenses, and clearances, for both simple and complex structures.

The city government utilizes a systematic approach to selecting and prioritizing programs and projects. This method ensures balanced development across the city's six districts and helps identify and allocate sources of funding effectively.

In addition, the following system improvements have been put in place:

QC Free Wi-Fi

In partnership with Globe Telecom to provide free internet access to the Citizens via Community Wi-Fi, a total of 4,037 access points in 816 sites have been established across the city including hospitals, barangay halls, markets, schools, malls, parks, and other public places. This initiative will greatly benefit QCitizens especially with the digitalization of various local government services and transactions.

Table In-4: Number of Community Wi-Fi Sites and Access Points Deployed in Quezon City: 2020-2022

	Sites		Access Points			
	Sites	2020	2021	2022	Total	
	267	2,000	N/A	N/A	2,000	
	258	N/A	1,000	N/A	1,000	
	291	N/A	N/A	1,037	1,037	
TOTAL	816				4037	

Source: Information Technology Development Department

QC E-Services

- Business Permit On-line Application This service allows businesses to apply for new permits or renew
 existing ones entirely online. Applicants can submit the required documents electronically or schedule an
 appointment to visit the Business Permits and Licensing Department (BPLD) in person if necessary.
 Notifications are sent via email to inform clients when their permits are ready for collection, with the
 added convenience of choosing courier delivery if preferred.
- Construction Permit On-line Application This platform enables users to apply for various construction
 permits, including building permits, demolition permits, telecommunications permits, and other related
 construction approvals, all through a convenient online system
- On-line Payment QC Pay Easy streamlines the payment process for taxpayers and business owners, allowing them to settle real property dues and new business permit applications through the electronic payment facility QC Easy Pay. Payments can be made conveniently via credit card, PayMaya e-wallet, or instant fund transfers from BPI, RCBC, Robinsons Bank, and Union Bank. This initiative aligns with the

Anti-Red Tape Authority (ARTA) guidelines and complies with RA 11032, the Ease of Doing Business Act, which aims to digitize and simplify government transactions

- On-line Birth Registration This initiative provides a streamlined and efficient process for birth registration. Applicants can submit required documents through the website, where they will be verified by the City Civil Registry Department (CCRD). The online portal facilitates birth registration for both newborns and individuals needing late registration. Designed to address challenges related to delayed and unregistered births, this digital solution aims to enhance accessibility and timeliness in the birth registration process
- Real Estate Assessment and Payment The
 online assessment and payment system
 simplifies the process of managing real estate
 taxes. Integrated with QC E-Services, users
 can quickly view their tax amount by entering
 their property's tax declaration number.
 Payments for real estate taxes can also be
 conveniently completed online, streamlining
 the entire process for property owners

• Other features of the QC E-Services include:

- Quezon City ID Application
- Work Permit Transactions
- Health Permit Transactions§
- Real Property Tax Payments
- Social Services Assistance Programs
- Covid-19 Assistance Programs

Kiosks in strategic locations

To enhance service delivery and convenience, the city has deployed 24 kiosk machines in key locations, including malls and District Offices. These kiosks provide access to a range of services available through QC E-Services, such as business permits, construction permits, and more. Plans are underway to deploy additional kiosks with expanded features to further improve accessibility and user experience

QC ID

The Quezon City Government has introduced its own unified identification system, the QCitizen ID, designed to create a comprehensive and accurate database of its residents. This system enables the city to accurately determine the number of individuals in each sector of the population, allowing for the allocation of targeted programs that address specific community needs. The QCitizen ID also plays a critical role in the efficient distribution of government financial assistance, such as the Kalingang QC and Social Amelioration Program, by ensuring that aid reaches the intended beneficiaries through precise data management.

In addition to its role in public service, the Quezon City ID (QCID) is expanding its benefits through partnerships with private businesses like SM Store and McDonald's. This citizen ID also functions as a discount and privilege card, offering cardholders exclusive discounts and perks at participating establishments. Through these initiatives, the QCID not only enhances access to government services but also provides tangible benefits that improve the everyday lives of Quezon City residents.

Acquiring lands for future projects (Land Banking/ Land Acquisition Program)

To strategically prepare for future programs and projects, the City is actively acquiring parcels of land in key locations throughout Quezon City. These lands will be used to develop essential infrastructure and community facilities, including housing, schools, health centers, barangay halls, and other public-purpose structures.

So far, the City Government has successfully acquired 33 parcels of land, covering a total area of 142,027 square meters, with a total acquisition cost of P509,884,995.00. These acquired lands have been designated for various social infrastructure projects, including the construction of barangay halls, the Tahanan Center, and the District 1 Action Office.

Additionally, the city is in the process of fully acquiring 20 more parcels of land that are currently partially paid for. These ongoing efforts ensure that Quezon City remains well-prepared to meet the evolving needs of its residents through strategic land development.

Quezon City Helpline 122

In line with Mayor Belmonte's good governance agenda of "listening to our citizens and knowing what they need," the Helpline 122 Contact Center serves as a vital communication channel for over 3 million residents. This helpline allows citizens to voice their concerns and report emergencies that require immediate government intervention.

The city operates and maintains a 24/7 Integrated Radio Communication Network, ensuring seamless coordination among key action units such as the Quezon City Police District, Bureau of Fire Protection, Medical Responders, Traffic Management, Barangay-Based Radio Stations, and the Barangay Health Emergency Response Team. This network enhances the city's ability to respond effectively to daily operations, as well as during emergencies and disasters.

In addition to Helpline 122, the city offers a helpdesk for public service inquiries, complaints, and feedback. Citizens can reach out via email at helpdesk@quezoncity.gov.ph for assistance.

The Helpline also integrates the Quezon City Police District's three-minute response time for emergency situations, ensuring rapid police intervention. Furthermore, the helpline provides support for COVID-19 services, city program inquiries, violence against women and children reports, and concerns related to the People's Law Enforcement Board (PLEB).

Quality Management System (QMS-ISO)

This initiative focuses on enhancing service delivery and operational efficiency to meet the high standards set by the International Organization for Standardization (ISO), ensuring that the needs and expectations of Quezon City residents are consistently met.

In recognition of its commitment to quality, the Revenue Cluster of the Economic Development Sector, encompassing 15 departments and offices, successfully obtained ISO 9001:2008 certification in May 2016. Building on this achievement, the city is now progressing towards ISO 9001:2015 certification, with plans to include city hospitals, social services, public

order and safety departments, as well as the Governance and Administrative Cluster Department.

Adopting these ISO standards is expected to lead to increased efficiency, improved productivity, and a reduction in errors and waste, thereby enhancing the overall quality of services provided to the public

Service Modernization Program

The city government has implemented a comprehensive Service Modernization Program that offers a complete range of electronic payment systems for real property and business taxes, making the tax payment process simple and convenient. Taxpayers now have two easy, 24/7 options to pay their taxes without needing to visit City Hall.

One option is mobile money payment through GCash, available to Globe and TM cellular phone users, for real property and business tax payments up to Php100,000.00. Alternatively, taxpayers can use an online payment system accessible to Landbank, Bancnet ATM, and debit card account holders. This system allows users to print electronic receipts, which have been approved by the Commission on Audit (COA).

For those who prefer to pay in person, the Treasurer's cashiers at City Hall remain open six days a week to accommodate payments. This multifaceted approach ensures that all taxpayers, regardless of their preferred method, can easily fulfill their obligations while benefiting from modernized, efficient service.

e-Financial System

The eFinancial System is an integrated, electronic-based platform implemented by the city government to streamline and connect the financial transactions of its key departments. By centralizing financial operations, this system enhances transparency, promotes greater efficiency, and ensures more effective management of the city's financial resources.

Enhanced Tax Mapping System

Utilizing Geographic Information System

(GIS) technology, the Enhanced Tax Mapping System allows for the systematic management and accurate assessment of real property units for taxation purposes. This advanced system improves the precision of property records, streamlines tax administration, and supports more effective revenue collection for the city.

Computerized Health Information Tracking System (CHITS)

CHITS is an open-source electronic reporting and database management system designed to streamline the generation and maintenance of health records. It also simplifies the management of patient scheduling at health centers, ensuring more efficient and organized healthcare services. By digitizing these processes, CHITS enhances data accuracy, improves patient care, and facilitates better resource management across the city's health facilities.

Retooling and Modernizing the Bureaucracy

Committed to enhancing public service performance, the city government is undertaking comprehensive efforts to retool its human resources and modernize its organizational structure through the following initiatives:

- Ongoing Capacity Building: The city prioritizes the continuous development of its personnel by providing access to a variety of trainings, seminars, and workshops. This initiative aims to reinforce skills and competencies, ensuring that management mechanisms and technical expertise are updated to meet contemporary needs. As information technology evolves rapidly, maintaining high standards in information services and knowledge sharing is crucial for the city to remain competitive on a global scale.
- Organizational Rationalization: To modernize
 its structure and drive progress, the city is
 implementing rationalization initiatives. This
 process has already been applied to several
 offices, including the Quezon City Sports
 Development Office, Quezon City Citizen
 Services Department (formerly Radio
 Communication Services), Quezon City
 Disaster Risk Reduction and Management
 Office (QCDRRMO), Gender and Development

Department (GAD), and Quezon City Engineering Department (QCED), with approvals from the Department of Budget and Management (DBM). Efforts are ongoing for 27 additional offices that require rationalization.

 Policy and Standards Updates: The city is also focused on updating policies and localizing standards to ensure relevance in changing times. This includes revisions to the New Market Code, Veterinary Code, Sanitation Code, and Building Code, refining these legislations to align with contemporary needs and practices

Awards and Accolades enjoyed by the Quezon City Government

Quezon City has garnered several awards and accolades in recognition of its key innovations and improvements across various service areas. Some notable achievements include:

- Seal of Good Local Governance (SGLG): This award from the Department of the Interior and Local Government (DILG) recognizes innovations in governance, such as effective service delivery, transparency, and accountability.
- 2. Most Business-Friendly City Award: Awarded by the Philippine Chamber of Commerce and Industry (PCCI) for the city's innovative business permit and licensing processes, including the Business Permits One Stop Shop (BOSS) and online payment systems.
- 3. Gawad Kalasag Award: Conferred by the National Disaster Risk Reduction and Management Council (NDRRMC), acknowledging innovations in disaster risk reduction and management, such as the city's comprehensive emergency response and preparedness programs.
- 4. Outstanding Local Government Unit in Health Innovation: Recognized for the implementation of the Computerized Health Information Tracking System (CHITS) and other health-related innovations that improve patient care and data management.
- Innovative City Award: Received for pioneering initiatives like the Enhanced Tax Mapping

System and the eFinancial System, which modernize financial and tax administration.

- 6. Best in Local Governance Performance Award: Given by the Department of Budget and Management (DBM), this award highlights the city's effective modernization efforts, including retooling and rationalizing its organizational structure.
- Outstanding City for Environmental Sustainability: Awarded for innovative environmental programs and policies that promote sustainability and conservation efforts.
- 8. Most Efficient Online Services Award:
 Recognizing the city's advancements in
 digital platforms for services such as online
 birth registration and the QCitizen ID
 program, which improve accessibility and
 convenience for residents.

These accolades reflect Quezon City's commitment to innovation and excellence in various service areas, enhancing governance, business operations, health services, and environmental sustainability. (See Annex 4: QC Awards and Recognitions received by the Quezon City Government from 2019-2022)

6.1.6 The Barangay

Barangays, the fundamental political units in the Philippines, play a crucial role as the primary planning and implementing bodies government policies, plans, programs, projects, and activities within their territorial jurisdiction. They also serve as the venue for expressing and considering the collective views of their constituents and for amicably settling disputes. These barangays evolved from what were once known as "barrios," which functioned as quasimunicipal entities. These barrios carried out specialized governmental functions through their "barrio councils," operating under supervision of the Mayor. The governance and activities of barrios were formalized by Republic Act No. 2370, also known as the Barrio Charter, enacted on June 21, 1959. This legislation provided the framework for the establishment and operation of barrios, which later transformed into the barangays we recognize today.

Creation of Barangays

During the administration of President Ferdinand Marcos, Sr., particularly during the martial law period, significant changes were made to the structure and naming of local political units. The term "barrio assemblies" was replaced with "citizens assemblies" as mandated by Presidential Decree (PD) No. 86, issued on December 31, 1972. Later, on September 21, 1974, PD 557 was enacted, officially renaming barrios as barangays. The Barrio Charter, which had been amended by Republic Act (RA) 3590 on June 22, 1963, was subsequently adopted as the Barangay Charter.

Prior to the issuance of PD 86, Quezon City already had 44 established barrios, which were constituted by the then City Council. In 1973, 89 new civic assemblies were formed, and soon after, all 133 barrios and civic assemblies were reclassified as barangays through Executive Orders No. 20 to 35, dated June 25, 1975. These orders were issued by then Mayor Norberto S. Amoranto in compliance with PD 557. The boundary descriptions and maps accompanying these Executive Orders were meticulously prepared by the Quezon City Secretariat on the Delineation of Barangay Boundaries and presented to the Department of Local Government and Community Development (DLGCD) on December 9, 1975, for confirmation.

The formation of additional barangays in the city followed a structured process. Some barangays were established through Presidential Decrees issued between 1978 and 1981, while others were created through Batas Pambansa enacted between 1982 and 1984. This brought the total number of barangays in Quezon City to 139. Since the entire city was already divided among the 133 original barangays, the new ones were "carved out" from existing territories. A special case was Barangay Payatas, which was declared separate from Barangay Commonwealth by a court order from the Quezon City Court of First Instance, Branch 31, on March 5, 1976. However, this court order did not specify the exact boundaries of Barangay Payatas.

The most recent addition to Quezon City's barangays occurred through Ordinance No. SP 439, S-96, dated September 10, 1996, which divided Barangay Pasong Putik into three barangays: Greater Lagro, Pasong Putik Proper, and North Fairview. Today,

Quezon City is comprised of 142 barangays, each governed by a barangay council consisting of one Punong Barangay, seven Barangay Kagawad, one Sangguniang Kabataan Chairperson (as an ex officio member), one Barangay Secretary, one Barangay Treasurer, and one Lupon Tagapamayapa. The term of office for all local elective officials is three years, with a maximum of three consecutive terms in the same position.

Barangay officials represent the city government at the grassroots level, serving as the recognized authorities in their respective jurisdictions. They are legally tasked with maintaining public order, ensuring the protection and security of life and property, and preserving a desirable and balanced environment. The passage of the Local Government Code of 1991, also known as RA 7160, further empowered barangays by granting them additional powers, responsibilities, and resources. This code was enacted to decentralize governance, foster community participation, and enhance the autonomy and flexibility of Local Government Units (LGUs), particularly barangays, in managing local affairs. The barangays now enjoy greater administrative and fiscal autonomy, improved service delivery, enhanced decision-making and participation, and a stronger role in local economic development.

In terms of land area, Barangay Bagong Silangan is the largest barangay in Quezon City, spanning 594.82 hectares, while Barangay Escopa I is the smallest, covering just 1.28 hectares. When it comes to population, Barangay Commonwealth stands out as the most populous, housing 213,229 residents, whereas Barangay Bayanihan is the least populated, with only 613 residents.

Table In-5: QC Barangays with Highest and Lowest Land Area and Population

	HIGHEST			LOWEST	Γ
District	Barangay	Land Area (has.)		Barangay	Land Area (has.)
1	Brgy. Bahay Toro	295.49		Brgy. Alicia	11.46
2	Brgy. Bagong Silangan	594.82		Brgy. Payatas	321.01
3	Brgy. Matandang Balara	334.86		Brgy. Escopa I	1.28
4	Brgy. U.P Campus	453.18		Brgy. Botocan	3.78
5	Brgy. Greater Lagro	420.18		Brgy. Capri	8.93
6	Brgy. Pasong Tamo	497.60		Brgy. Unang Sigaw	19.94
District	Barangay	Population		Barangay	Population
1	Brgy. Bahay Toro	59,639		Brgy. Damar	952
2	Brgy. Commonwealth	213,229		Brgy. Bagong Silangan	106,886
3	Brgy. Matandang Balara	69,475		Brgy. Bayanihan	613
4	Brgy. Tatalon	55,404		Brgy. Old Capitol Site	1,319
5	Brgy. Bagbag	64,653		Brgy. Capri	12,903
6	Brgy. Pasong Tamo	110,738		Brgy. Unang Sigaw	6,508

Source of data: PSA Census of Population, 2020

Empowering the Barangay

Quezon City was the first local government unit in the Philippines to grant barangay officials full fiscal control over their share of real property tax (RPT), disbursed on a quarterly basis. This progressive system has been in place since 2002, empowering barangays to manage their finances with greater autonomy.

The Barangay and Community Relations Department (BCRD) plays a central role in coordinating with the city's 142 barangays. In addition to facilitating interactions with people's organizations (POs), non-governmental organizations (NGOs), and other community groups, the BCRD is tasked with gathering feedback from constituents to enhance local government services. This department is responsible for

overseeing and coordinating the programs, projects, and activities of all barangays, providing both technical and administrative support. The BCRD also organizes training sessions and seminars for barangay officials and staff, aimed at improving their skills and capabilities in developing effective and appropriate community plans. These initiatives are carried out in collaboration with other local government agencies and civil society organizations.

As part of its mission to strengthen government-citizen relationships, the BCRD coordinates Mayor-community conferences to explain city plans and initiatives, ensuring transparency and responsiveness in governance. The department also manages community concerns and grievances, serving as a vital link between the local government and its constituents to continually improve public services.

In 2014. the city government institutionalized measures of good governance across its barangays through Ordinance No. SP-2273, which introduced the Barangay Seal of Good Housekeeping. This program, evaluated jointly by the city government and the Department of the Interior and Local Government (DILG), recognizes barangays for their excellence in transparency, financial management, and the functionality of barangay -based institutions. The highest award, the Gawad Dangal ng Lungsod, is conferred on the best-performing barangays that demonstrate best practices and innovation.

Among the notable recipients of these awards, Barangay Batasan Hills was honored with the Seal of Good Housekeeping and a cash incentive of Php500,000. Barangay Commonwealth earned the prestigious Hall of Fame award, along with a Php5-million cash incentive. Additionally, various barangays were recognized for specific achievements, including Best in Legislative Practices, Best in

Barangay Ease of Doing Business, Innovator of Best Practice, Best in Road Clearing, Best in COVID-19 Response, Best in Barangay Health Emergency Response Team (BHERT) Functionality, Best in Barangay-Based Institutions (BBIs), Best in Nutrition, and Good Financial Housekeeping.

In terms of income, Barangay Commonwealth in District II and Barangay Pasong Tamo in District VI are the wealthiest, with incomes of Php172.25 million and Php94.50 million, respectively. Conversely, Barangays Mangga in District III and Old Capitol Site in District IV have the lowest incomes, with Php6,150,446.69 and Php8,544,312.61, respectively.

Regarding the share of Real Property Tax (RPT), Barangay Socorro in District III and Barangay Bagong Pag-asa in District I receive the highest shares, with Php31.43 million and Php25.57 million, respectively. In contrast, Barangays Payatas in District II and Escopa IV in District III have the lowest shares, at Php3,287,749.94 and Php3,301,299.56, respectively.

For Internal Revenue Allotment (IRA) shares, Barangay Commonwealth in District II and Barangay Pasong Tamo in District VI again top the list, with allocations of Php162.12 million and Php84.96 million, respectively, due to their large populations and expansive areas. On the other hand, Barangays Quirino 3-A in District III and Old Capitol Site in District IV receive the smallest IRA shares, with only Php2.30 million and Php2.34 million, respectively.

Operation of the barangays is being funded from the following major sources (See Table In-7):



Table In-6: QC Barangays with Highest and Lowest Income

	HIGHEST			LOWES	Γ
District	Barangay	Income (Php)		Barangay	Income (Php)
I	Brgy. Bahay Toro	72,579,804.02		Brgy. Nayong Kanluran	8,719,115.65
II	Brgy. Commonwealth	172,249,903.30		Brgy. Bagong Silangan	81,889,364.60
III	Brgy. Matandang Balara	77,234,104.34		Brgy. Mangga	6,150,446.69
IV	Brgy. Tatalon	64,243,694.64		Brgy. Old Capitol Site	8,544,312.61
V	Brgy. Bagbag	56,466,392,74		Brgy. Capri	16,612,935.31
VI	Brgy. Pasong Tamo	94,502,362.67		Brgy. Unang Sigaw	11,387,724.91
District	Barangay	Share on RPT		Barangay	Share on RPT
		(Php)			(Php)
I	Brgy. Bagong Pag-asa	25,573,342.80		Brgy. Alicia	3,507,276.52
II	Brgy. Batasan Hills	9,381,239.72		Brgy. Payatas	3,287,749.94
III	Brgy. Socorro	31,434,064.92		Brgy. Escopa IV	3,301,299.56
IV	Brgy. South Triangle	21,714,592.85		Brgy. Krus na Ligas	3,303,292.80
V	Brgy. Greater Lagro	12,986,828.35		Brgy. Capri	3,326,115.54
VI	Brgy. Apolonio Samson	11,952,289.38		Brgy. New Era	3,625,061.54
District	Barangay	Share on IRA		Barangay	Share on IRA
		(Php)			(Php)
I	Brgy. Bahay Toro	58,750,544.00		Brgy. Damar	2,709,322.00
II	Brgy. Commonwealth	162,122,149.00		Brgy. Bagong Silangan	72,957,847.00
III	Brgy. Matandang Balara	58,951,595.00		Brgy. Bayanihan	2,299,924.00
IV	Brgy. Tatalon	52,552,836.00		Brgy. Old Capitol Site	2,341,269.00
V	Brgy. Bagbag	47,532,247.00		Brgy. Capri	13,200,432.00
VI	Brgy. Pasong Tamo	84,956,836.00		Brgy. Unang Sigaw	7,266,197.00

Source of data: Quezon City Accounting Department, 2021

Each of	Table In-7: Barangay Fund Sources
O'. 1	

Quezon City's	Sources	Share / Distribution
barangays is	Internal Revenue Allotment	20% of IRA from National Taxes
equipped with	(IRA)	2070 OF ITENTION TO THE TOTAL THE TOTAL TO T
its own	Community Tax	50% of the community tax collected through the Barangay Treasurer
barangay hall,		30% of the Real Property Tax is distributed among the component
serving as the	Real Property Tax (RPT)	barangays
administrative	heat Floperty Tax (NFT)	a. 50% accrues to the barangay where the property is located
center for local		b. 50% accrues equally to all component barangays of the city
governance.		

Among these, 116 barangays have permanent structures located on designated and stable sites. However, 26 barangays have permanent structures situated on temporary locations, which may include private lands, rented spaces, or areas such as sidewalks and creek easements. These barangays include Talayan, Salvacion, Maharlika, Phil-Am, Paraiso, San Isidro Labrador, Balingasa, Quirino 2-C, Socorro, Loyola Heights, Quirino 3-A, Silangan, Immaculate Concepcion, Central, Doña Josefa, Pinagkaisahan, Roxas, Kaunlaran, Sacred Heart, Bagbag, Sta. Monica, San Bartolome, Unang Sigaw, Balonbato, Baesa, and Culiat. These barangays have yet to establish their barangay halls on permanent, city-owned land, highlighting the ongoing challenges in securing stable infrastructure for all local governance units

6.1.7 National Government Agencies

As the chartered city and former capital of the Philippines from 1948 to 1976, Quezon City is home to numerous National Government Agencies (NGAs) and institutions. Currently, 134 NGAs and institutions

Table In-8: Status of Barangay Halls: QC, 2018

District	No. of Bgys Per District	No. of Per- manent Bgy Halls	No. of Tem- porary Bgy- Halls
I	37	30	7
II	5	5	-
III	37	32	5
IV	38	31	7
V	14	11	3
VI	11	7	4
TOTAL	142	116	26

Source: Barangay and Community Relations Department

have established their offices within the city, making it a vital hub for government operations.

The Local Government Code of 1991 mandates that national agencies and offices with implementation project functions coordinate directly with local government units (LGUs) to ensure active participation in both the planning and implementation of national programs, projects, and activities. In line with this, the Quezon City government maintains close coordination with key national agencies such as the Department of Public Works and Highways (DPWH), the Metropolitan Waterworks and Sewerage System (MWSS), and the Metropolitan Manila Development Authority (MMDA). This collaboration is crucial to prevent project overlaps and duplications, ensuring that initiatives are implemented efficiently and costeffectively.

In addition to housing the offices of various NGAs, Quezon City also hosts several local or extension offices of these agencies within the Quezon City Hall Complex. These offices provide direct services to the city government, its residents, and the general public. Notable among these agencies are:

- Regional Trial Court (Department of Justice)
- City Prosecutor's Office (Department of Justice)
- Metropolitan Trial Court (Department of Justice)
- City Auditor's Office (Commission on Audit)
- DILG Field Office (Department of the Interior

- and Local Government)
- Quezon City Police District (Philippine National Police/DILG)
- Quezon City Jail (Bureau of Jail Management and Penology/DILG)
- Quezon City Fire District, including 16 Fire Sub-Stations (DILG)
- Division of City Schools (Department of Education)
- Bureau of Immigration (Department of Foreign Affairs)
- Philippine National Red Cross
- National Bureau of Investigation

These agencies offer a range of public adjudication, services, including law enforcement, protective services, and education. Their operations are funded through the city's share of national taxes, local revenues, and additional financial support from the national government, as stipulated under Section 17 of Republic Act No. 7160 (the Local Government Code of 1991). These resources enable the city to deliver essential services and facilities that are crucial for maintaining public order and ensuring the well-being of its residents.

6.2 GOVERNMENT INCOME AND EXPENDITURE

6.2.1 Government Income

Government revenue sources can be broadly categorized into regular and non-regular income. Regular income includes traditional sources such as taxation, the National Tax Allotment (NTA), fees, charges, and other receipts. Nonregular income encompasses alternative financing methods available to Local Government Units (LGUs), such as credit financing, bond flotation, and privatization.

Quezon City's total revenue at the end of 2022 reached Php28.1 billion, reflecting a 61.98% increase from the Php17.3 billion recorded in 2015. Over the period from 2015 to 2022, the city achieved a steady revenue growth with an average annual growth rate of 7.42%, excluding 2022. However, the year 2022

experienced a revenue decline of -9.17%, equivalent to a Php2.8 billion decrease, primarily due to the lingering effects of the COVID-19 pandemic. Despite this, the city maintained an impressive average incremental growth rate of 10.18% during the pandemic years of 2020-2022.

The year 2019 marked the highest annual percentage increase in revenue at 15.44%, driven by a significant 14.03% surge in tax collections, particularly business taxes, which rose by 20.56%, or Php2.6 billion. However, the momentum slowed in 2022, with tax revenues experiencing a -9.17% decline. Key revenue sources, including Real Property Tax, Business Tax, Other Taxes, and Non-Tax Revenues, collectively dropped from Php24.2 billion in 2021 to Php19.6 billion in 2022. This decline was largely attributed to the economic challenges posed by the COVID-19 pandemic.

The National Tax Allotment (NTA), previously known as the Internal Revenue Allotment (IRA), was the only revenue source to register an increase in 2022, rising from Php6.2 billion in 2021 to Php7.9 billion in 2022. The NTA represents the city's share of the National Government's tax revenues and serves as an external income source for the LGU. It is worth noting that the NTA is expected to decrease in 2023 due to the creation of new LGUs in Baliuag, Bulacan, and Calaca, Batangas. Despite this, Quezon City remains self-sustaining, capable of funding its programs and projects without relying heavily on its NTA, aside from the mandated 20% allocation required by the National Government. The NTA is distributed across the city's 142 barangays to support their respective projects.

Overall, while the last two years of 2020 and 2021 saw robust revenue growth rates of 14.82% and 7.21%, respectively, the revenue drop in 2022 highlights the ongoing financial recovery challenges facing the city. Nevertheless, Quezon City's fiscal resilience and strategic revenue management position it well for continued growth and effective governance. (See Fig. In-1)

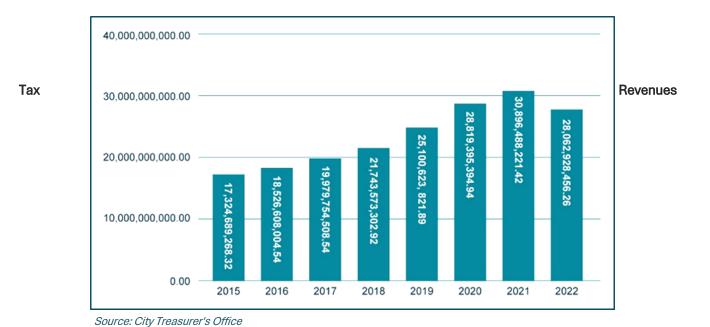
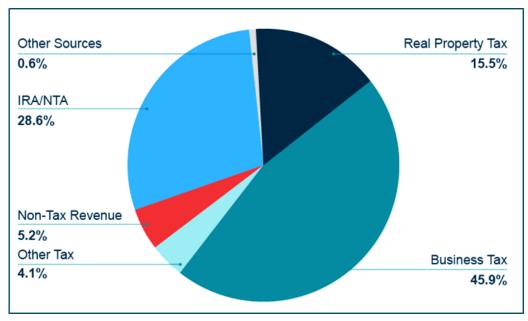


Figure In-1: Local Government Income Growth: QC, 2015-2022 (GF + SEF)



Source: City Treasurer's Office

Figure In-2: Local Government Income by Source: QC, 2022

Evidently, tax collections remain the most significant contributor to the city's revenue stream, accounting for 64.81% of the total earnings in 2022. This has consistently been the largest revenue inflow since 2015. Despite a steady growth rate of 6.59% from 2015 to 2022, there was a notable decline of 16.44% in tax revenue in 2022. Although tax income in 2020 and 2021 was relatively high at 19.70% and 4.67%, respectively, due to pandemic-related measures, the substantial drop in 2022 is largely attributed to the economic impact of the pandemic. The city had implemented measures such as extensions and holidays for Business Tax payments and tax amnesty programs on Transfer Tax, as reflected in SP-3151, S-2022 and SP-3124, S-2022, to alleviate the financial strain on taxpayers and businesses.

In contrast, the National Tax Allotment (NTA), formerly known as the Internal Revenue Allotment (IRA), saw a significant increase, emerging as the second-largest revenue source. The NTA grew annually at an average rate of 12.17%, rising from Php6.2 billion. Non-tax revenues experienced a minimal annual increase of 0.71%, but in 2022, these revenues saw a decline of -12.33%, amounting to Php140.1 million.

The total aggregate income for 2022 was Php28.1 billion, reflecting a decrease of -9.17% from the Php30.1 billion reported in 2021. The revenue composition was as follows: tax revenues (64.81%), IRA (28.29%), non-tax revenues (5.13%), and other external shares (1.76%).

Real Property Tax

Collections from real property tax, which remained third among the biggest revenue sources of the city, multiplied at an average of 4.74% during the 2015-2022 periods. In 2020 and 2021, real property tax collections reached Php4.79 billion and Php5.04 billion respectively or about 16.61% and 16.30% for both years of the overall city income and recorded an increase of 25.85% and 5.19% compared with the preceding year of 2019 and 2020. However, due to RPT measures by the city to mitigate the effects of COVID-19, the RPT dropped -14.45% in the year 2021 from Php5.0 billion to Php4.3 billion.

Business Tax

Business tax collections are the city's most dominant revenue source with an average growth rate of 7.62% from 2015 to 2022. For the years 2018-2020, it reached an average of Php12.68 billion or an average 3-year period of 49.97% of total city income at its peak. For 2022, business tax slowed down to Php12.73

billion, still the highest garnering tax revenue source but a decrease of -21.92% from the previous year's Php16.35 billion, the highest collected BT since 2015. Again, this can be attributed to the post-effects of the pandemic, including the extensions for the payments of business tax as relief to the businesses and taxpayers brought about by the pandemic.

Other Taxes

Other taxes include those derived from transfer of real property ownership, professional tax and community tax. Dues collected from these taxes provided the city an average growth of 8.55% during the periods 2015-2022. For 2022, revenues from other taxes reached Php1.1 billion, a decrease of 6.86% from the 2021 figure of Php1.2 billion. The total amount earned from other taxes in 2022 represents about 2.62% of the aggregate city income for the same year.

Table In-9: Share to Total Income by Type of Tax

Type of Tax	Amount	Share to Total Income
Real Property Tax	P4,309,290.56	15.35%
Business Tax	P12,733,557.23	45.38%
Other Taxes	P1,147,096.67	4.09%

Source: City Treasurer's Office

National Tax Allotment (formerly Internal Revenue Allotment)

The National Tax Allotment (NTA), previously known as the Internal Revenue Allotment (IRA), represents a substantial portion of the city's revenue, totaling Php7.9 billion in 2022, which constitutes approximately 28.29% of the city's overall income. From 2015 to 2022, the NTA/IRA experienced a robust average annual growth rate of 12.17%. Notably, there was a significant increase of 28.82% from 2021 to 2022. Since 2015, when the NTA/IRA was Php3.6 billion, it has surged by 120.58%, reflecting its crucial role as a key revenue source for the city.

Non-Tax Revenues

Non-tax revenues or income from regulatory fees, service user charges and receipts from economic enterprises such as the city's markets, reached Php1.44 billion in 2022, dropping 12.33% from the 2021 figure of Php1.6 billion. Earnings from non-tax revenues comprised about 5.13% of the total city income in 2022 and grew slightly by an average of 0.71% during the periods 2015-2022. It recorded a drop of 9.18% from the rate in 2015. (See Fig. In-3)



Source: City Treasurer's Office, Statement of Receipts and Expenditures and Fiscal Management Data

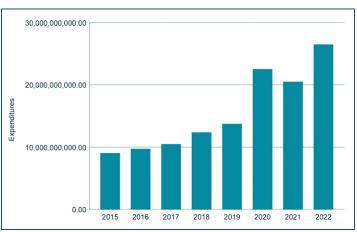
Figure In-3: Percentage Share of Government Income by Source, OC: 2015-2022

It is worthy to note that throughout the periods 2015-2022, the Quezon City government did not resort to any loans and/or borrowings to run the city.

6.2.2 Government Expenditure

By Major Function

The city's operating expenses have exhibited a consistent upward trend, increasing at an average annual rate of 18.56% from 2015 to 2022. In 2022, the operating costs surged to Php26.6 billion, marking a significant 29.13% increase compared to the previous year's total expenditures of Php20.6 billion. This notable rise in 2022 underscores the city's expanding operational demands and the continued investments in public services infrastructure to meet the needs of its growing population and development goals. (Refer to Source: Statement of Receipts and Expenditures, 2022 Fig. In-4)



Over the last three years (2020 to 2022),

Figure In-4: Government Expenditure: QC, 2015-2022

the city's expenditures saw an unprecedented average annual increase of 28.25%, with each year surpassing the Php20 billion mark. This sharp rise is primarily attributed to the extensive COVID-19 response efforts, marking a significant departure from the pre-pandemic expenditure levels recorded between 2015 and 2019. In 2019, total expenditures were at Php13.8 billion, but the subsequent years saw a dramatic escalation in spending to address the pandemic's challenges.

Since 2015, the city government has prioritized funding for general public services and health, nutrition, and population control—the two sectors receiving the most significant budget allocations. In 2022, these sectors commanded the highest expenditures at Php10.67 billion and Php3.40 billion, respectively, reflecting the city's commitment to these critical areas. Notably, in 2021, these two sectors also topped the list of expenditures.

General public services accounted for 50.64% of the total expenditures, with an average annual increase of 19.93% from 2015 to 2022. The spending in this category surged by 30.31% in 2022 alone. The trend saw a steady rise beginning in 2020, a dip in 2021, and another increase in 2022, with the COVID-19 pandemic likely influencing these fluctuations, resulting in an average three-year growth rate of 35.13% in response to the crisis.

Expenditures on health, nutrition, and population control consistently grew by an average of 18.78% annually from 2015 to 2022, with a 16.02% increase from 2021 to 2022. These expenses saw a sharp 53.63% jump in 2019, reaching Php2.3 billion, and further climbed to Php3.4 billion in 2022—a remarkable 206.27% increase from Php1.1 billion in 2015. This surge aligns with the city's vision to establish itself as the Health and Wellness Capital of the Asia-Pacific region.

Housing and community development expenditures increased by an average of 13.51% annually between 2015 and 2022, with the most significant jump occurring in 2018, where spending rose by 85.71%. The total expenditures in this category amounted to Php2.1 billion in 2018, representing 16.44% of the year's budget, up from Php1.1 billion in 2017. This growth underscores the city's dedication to providing low cost and affordable housing for its residents.

Education, Culture & Sports, and Manpower Development also saw a significant increase, reaching 10.28% of total expenditures, or Php2.2 billion in 2022. The average annual growth rate for this sector was 12.62% from 2015 to 2022, with a notable 34.57% increase from the previous year's Php1.6 billion.

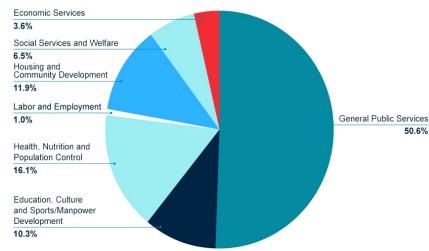
Other expenditure categories, each representing less than 10% of the total budget, include Social Services and Social Welfare at 6.45% (Php1.4 billion), Economic Services at 3.65% (Php768.22 million), and Labor and Employment at 1.01% (Php212.86 million). These figures highlight the city's balanced approach to funding various essential services while addressing its evolving priorities.

By Allotment Class/Object

In 2022, Quezon City's operating costs, classified by allotment class/object, are detailed as follows:

- Personal Services (PS): Php6.9 billion
- Maintenance and Other Operating Expenses (MOOE): Php17.4 billion
- Property, Plant, and Equipment (PPE): Php2.8 billion
- Lump Sum Appropriations: Php3.2 billion
- Statutory Mandatory Obligations: Php26.3 million

Figure In-5 illustrates the distribution of city expenses by allotment class.



Source: Statement of Receipts and Expenditures. 2022

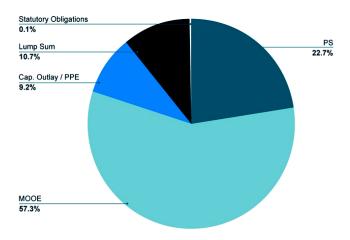
Figure In-5: Government Expenditure by Major Function, QC: 2022

Personal Services (PS) amounted to Php6.9 billion in 2022, marking a substantial increase of Php2.9 billion or 74.18% from the 2021 figure of Php3.9 billion. This category includes salaries and wages, other compensations, personnel benefits contributions, and various personnel benefits. Over the period from 2019 to 2022, PS expenses demonstrated an average annual growth rate of 27.43%, reflecting the city's efficient and streamlined organizational structure. Notably, this expense is well below the 45% threshold of the total budget allowed by the Local Government Code.

Maintenance and Other Operating Expenses (MOOE) decreased by Php1.47 billion or -7.82%, from Php18.8 billion in 2021 to Php17.4 billion in 2022. This category saw an average growth rate of 24.58% from 2019 to 2022.

Property, Plant, and Equipment (PPE) expenditures showed a modest increase of Php157.11 thousand or 0.01% from the previous year, maintaining a similar level to infrastructure investments made in 2021. PPE expenses grew at an average annual rate of 20.25% during the period from 2019 to 2022.

Lump Sum Appropriations experienced a notable increase of Php961.67 million or 42.34%, rising from Php2.3 billion in 2021 to Php3.2 billion in 2022.



Source: 2023 Budget, City Budget Department
Data provided for second semester of 2022 are estimated values.

Figure In-0: Government Expenditure by Allocation: QC, 2022

Figure In-7 provides a comparative overview of income and expenditure over the past nine years, based on data from the City Treasurer's Office and City Budget Department



Source: Statement of Receipts and Expenditure, CTO

Figure In-7: Comparative Operating Income and Expenditure, QC: 2015-2022

From 2015 to 2022, the city maintained an impressive average annual surplus of Php8.1 billion. The highest surplus was recorded in 2019 at Php11.32 billion, while the lowest was in 2022, with just Php1.5 billion. The sharp decline in the 2022 surplus, an 85.70% drop from Php10.3 billion in 2021, is primarily attributed to the significant increase in expenditures, particularly in Personnel Services (PS) and Maintenance and Other Operating Expenses (MOOE).

In 2022, the city's expenditures surged by 29.13%, or Php6.0 billion, reaching Php26.6 billion, up from Php20.6 billion in 2021. A substantial portion of these expenses was allocated to general public services, covering essential costs such as salaries, wages, other compensation, personnel benefits contributions, and other related expenses. Other major spending areas included health, nutrition, and population control, as well as education, culture, and sports/manpower development, social security services, welfare, and economic services.

The significant drop in the 2022 surplus—down by 85.70% to Php1.47 billion from Php10.3 billion in 2021—is a stark reflection of the city's intensified efforts to address the ongoing impacts of the COVID-19 pandemic. The pandemic not only required extensive government spending to support public health and welfare but also led to a slowdown in business activities, further straining the city's finances. Despite these challenges, the city government managed to sustain its operations, though at a much higher cost than in previous years.



Source: Statement of Receipts and Expenditures, 2022

Figure In-8: Government Surplus (2015-2022)

General public service expenditures increased by 30.31% or Php2.5 billion from Php8.2 billion the previous year. Education, culture and sports and manpower development increased by 34.57% or Php556.5

million from P1.6 billion in 2021, health, nutrition and population control expenditures by 16.02% or Php469.03 million from Php2.9 billion, labor and employment expenditures increased by 278.21% or Php156.6 million from Php56.3 million. housing and community development expenditures 17.68% by or Php375.1 million from Php2.1 billion, social security services welfare expenses increased by 118.36% or Php737.06 million

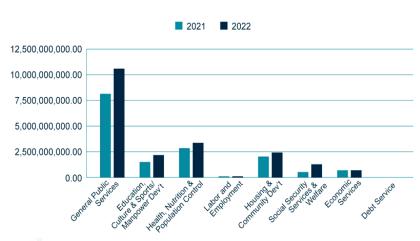


Figure In-9: Comparative Government Expenditure (2021-2022)

from Php622.8 million, and economic services expenditures increased by 5.47% or Php39.85 million from Php728.4 million.

6.3 LOCAL LEGISLATION

the

supports

As the legislative body of Quezon City, the City Council plays a crucial role in enacting ordinances that facilitate the implementation of social and economic development projects and activities. The Council also approves resolutions and allocates funds

to promote the general welfare of the city's residents.

Council

comprehensive legislative, administrative, and secretarial services. The City Secretary is tasked with documenting and tracking all legislative measures and documents, ensuring efficient storage and retrieval of information related to the city's legislative processes.

The Office of the City Secretary

bγ

providing

Table In-10: Brief Profile of Districts

District	No. of Brgys.	Land Area (Has.)	District Popu- lation
1	37	1,959.39	406,401
2	5	4,626.52	720,894
3	37	2,184.52	334,821
4	38	2,341.89	456,852
5	14	2,802.57	565,071
6	11	2,197.39	558,654
Total	142	16,112.58	3,042,323

The Council is composed of 36 GC: 2013 members, each assigned a Councilor's Area of Responsibility (CAR). These CARs represent

Source: Actual and Projected Population by District and by Barangay, QC: 2015-2020

specific political jurisdictions and act as the mayor's extended reach into various parts of the city. The councilors work within their CARs to ensure the effective delivery of essential services to the local community. Additionally, the 36 councilors serve on regular committees within the City Council, with roles as chairs and vice chairs, contributing to the city's governance through focused committee work and oversight

Legislative Outputs

The Quezon City Council, from January 2022 to December 2022, has passed and approved a total of 413 legislative measures classified into 12 areas for planning purposes. The classification was then further categorized into the five development sectors.

Table In-11: Legislative Outputs: Quezon City, 2022

Sector	No. of Ordi- nances	No. of Resolutions
City Properties & General Services, Local Governance and Administration	13	81
Taxation, Assessment, Budgeting & Property Valuation	15	4
Education, Science, Technology, Culture, Tourism and Internal Relations	9	16
Peace and Order, Public Safety, Transportation and Traffic Management	16	25
Public Works, Infrastructure, Building, Zoning, Subdivision & Housing	3	74
Public Health and Social Welfare Services, Senior Citizens, Handicapped People, Women, Family, Domestic Relations & Civil Registration	19	41
Legal Affairs, Justice, Human Rights, Public Information & Assistance, and People's Participation	1	45
Commerce, Industry, Markets, Slaughterhouses, Economic Enterprises, Livelihood and Employment	6	13
Youth Welfare, Sports, Amusement/Entertainment, Games and Drugs	2	36
Barangay Affairs, Urban Poor and Human Settlements	4	14
Parks, Environment and Garbage	2	1
Energy, Water Resources, Public Services, Utilities and Telecommunications	1	27

Source: DILG Guidebook for CSOs in Local Special Bodies and Local Budget Process

Table In-2: Legislative Outputs by Development Sector, QC: 2022

Sector	Approved Ordi- nances	% Equivalent	Approved Resolutions	% Equivalent
Social	31	38	63	19
Economic	16	20	35	11
Land Use/Infrastructure	7	9	124	37
Environment	2	2	6	2
Institutional	25	31	104	31
Total	81	100	332	100

6.4 PEOPLE'S PARTICIPATION

The 1987 Philippine Constitution emphasizes the involvement of people's groups and the private sector across all levels of government. In alignment with this constitutional mandate, the Local Government Code (RA 7160) further reinforces the role of local government units in promoting the establishment and active participation of people's organizations (POs) and non-governmental organizations (NGOs) in local governance and the pursuit of local autonomy. Specifically:

- Section 3 (l) of RA 7160 encourages the participation of the private sector in local governance, particularly in the delivery of basic services.
- Section 34 directs government units to foster the creation and operation of people's and non-governmental organizations as active partners in local autonomy.
- Section 35 allows government units to engage in joint ventures and other cooperative arrangements with these organizations.

City Ordinance SP-1942, S-2009, known as the Participation, Accountability, and Transparency (PAT) Ordinance, and its Implementing Rules and Regulations (IRR), institutionalize and strengthen the partnership between the local government and its constituents. Under the IRR, the City Council can participate in local special bodies, such as task forces and committees, through elected representatives. The People's Council comprises representatives from various sectors, including Business Professionals, Women, Homeowners Associations, Persons with Disabilities, Urban Poor, Solo Parents, LGBTQIA, Cooperatives, Charitable/Socio-Civic groups, Social Justice/Peace and Order, Health and Sanitation, Academe/Education, Youth Labor/Workers, Transportation, Senior Citizens, Socio-Cultural, Environmental/ Urban Protection/Solid Waste, and Livelihood/Vendors.

City Ordinance SP-3169, S-2023, amends certain provisions of City Ordinance SP-1942, S-2009, establishing the People's Council of Quezon City (PCQC) as the overarching body and umbrella organization for all accredited Civil Society Organizations (CSOs) and Private/Business Organizations in Quezon City.

For sectoral representation in the Local Development Council (LDC), organizations must apply for accreditation with the City Council through the Committee on People's Participation. Only accredited organizations are eligible for representation in local special bodies

6.4.1 Local Special Bodies

To promote active public engagement in governance and development, select People's Organizations (POs) and Non-Governmental Organizations (NGOs) are invited to join local special bodies. This inclusion facilitates their active participation in shaping development plans and investment programs, ensuring that diverse perspectives are integrated into decision-making processes. (See Table In-11)

While the Implementing Rules and Regulations (IRR) of the Local Government Code recognize the People's Law Enforcement Boards (PLEBs) as a type of local special body, the Code's provisions for selecting representatives to local special bodies do not apply to the PLEBs. This distinction reflects the unique role of PLEBs in community policing and law enforcement oversight, which is governed by separate regulations.

Table In-13: Local Special Bodies and Their Functions

L	ocal Special Bodies	Functions
City		Assists the Sanggunian in setting the direction of economic and social development and coordinating development efforts within its territorial jurisdiction.
	•	Serves as an Advisory Committee to the Sanggunian on health matters and/ or application of local appropriations for public health purposes.
		Serves as an Advisory Committee to the Sanggunian on educational matters and the use of local appropriation
	•	Formulates plans and recommends measures which will im- prove/ enhance peace and order and public safety in the local level
E	Inforcement Boards	Receives citizen's complaints against PNP officials or members; recommends imposition of penalties after hearing and due process.
	Committee	Primarily responsible for the conduct of pre-qualification of contractors, biddings, evaluation of bids and recommendation of awards concerning local infrastructure projects and goods

Source: DILG Guidebook for CSOs in Local Special Bodies and Local Budget Process

In 2021, the Quezon City Council, through its Committee on People's Participation, accredited a total of 4,055 organizations under Ordinance No. SP-3137, s-2022. This was followed by the accreditation of an additional 382 organizations through Ordinance No. SP-3171, S-2023, as part of ongoing efforts. From these accredited organizations, 50 sectoral representatives were elected to the Quezon City Development Council (CDC).

The city's Local Development Council (LDC) was initially convened and reconstituted on February 27, 2003, with a complete membership. Since then, it has become an active and functioning body, playing a crucial role in the city's development planning and implementation processes. (See Figure In-10 & Table In-13)

Accredited organizations establish their own internal rules of procedure to govern the selection of sectoral representatives to the Local Development Council (LDC). These representatives serve co-terminus with the mandate of the local chief executive. In the event of a vacancy, the respective People's Organizations (POs) and Non-Governmental Organizations (NGOs) are responsible for designating a replacement to complete the unexpired term.

The selection of these representatives was coordinated by the Department of the Interior and Local Government - National Capital Region (DILG-NCR) through a dedicated assembly. This process resulted in the election of 50 representatives from accredited organizations, fulfilling the 25% membership requirement

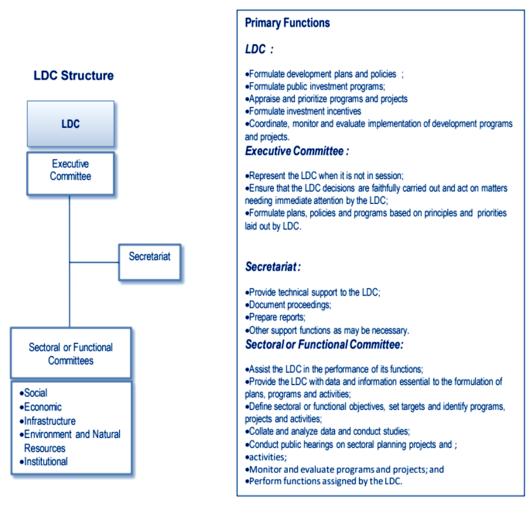


Figure In-10: Local Development Council (LDC) Structure

Table In- 14: CDC Membership in Plenary

Position	Membership
Chairman	Local Chief Executive
	6 District Representatives
	142 Barangay Captains
Members	At least ¼ of the total membership of the fully organized council representing non-government sectors
	Chair of the Appropriations Committee of the City Council

for the Quezon City Development Council (CDC). Notably, the majority of the accredited organizations were active urban poor groups and Homeowners' Associations (HOAs)/neighborhood organizations, which resulted in their larger representation on the Council. (See Table In-14).

Table In-15: NGO/PO Representatives to the CDC

Sector	No. of Representative/s
Urban Poor	9
Cooperative	1
Charitable/Civic	1
Education Academic	1
Livelihood/Vendors	1
Labor/Workers	1
Social Justice/Peace & Order	1
Women	7
Sr. Citizens	6
Youth and Children	1
Business	1
Environment	1
HOA/Neighborhood	11
Health/Sanitation	1
Social/Cultural Development	1
Transportation	1
Professional	1
Religious	1
Persons with Disability	1
Solo Parents	1
LGBT	1
Total	50

Below is the list of the Quezon City Development Council (CDC) members as of 2022, representing a diverse range of sectors, organizations, and key stakeholders in city governance and development planning.

Social Development Committee			
	Name	Barangay/Organization	
1	Elenita C. Chavez	Amihan	
2	Elizabeth C. De Jesus	Apolonio Samson	
3	Fleucita T. Feliciano	Bagong Lipunan Ng	
3		Crame	
4	Esperanza C. Lee	Blue Ridge B	
5	Rosalyn R. Ballad	Botocan	
6	Rosa D. Magpayo	Central	
7	Cristina V. Benardino	Culiat	
8	Edgar C. Tengki	Damar	
9	Judy A. Concepcion	Dioquino Zobel	
10	Jose Arnel L. Quebal	Fairview	
11	Armida F. Castel	Kamuning	
12	Christopher M. Cheng	Kaunlaran	
13	Darwin B. Hayes	Loyola Heights	
14	Arturo D. Tambis	Manresa	
15	Alejandro H. Cuizon	Milagrosa	
16	Eunice C. Bucsit	Nayong Kanluran	
17	Joseph P. Mahusay	Pansol	
18	Evangeline F. Dungca	Pasong Putik Proper	
19	Graziella C. Saab	Pinagkaisahan	

	(con't) Social Development Committee				
	Name	Barangay/Organization			
20	Noel R. Agdeppa	Quirino 2-A			
21	Oscar M. Reyes	Quirino 2-B			
22	Maria Carmela R.	Roxas			
	Gotladera				
23	Danilo B. Soriano	Salvacion			
24	Mario Dr. Alcantara Jr.	San Jose			
25	Mervin C. Viray	San Martin De Porres			
26	Eduardo S. Nieto	Santol			
27	Gary E. Arroyo	St. Peter			
28	Ventura E. Ferreras Jr.	Tagumpay			
29	Josefina L. Landingin	Veterans Village			
30	Anthony G. Dacones	West Kamias			
40	Apolonia A. Tolentino	Sauyo United Senior Citi-			
		zen's Federation Inc			

Economic Development Committee				
	Name	Barangay / Organization		
1	Lottie Gemma D. Juan	Baesa		
2	Catherine G. Maglalang	Balon-Bato		
3	Manuel A. Co	Commonwealth		
4	Bernadette C. Balbas	Damayan		
5	Fernand C. Ubaldo	Doña Imelda		
6	Marciano R. Buena Agua Jr.	E. Rodriguez		
7	Ramon B. Salas	Immaculate Concepcion		
8	Alejandro Z. Mejia Jr.	Kristong Hari		
9	Regina Celeste C. San Miguel	Mariana		
10	Nenita C. Valdez	Mariblo		
11	Arsenia R. Flores	Masambong		
12	Dario M. Orencia	New Era		
13	Manuel N. Guarin	Payatas		
14	Vicente Honorio C. Lla- mas V	Project 6		
15	Vergilio B. Dela Cruz	Quirino 3-A		
16	Ramiro S. Osorio	San Agustin		
17	Marivic O. Hefti	Sangandaan		
18	Noel F. Vitug	Sauyo		
19	Teodulo O. Santos	Socorro		
20	Pedro D. Battung Jr.	South Triangle		
21	Edwin S. Tansingco	St. Ignatius		
22	Eric R. Juan	Talipapa		
23	Zenaida P. Lectura	Up Campus		
24	Virgilio S. Ferrer Ii	Up Village		
25	Roberto G. Fortuno	Vasra		
26	Danilo C. Mojica	Villa Maria Clara		
27	Elmer Timothy J. Ligon	West Triangle		
28	Raymond Moses B.	White Plains		
	Tenchavez			
29	Josephine B. Custodio-	Arlegui Homeowners As-		
20	Samala Evolva S. Colong	sociation Inc		
30	Evelyn S. Galang	Rotc Hunters Neighbor-		
31	Lamberto Q. Nolasco	hood Association Inc. Kingspoint Joy of Urban		
		Farming Association		
		5		

	(con't) Economic Development Committee				
	Name	Barangay / Organization			
31	Lamberto Q. Nolasco	Kingspoint Joy of Urban Farming Association			
32	Josephine L. Velasco	4ks Task Force for Solo Association Inc.			
33	Marilyn N. Afable	Payatas Unified Senior Citizens Association Inc. (Formerly: Samahan ng Nakakatanda Sa Payatas B Inc)			
34	Helen P. Gonzales	Urban Farming 66 Agno Extension Tatalon Chapter			
35	Virginia Claveria	Batasan Working Wom- en's Club Inc.			
36	Rachel L. Martin	Councilor for The Restoration Of Filipino Values Inc			
37	Rosevic Estorque	Akap Para Sa Lahat Inc.			
38	Ma. Divina S. Toquero	Ultra Bandila Federation Inc.			

	Environmental Management Committee				
	Name	Barangay/Organization			
1	Richard V. Ambita	Bagbag			
2	Antonio Ma. Benito T. Cal- ma Jr.	Don Manuel			
3	Rosalie M. Santos	Doña Aurora			
4	Carlo S. De Mesa	Duyan-Duyan			
5	Ryan I. Dapitan	Escopa lii			
6	Leo B. Garra Jr.	Greater Lagro			
7	Francisco M. Aguilar	Horseshoe			
8	Alfredo S. Roxas	Kaligayahan			
9	Rocky Dc. Rabanal	Kalusugan			
10	Jose Maria M. Rodriguez	Laging Handa			

	Name	Barangay/Organization		Name	Barangay / Organization
11	Leny Leticia P. Glivano	Libis	1	Rodolfo S. Palma	Bagong Pag-Asa
12	Feliciana B. Ong	Malaya	2	Wilfredo L. Cara	Bagong Silangan
13	Allan P. Franza	Matandang Balara	3	Alex V. Cruz	Bagumbayan
14	Asuncion M. Visaya	Novaliches Proper	4	Dennis A. Caboboy	Bahay Toro
15	Maria Abigail A. Parwani	Pag-Ibig sa Nayon		John M. Abad	Batasan Hills
16	Edgardo A. Paragua Jr.	Paltok		Mark Anthony L. Escusa	Bayanihan
17	Ryan L. Navero	Paraiso		•	
18	Mae A. Tagle	Pasong Tamo		Christian A. Cando	Capri
19	Jesus P. Lipnica III	Pinyahan	8	Cornelio G. Pabustan	Del Monte
	•	Sacred Heart	9	Marvin C. Morales	Escopa I
	David		10	Eduardo M. Zabala	Escopa II
	Lamberto L. Pascual	San Bartolome	11	Rey Aldrin S. Tolentino	Gulod
	Jomar B. Baetiong	Sta. Cruz			
	Ruel S. Marpa Michelle Ann L. Yu	Sta. Lucia Sto. Domingo	12	Maria Maurina F.	Krus Na Ligas
24	Michelle Amir L. Tu	Sto. Domingo	13	Magalong Ilsaac C. Tan Jr.	Maharlika
25	Rodel N. Lobo	Tatalon		Cesar R. Dela Fuente Jr.	
26	Lolita Dl. Singson	Teachers Village East			Mangga
	Zarina Yasmine Xenelle W.	_		Perla U. Daniega	Masagana
	Jorge		16	Feliciano F. Dela Cruz	Nagkaisang Nayon
28	Orlando G. Mamonong	Unang Sigaw	17	Manuel A. Chua	North Fairview
29	Benjamin Cordero Jr.	Sandigan Ng Manggagawa	18	Lawrence V. Tiglao	Paang Bundok
		ng Quezon City	19	Cecilia S. Tiamson	Paligsahan
30	Norma R. Datol	Zabarte North Olympus	20	Ronald N. Tagle	Quirino 3-B (Claro)
31	Miriam G. Grafil	Senior Citizens Association Center for Women's	21	Daniel Leon S. Berroya	San Antonio
		Resources Inc.	22	John M. Reyno	San Isidro Galas
32	Brian James L. Lu	National Economic Protec-		Annabella I. Curatcho	Sikatuna Village
		tionism Association			_
		(NEPA)		Nelson C. Alcantara	Sta. Monica
33	Rev. Wilson C. Martin	Greater Heights Cristian	25	Rey Mark John C. Navarro	Sto. Cristo
34	Carlito E. Zoleta	Worshop Center., Inc Senior Citizenz Association	26	Sergio C. Gonzalvo	Sto. Niño
		Of Barangay Paltok, Inc.	27	Jerry L. Ongtauco	Talayan
35	Baltazar A. Agustin	Barangay Pinyahan Toda	28	Marlou C. Ulanday	Tandang Sora
36	Consolacion G. Apo	Qccwleaf Quezon City	29	Ana Liza N. Rosero	Teachers Village West
		Community Women Lead-	30	Edevico T. Demayo Jr.	Bistekville 6 High Density
		ers Federation Inc.		,	Housing Homeowners A
37	Ma. Rosario C. Saguibo	Quezon City Vendors Alli-			sociation Inc.
		ance- Aksyon Sambayanan	31	Romeo Especial Escober	Magkakasama HOA Federation
	Teresita V. Taneza	Inc.	32	Hubert M. Raymundo	Bgy Pinyahan Senior Citi
20	Heresita V. Taneza	Luakan Community Sav-	_	Traboter ii riayirianao	zens Assn, Inc.

	(con't) Land Use a Developmen		(con't) Institutiona	
	Name	Barangay / Organization		Name
33	Rodel Adiao	Sandigan Ng Maralitang	17	Rodelio C. Cabigas
		Nagkakaisa (Samana) North Triangle Federation	18	Simplicio Ever J. Her
34	Alvin J. Constantino	Confederate Sentinels of God Inc	19	genes Marlon J. Janoras
35	Rosemarie B. Eseo	Jbvm Lunas Chapter	20	Cesar C. Dionisio
36	Nimfa E. Geronimo	Visayan Community Or- ganization of Tandang Sora	21	Joselito D. Sahagun
		Inc.	22	Telesforo A. Mortega
37	Veronic Joy N. Lazare	55 Compound Hoa Inc.	23	Wilfredo E. Real
38	Virginia D. Villarante	Malasakit At Respeto Sa	24	Emma Lourdes C. D Jesus
		Mamamayan Movement D6 Federation	25	Reynaldo P. Nitro
39	Gina D. Zapata	Nk Ladies	26	Lorenzo S. V Reyes
			27	Julie C. Salmingo

39	Gina D. Zapata	Nk Ladies	20	Luienzu 3. V neyes	Sta. Teresita
			27	Julie C. Salmingo	Valencia
			28	Edilberto M. Adraneda	Barangay San Vicente
	Institutional Development Committee		29	Ricky T. Gonzales	Institute For Popular
	Name	Barangay / Organization	30	Rizza Joy E. Laurea	Kapatiran Ng Mga Mama-
1	Rodrigo A. Corro	Alicia		•	mahayag Sa Pilipinas
2	Celestino Martinez Jr.	Bagumbuhay	31	Rolando H. Mejila	Freedom of Responsible Volunteers For Social
3	Ma.Teresa V. Montalbo	Balingasa			Votanteers For Social
4	Gabriel C. Legaspi	Blue Ridge A	32	Julianne S. Andrada	E-Merge United Zumba Ladies of Escopa 3
5	Sherilyn D. Corpuz	Bungad	33	Godelia S. Esguerra	Unified Senior Citizen
6	Gregory R. Tolentino	Camp Aguinaldo			Association of District 3
7	Renato C. Tanyag	Damayang Lagi	34		Barangay Culiat Solo Par-
8	Louie G. Muñoz	Doña Josefa	35		ent Federation Inc (4ks) 210 Ermin Garcia
9	Octavio P. Garces	East Kamias			Neighborhood Association
10	Laila C. Arcega	Escopa Iv	36	Timoteo L. Salaguste	Quezon City Federation of
11	Lydia R. Ballesteros	Holy Spirit	37	Asgar Saripada Hadjisalic	Maranao Muslim Tribe
12	Julious C. Secillano	Katipunan		1	<u> </u>
13	Mary Catherine C. Sioson	Lourdes			
14	Raul C. Addatu	Marilag			

(con't) Institutional Development Committee

Barangay / Organization

Old Capitol Site

Quirino 2-C

San Roque

San Vicente

Siena

Silangan

Sta. Teresita

Ramon Magsaysay

San Isidro Labrador

18 Simplicio Ever J. Hermo- Phil-Am

24 Emma Lourdes C. De



15 Arthuro C. De Guzman

16 Jose D. Segundo

Ns Amoranto

Obrero



The Risk Profile Chapter addresses three areas of concern – Meteoroidal Hazards, Geological Hazards and Anthropogenic Hazards

7.1 HAZARDS

A hazard is a dangerous natural phenomenon, substance, human activity or condition that may cause loss of life, injury or other health impacts, property damage, loss of livelihood and services, social and economic disruption, or environmental damage (RA 10121). Hazards, both

natural and human-induced, happen due to geological, mereological, oceanic, biological, and technological causes and sources, sometimes acting in combination (DILG, 2011).

A key source of data for this risk profiling is the Quezon City Climate and Disaster Risk Assessment (CDRA) which was updated in 2022 by the Quezon City Government through its partnership with the Quezon City Government and Earthquake Megacities Initiatives (EMI). The QCDRRMO in collaboration with the Climate Change and Environmental Sustainability Department (CCESD) administered the assessment of flood, landslide, earthquake, and other climate hazards and risks to the city, identified the hotspot barangays, and developed a City Risk Profile and Atlas (R PA). The 2022 version of the Quezon City Risk Profile and Atlas (RPA) presents a complete update of the 2014 Quezon City Risk Atlas based on 2022 exposure data, hazard vulnerability, and risk information and list of hotspot barangays identified from a state of-the-art hazard and risk assessment study. The climate change dimension was also included in the CDRA that provides the opportunity to look at the impact of climate change on Quezon City, particularly in terms of impacts on flood susceptibility, temperature, and precipitation

7.1.1 Meteorological Hazards

Meteorological hazards are weather-related events such as typhoons, extreme rain, floods caused by heavy rains, drought, landslides, sea level rise, and extreme temperatures, among others.

Typhoon

A typhoon is a mature tropical cyclone that develops in the western part of the North Pacific Ocean which is referred to as the Northwestern Pacific Basin and is the most active tropical cyclone basin on earth. Due to its geographic location, the Philippines is one of the most highly exposed countries to typhoons. About twenty (20) typhoons hit the country every year, and majority of these form between June and November while typhoon formation is at a minimum between December and May.

In 2009, Storm (STS) Ondoy, with international name Ketsana, was the most destructive typhoon to hit the Philippines surpassing Typhoon Patsy (Yoling) in 1970 and produced one of the worst floods in Metro Manila. STS Ondoy recorded the highest rainfall totals for a one-day rainfall of 455 mm at the Science Garden Station in Quezon City.

The southwest monsoon, locally known as Habagat enhanced by a typhoon happened in August 2012 also brought in the highest two-day rainfall total in Metro Manila with 684 mm. *Table RP-1* shows tropical cyclones that affected Quezon City and the rest of Metro Manila from 2009-2022.

Flood and Flooding Situation

Flooding is a primary impact brought about by increased precipitation or extreme weather events such as storms or cyclones.

Despite its higher elevation compared to Manila and other Metro Manila cities, Quezon City still experiences regular flooding. The city has an undulating terrain and is within the catchment area of five river systems—San Juan River, Tullahan River, Marikina River, Pasig River, and Meycauayan River—and their tributaries and creeks. These river systems receive tremendous amounts of water during heavy rainfall and have great potential to flood low-lying areas.

Flood Risk Assessment

The hazard and risk assessment of the CDRA Report focused on analyzing the impact of an RCP 8.5 100-year return flood scenario on the population and buildings in Quezon City. The RCP 8.5 100-year flood return would be similar to what was experienced during severe tropical storm Ondoy in 2009 which generated 455 mm of rainfall in one day. The 100-year rain return flood scenario map shown in *Figure RP-1* is simulated using a one-day rainfall of an early future scenario (2020-2039) under RCP 8.5.

Table RP-1: Typhoons that Affected Quezon City and Metro Manila, 2009-2022

Typhoon (International Name)	Period of Occurrence	Lowest Pressure	Highest Wind Speed	Casualties (Phils)	Damages (Dollar)
Ondoy (Ketsana)	Formed: 9/23,/2009 Dissipated: 9/30/2009	960 mbar (hPa) 28.35 inHg	10-min sustained: 130 kmh 1-min sustained: 165 kmh	710 fatalities 37 missing	\$1.09B
Basyang (Conson)	Formed: 7/1/ 2010 Dissipated: 7/18/2010	970 mbar (hPa); 28.64 inHg	10-min sustained: 130 kmh 1-minsustained: 150 kmh	46 missing	\$77.8M
Glenda (Rammasun)	Formed: 7/9/ 2014	935mbar(hPa) 27.61 inHg	10-min sustained: 165 kmh 1-min sustained: 250 kmh	195 fatalities 102 dead	\$7.13B
Mario (Fungwong)	Formed: 9/17/2014 Dissipated: 9/18/2014	985 mbar (hPa) 29.09 in Hg	10-min sustained: 95 kmh 1-min sustained: 95 kmh	21 fatalities	\$75.5M
Lando (Koppu)	Formed: 10/12/ 2015 Dissipated: 10/ 21/2015	925 hPa (mbar) 27.32 in Hg	10-min sustained: 185 kmh 1-min sustained: 240 kmh	62 fatalities	\$313M
Lawin (Haima)	Formed: 10/14/2016 Dissipated: 10/ 26/ 2016	900 hPa (mbar) 26.58 inHg	10-min sustained:215 kmh 1-min sustained: 270 kmh	19 fatalities	\$972.2M
Source: 2018 QC	Ecological Profile, Wi	kipedia			
Mangkhut (Ompong)	Formed: 9/ 6/ 2018 Dissipated: 9/17// 2018	905 hPa (mbar); 26.72 inHg	10-mim sustained: 205 km/h (125 mph) 1-min sustained: 285 km/h (180 mph)	127 fatalities	\$626.8M
Source: Wikipedi	a			1	
Kammuri (Tisoy)	Formed: 11/24/ 2019 Dissipated: 12/16/ 2019	950 hPa (mbar); 28.05 inHg	10-min sustained: 165 km/h (105 mph) 1-min sustained: 220 km/h (140 mph)	17 deaths 318 injured	\$130 M
Vongfong (Ambo)	Formed: 5/8/2020 Dissipated: 5/18/ 2020	960 hPa (mbar); 28.35 inHg	10-min sustained: 155 km/h (100 mph) 1-min sustained: 185 km/h (115 mph)	5 fatalities	\$31.1M
Goni (Rolly)	Formed: 10/26/ 2020 Dissipated: 11/6/2020	905 hPa (mbar); 26.72 inHg	10-min sustained: 220 km/h (140 mph) 1-min sustained: 315 km/h (195 mph)	31 fatalities	\$369 M
Vamco (Ulysses)	Formed: 12/8/2021 Dissipated: 12/15/ 2020	955 hPa (mbar); 28.2 inHg	10-min sustained: 155 km/h (100 mph) 1-min sustained: 215 km/h (130 mph)	98 deaths 19 missing	\$418 M
Choi-wan (Dante)	Formed: 5/29,/2021 Dissipated: 6/6/ 2021	998 hPa (mbar); 29.47 inHg	10-min sustained: 75 km/h (45 mph) 1-min sustained: 85 km/h (50 mph)	11 deaths 2 missing	\$6.39M
Conson (Jolina)	Formed: 9/5/2021 Dissipated: 9/13/ 2021	992 hPa (mbar); 29.29 inHg	10-min sustained: 95 km/h (60 mph) 1-min sustained: 120 km/h (75 mph)	20 deaths 24 injured 5 missing	\$31.8M
Source: QCDRRI	⊥ MO Accomplishment R	Peport, Wikipedia	1	L	1
Noru (Karding)	Formed: 9/21/2022 Dissipated: 10/1/2022	940 hPa (mbar); 27.76 inHg	175 km/h (110 mph)	12 deaths 5 missing	\$6.18M
Nalgae (Paeng)	Formed: 10/26/2022 Dissipated: 11/3/2022	975 hPa (mbar); 28.79 inHg	110 km/h (70 mph)	101 confirmed deaths 29 missing	\$73.4M

Source: Wikipedia

The flood risk analysis involves the combination of flood hazard information which

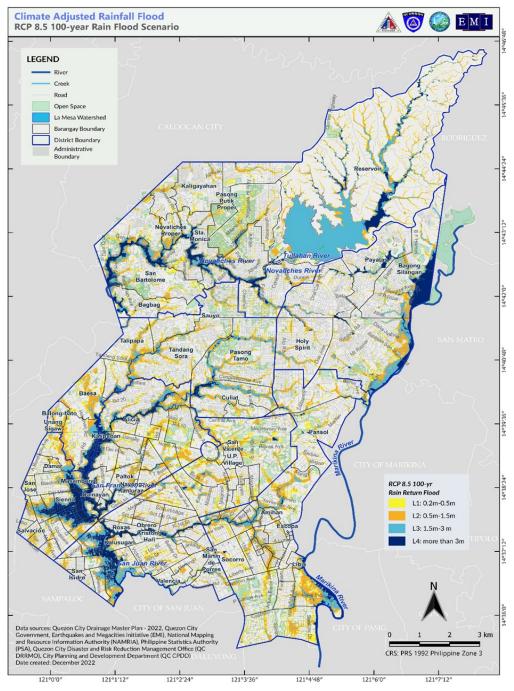
describes the likelihood and intensity of a flood event, exposure information which describes the distribution of people and elements at-risk from a flood event and vulnerability information which describes how the exposed elements would be affected when subject to a given intensity of flooding.

The CDRA Report flood depth values were obtained from Quezon City Drainage Master Plan (QC-DMP) study and the Mines and Geosciences Bureau (MGB) flood susceptibility map, which provided information on the highest flood depths. Based on a 100 -year flood due to heavy rainfall, the city's level of exposure can be categorized into four levels of flood depth as shown in Table RP-2.

Flood Susceptibility Results

Data on climate-adjusted rainfall flood under the representative concentration pathways (RCP) 8.5 rain flood scenario indicate several barangays in each district that can be severely flooded (See Figure RP-1).

In District I, 37 barangays can be severely flooded with a depth of more than half a meter under the climate-adjusted rainfall for a 100-year flood scenario. Eight (8) barangays with



Source: QC-DMP Preliminary Report, 2022

Figure RP-1. Climate Adjusted Rainfall Under RCP 8.5 100-Year Rain Flood Scenario

Table RP-2. Flood Depth Category, QC:2022

Flood Level	Flood depth	Impact
1	0.2 me- ters to 0.5 meters	This flood depth may start to affect the stability of moving vehicles and may be an inconvenience to people walking through roads.
2	0.5 me- ters to 1.5 meters	This brings risk to life or property as this can cause drowning especially for small children and threaten the stability of adults
3	1.5 me- ters to 3 meters	A flood depth greater than 1.5m will in- undate a very large area, including most one-storey buildings, thus creating sig- nificant loss of life and property. The utilities and services may no longer be functional
4	deeper than 3 meters	This flood depth is devastating. It will completely cover one-story buildings and extend over a very large area, taking a long time for the flood to recede and for life to get back to normal. The opportunity for bodily harm, acquiring infections through skin contact, while ingestion of contaminated water also increases.

Source: CDRA Report, 2022

bounded area affected include Katipunan (97%), Talayan (91%), Masambong (88%), Sto. Domingo-Matalahib (81%), St. Peter (65%), Mariblo (64%), Sienna (62% and Maharlika (61%).

In District II, five (5) barangays are affected by deep flooding which ranges between 8-25% of their areas. Barangay Bagong Silangan leads with about 25% of the land area susceptible to flooding with more than 0.5 m.

For District III, 35 barangays can be severely flooded with more than half a meter in depth. Four barangays with more than 50% of barangay bounded include Bagumbayan (66%), Claro-Quirino 3-B (62%), and West Kamias (61%).

For District IV, 38 barangays can be severely flooded by more than half a meter while 3 barangays with more than 50% of barangay bounded area include Tatalon (79%), Doña Imelda (77%), and Damayang Lagi (55%).

In District V, 14 barangays can be severely flooded at more than half a meter depths. Barangay Capri has 97% of its area flooded, while other barangays flooded varies from 6-38%.

District VI has eleven (11) barangays that are affected by flood but ranges between 10-41% of the barangay areas.

Displaced Population

Almost 380,000 persons or 11% of the total city population could be displaced in the event of a 100-year flood. *Table RP-3* shows the number of people per district that are likely to be displaced and will require evacuation, as graphically shown in *Figure RP-2*.

Table RP-3. Number of People Displaced by Flood Per District, Quezon City: 2022

District	Population
I	73,511
II	50,962
III	38,547
IV	51,354
V	84,760
VI	80,600
TOTAL	379,734

Listed in their corresponding districts, the following barangays are estimated to bring the larger number of flood-displaced population affected under 0.5 m and above depths: Bahay Toro, San Antonio, Masambong in District I; Barangay Batasan Hills in District II; Barangays Bagumbayan and Matandang Balara in District III; Barangay Tatalon in District IV; Barangays Capri, Bagbag and Sta. Monica in District V; and Barangays Culiat, Baesa, and Pasong Tamo in District VI.

The occurrence of floods will greatly affect informal settler families (ISFs) who are at the highest risk. A significant number of the total identified 200,591 ISFs are situated in flood-prone areas, as demonstrated in Table RP-4.

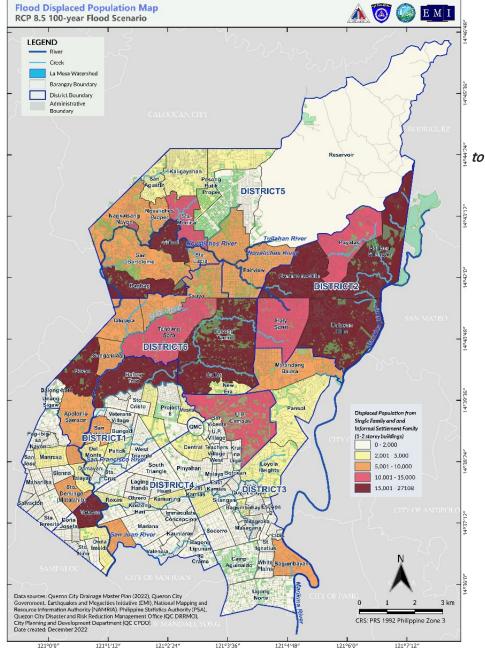
Flood Affected Buildings

There are 179,596 one- to two-storey buildings that would be affected by flood four levels of flood depth as shown in Table RP-5.

Critical Facilities Exposed Flood

An estimated number 128 public of facilities would be affected by flood depths of 0.5 m or higher. During times of emergency in Quezon City, access to and continued operations of public facilities such as evacuation centers, health centers, hospitals, multi-purpose halls, fire stations, and police stations/precincts become critical (See Table RP-6). By identifying the facilities most at risk of flooding, actions can be taken to decrease their vulnerability.

There are 272 sites identified as evacuation sites during flood events, however, 80 of these are in areas where flood depth can be higher than 0.5 m. Twostorey health center structures are in areas where flood exceeds 0.5m (Level 2 and up) while 12 health centers are at risk from high



Source: EMI, 2022

Figure RP-2: Map of Population Displaced by Flood under RCP 8.5 100-Year Flood Scenario

flood depths. Ten (10) hospitals are found in locations where flood depths can be higher than 0.5m in the RCP 8.5 100-year flood scenario. Among the 101 multi-purpose hall locations in Quezon City, about 11 are situated where flood waters vary from 0.2m to less than 0.5m, while some 16 multi-purpose halls comprising one- and two-storey buildings are situated in areas where flood depths can exceed 0.5m. Additionally, thirty two (32) barangays are found in 11 locations where flood depths can exceed 0.5 m.

Table RP-4. Number of ISFs Affected by Flood Depths
Higher than 0.5 m, Quezon City: 2022

District	Number of Informal Settler Families (ISFs)	Informal settler families in Areas with Flood Depths Deeper than 0.5 Meter	Percentage of Informal Settler Families in Areas with Flood Depths Deeper than 0.5 Meter
I	21,518	20,491	95%
Ш	21,780	21,039	97%
III	42,722	41,955	98%
IV	11,060	11,060	100%
V	42,072	42,072	100%
VI	ND	ND	ND

Table RP-5. Number of Flood-Affected Buildings Based on Floodwater Depth, Quezon City: 2022

	Flood-Affected Buildings Based on 4 Levels of Floodwater Depth					
District	0.2m-0.5m	0.5m-1.5m	1.5m-3m	3m and above	Total	
1	6,350	5,004	5,997	17,351	34,702	
II	6,630	4,096	3,982	14,708	29,416	
III	6,193	3,027	628	9,848	19,696	
IV	3,888	3,003	2,786	9,677	19,354	
V	6,920	5,381	5,702	18,003	36,006	
VI	11,807	5,561	2,843	20,211	40,422	
					179,596	

Table RP-6. Number of Critical Facilities Affected by Flood Depth Greater than 0.5 m, QC: 2022

Type of Facility	Number of Facilities Affected by Flood Depth	No. of Affected Facilities per District					
	>0.5m	1	II	III	IV	V	VI
Evacuation Centers	80	32	6	13	17	5	7
Health Centers	12	4	-	4	1	2	1
Hospitals	13	2	-	1	7	3	-
Multipurpose Halls	16	7	1	1	3	3	1
Barangay Halls	34	10	-	9	10	3	-
Fire Stations	3	3	-	-	-	-	-
Police stations/ precincts	7	5	1	1	-	-	-
TOTAL	128	53	8	20	28	10	9

Critical Point Facilities and Lifelines for Public Safety and Security

There are several one and two-storey barangay halls, particularly in Districts I, III, IV, and V may be surrounded by floodwater of half a meter or more in depth (Flood Levels 2-4). Access and operations to these barangay halls can be severely impaired after the event (See Table RP-7, Figures RP-4 and 5).



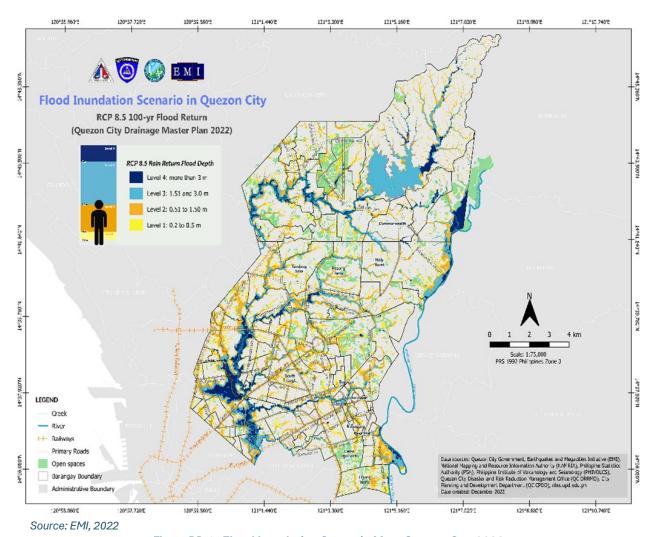


Figure RP-3. Flood Inundation Scenario Map, Quezon Cty, 2022

Table RP-7. Barangay Halls that may be surrounded by floodwater of \leq 0.5 m in depth, QC:2022

District	Barangays				
I	1) Del Monte, 2) Katipunan, 3) Lourdes, 4) Manresa, 5) Masambong, 6) NS Amoranto, 7) St. Peter, 8) Sta. Teresita, 9) Talayan, and 10) Vasra				
III	1) Amihan, 2) Loyola Heights, 3) Mangga, 4) Quirino 2-B, 5) Quirino 3-A, 6) Silangan, 7) Tagumpay, 8) Villa Maria Clara, and 9) West Kamias				
IV	1) Bagong Lipunan ng Crame, 2) Damayang Lagi, 3) Kalusugan, 4) Mariana, 5) Obrero, 6) Old Capitol Site, 7) San Martin de Porres, 8) Kaunlaran, 9) Santol, and 10) Tatalon				
V	1) Capri, 2) Fairview, and 3) Sta. Monica				

Source: EMI, 2022

Utilities and Facilities Exposed to Flood

Several utilities and facilities such as roads, bridges, and pumping stations will also be affected should a 100-year flood occur. *Table RP-8 lists* five (5) barangays in District I, three (3) in District II, four (4) in District III, three (3) in District IV, four (4) in District V, and four (4) in District VI with the most road lengths affected by 0.5 m flood depth (See Figure RP-6 and Table RP-8). Annex A presents a complete list of facilities affected by flood water levels greater than 0.5.

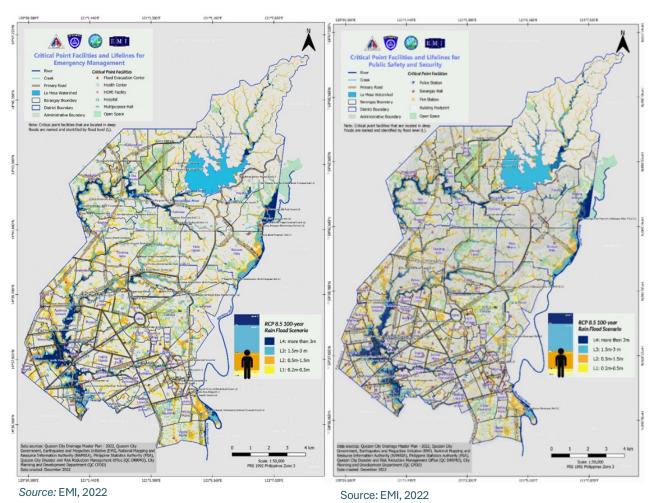


Figure RP-4. Critical Public Facility Locations in Quezon City in RCP 8.5 100-Year
Rain Flood Scenario

Figure RP-5. Safety and Security-related Public Facility Locations in Quezon City in RCP 8.5
100-Year Rain Flood Scenario

Forty (40) bridges and three (3) water pumping stations in Quezon City are located in areas where water depths can be higher than 0.5 meters. The pumping stations include: (1) D. Tuazon Pumping Station found in Barangay Maharlika, Balara Water Pumping Station location in Barangay Pansol, and UP Water Pumping Station at the University of the Philippines.

Table RP-9 further identifies the number of other utility and support facilities affected by flood depths greater than 0.5 meters.



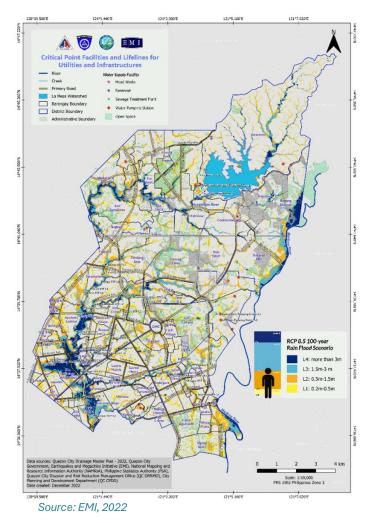


Figure RP-6. Critical Point Facilities and Lifelines
for Utilities and Infrastructure

Table RP-8. Barangays with Most Road Lengths
Affected by > 0.5 m Flood Depth, per District,
QC; 2022

District	Barangays				
I	Bahay Toro	Talayan			
	Sto. Domingo	San Antonio			
	Masambong				
Ш	Batasan Hills	Holy Spirit			
	Bagong Silangan				
III	Ugong Norte	Loyola Heights			
	Bagumbayan	Matandang Balara			
IV	Tatalon	Damayang Lag			
	Doña Imelda i				
V	San Bartolome	Nagkaisang Nayon			
	Sta. Monica	Gulod			
VI	Pasong Tamo	Culiat			
	Tandang Sora	Apolonio Samson			

Source: EMI, 2022

Flood-Related Health Risk

During large-scale floods, the presence of fecal coliform in floodwater can be a source of health risks. These high fecal coliform counts are indicative of untreated or partially treated organic wastes from septic tanks, spillages, garbage, and areas without proper sewerage systems that reach the waterways. When ingested, these wastes can cause gastrointestinal infection. Children can be particularly prone to floodwater ingestion, since they are more likely to engage in hand-to-

Table RP-9.: Number of Utility and Support Facilities Affected by Flood Depth Greater than 0.5m, QC: 2022

Type of Facility	No. Affected by	No	No. of Affected per District					
rype of Facility	Flood Depth > 0.5m	1	2	3	4	5	6	
Utility Facility								
Sewage treatment plant	23	11		3	2	1	6	
Materials Recovery Facility	22	7		7	3	2	3	
Utility Facility Pumping Stations	3	1		-	-	-	-	
Bridges	40	11	1	4	10	6	8	
Support Facility								
Schools	115	28	6	12	22	30	17	
Daycare Centers	89	22	6	19	13	22	7	
Markets	13	1		2	5	2	3	

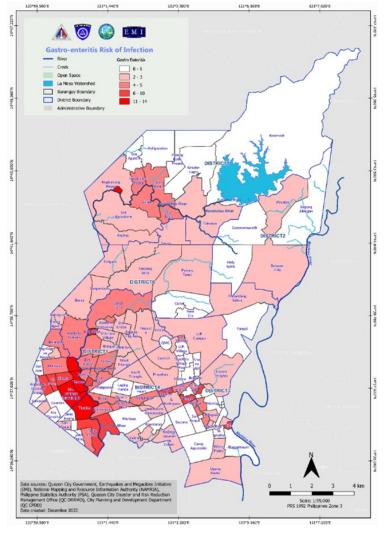
Source: EMI, 2022

mouth contact and can easily be submerged in floodwater due to their height. *Table RP-10* enumerates the barangays that are at risk of gastroenteritis during a 100-year-rain flood scenario.

Table RP-10.: Estimated Number of Persons per District Infected by Gastroenteritis Under RCP 8.5 100-Year Flood Scenario, QC: 2022

District	Estimated Number of Persons Infected by Gastroenteritis	Barangays
I	1,543	Barangays Bahay Toro, Sto. Domingo (Matalahib), Masambong and San Antonio
II	1,259	Barangays Batasan Hills and Bagong Silangan
III	720	Barangays Bagumbayan and Matandang Balara
IV	1,514	Barangays Tatalon and Damayang-Lagi
V	1,577	Barangays Gulod, Capri, Bagbag, Sta. Monica and Nagkaisang Nayon lead the 14 barangays of the district.
VI	1,321	Barangays Culiat, Pasong Tamo and Apolonio Samson

Source: EMI, 2022



Source: EMI, 2022

Figure RP-7. Gastro-enteritis Risk of Infection Map, QC: 2022

Flood Hotspots Barangays

Twenty-one (21) barangays are considered flood hotspots in Quezon City, as enumerated in Table *RP-11* and graphically shown in *Figure RP-8*. All the barangays rank high in each of the seven indicators: flood

depth, risk of infections, flooded roads, flooded buildings, displaced populations, and difficulty of access to critical point facilities.

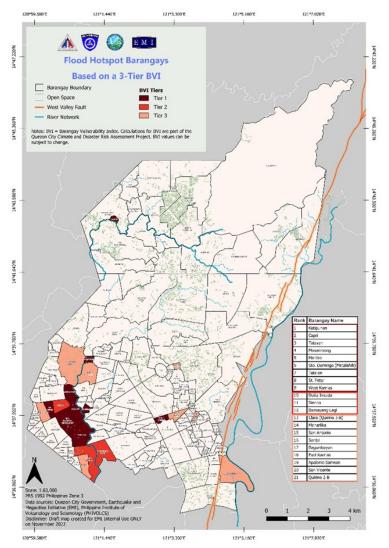
Table RP-11: Flood Hotspots Based on the 3-Tier Barangay Vulnerability Index, QC:2022

Tier	Rank	District	Barangay
	1	1	Katipunan
	2	5	Capri
1	3	1	Talayan
Very High	4	1	Masambong
Vulnerability	5	1	Mariblo
	6	1	Sto. Domingo
	7	4	Tatalon
	8	1	St. Peter
2	9	3	West Kamias
High	10	4	Doña Imelda
Vulnerability	11	1	Siena
	12	4	Damayang Lagi
	13	3	Quirino 3-B
	14	1	Maharlika
	15	1	San Antonio
3	16	4	Santol
Moderate	17	3	Bagumbayan
Vulnerability	18	3	East Kamias
	19	6	Apolonio
	19	U	Samson
	20	4	San Vicente
	21	3	Quirino 2-B

Source: EMI, 2022

Early Warning System for Flood

To closely monitor water levels during occurrences of flooding, the City Government spearheaded by the Disaster Risk Reduction and Management Office



Source: EMI, 2022

Figure RP-8. Percentage Population on High and Very High Landslide Susceptibility

(DRRMO) has a systematic early warning system for specific local hazards that is deemed beneficial in preventive measures for possible risks. This system is used to continuously monitor water levels during flooding incidents.

As of 2022, a total of 533 Early Warning System (EWS) devices have been strategically installed across key locations in the city, as detailed below. The selection, placement, and type of these Early Warning Systems are informed by a comprehensive risk assessment, which identifies the most effective systems for specific areas within the city. Additionally, flood markers have been deployed in flood-prone barangays, as outlined in *Table RP-12*. Furthermore, *Annex 5* provides a detailed list and locations of available facilities situated in highly flood-prone areas of Quezon City.

Intelligent Disaster Management System

(Hydromet Weather Station, Water Level Sensor, Flood Monitoring Sensor)

- 1. Susano Bridge
- 2. Del Monte Bridge
- 3. Kaliraya Bridge
- 4. Quezon Avenue Araneta
- 5. La Mesa Dam Controller Office
- San Pedro Subdivision, Brgy. Nova Proper
- 7. San Bartolome, Barangay Hall near School

Automated Rain Gauge Station (ARGS)

- 1. Barangay San Bartolome/ Quezon City Polytechnic University
- 2. Barangay Bagong Pag-asa/ Quezon City Science High School
- 3. Science Garden PAGASA-LDBP
- 4. La Mesa Dam Controller Office
- 5. Novaliches District Office
- 6. ASTI, DOST, C.P. Garcia Ave,
- 7. Susano Bridge
- 8. Del Monte Bridge
- 9. Kaliraya Bridge

Automated Weather Stations (AWS)

1.750 Smart Weather Cameras

Automated Water Level Monitoring System (WLMS)

- Barangay Gulod/ Tullahan Quirino Highway
- 2. Kaliraya Rd., Barangay Tatalon
- 3. Barangay Masambong/ Del Monte Bridge
- 4. Barangay Talayan/ Talayan Creek
- 5. People's Park, Quezon Avenue Bridge
- 6. Barangay Doña Josefa/ E. Rodriguez Bridge
- 7. Aurora Bridge
- 8. Gregorio Araneta Avenue
- 9. Barangay Diokino Zobel/ P. Tuazon
- Barangay Duyan Duyan/
 Duyan Duyan Bridge, Xavier
 Ville Avenue
- 11. Barangay Batasan Hills/ Batasan-San Mateo Road Bridge

Table RP-12: List of Flood-Prone Barangays with Flood Markers, QC:2022

Dist	Flood Prone Barangays with Flood Markers					
I	Talayan, Sto. Domingo, Del Monte, Sta. Cruz, Mariblo, Damayan, Masambong, Siena,					
	Alicia, Paraiso, Sta. Teresita, Vasra, San Antonio, Ramon Magsaysay, Bahay Toro and					
	Sto. Cristo					
II	Batasan Hills, Bagong Silangan					
III	Matandang Balara, Pansol, East Kamias, White Plains, and Loyola Heights					
IV	Roxas, Damayang Lagi, and Doña Imelda					
V	San Agustin, Sta. Monica, Fairview, Gulod, Nagkaisang Nayon, North Fairview, Novali-					
	ches Proper, and Bagbag					
VI	Apolonio Samson and Talipapa					

Source: EMI, 2022

The Quezon City Government through the DRRMO Emergency Operations Center (DRRMO-EOC) also monitors and reviews weather advisories released by DOST-PAGASA. The EOC likewise monitors the frequency of rainfall all year round. The QCDRRMO's Action Officer makes recommendations to the Local Chief Executive when intense or heavy rainfall threatens imminent flooding in the City. As part of early warning to city residents, the EOC issues advisories to barangays and posts them on their social media pages.

A total of 1,221 weather advisories were recorded by the Operations Center for 2022. The highest number of advisories was issued in the month of September with 202 postings, as illustrated in *Figure RP-9*.

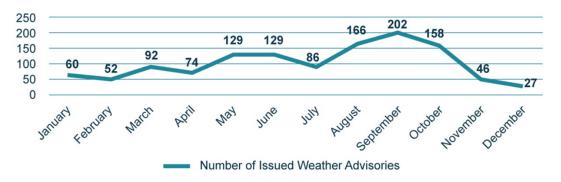


Figure RP-9. Number of Issued Weather Advisories, QC: 2022

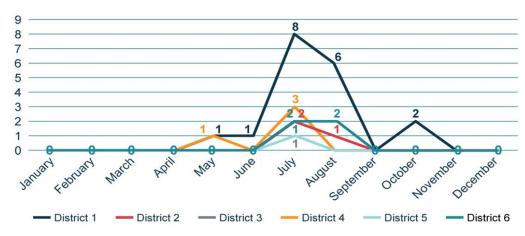
Figure RP-10 shows the daily average rainfall volume in millimeters from January to December 2022. The highest amount ever was recorded in July, at one point recording 193 mm per hour in a day.



Source: QCDRRMO Accomplishment Report, 2022

Figure RP-10. Daily Average Rainfall Volume in Millimeters, QC: 2022

Figure RP-11 shows the number of reported flooding incidents by district which was recorded and monitored by the Operations Center (OpCen) in 2022. The highest number of flooding was at the beginning of the rainy season in July when 43 thunderstorms were recorded.



Source: QCDRRMO Accomplishment Report, 2022

Figure RP-11. Flood Incidents per District, QC: 2022

Quezon City Drainage Master Plan

In 2021, the Quezon City Government in partnership with the University of the Philippines Resilience Institute (UPRI) formulated the Quezon City Drainage Master Plan (QC-DMP) Project. The DMP project aims to create a flood control plan for all 142 barangays in Quezon City, integrated across all 44 tributaries and 5 major water networks (QCG, 2013) that pass through the City's jurisdiction, including the areas where flooding and other drainage issues are encountered at the City's borders with its neighboring local government units (LGUs).

The project is part of the City's endeavor to understand its disaster risks, identify the informational gaps impeding the effective action of the local administration, and determine who will benefit from such risk information. The DMP project is set to be completed in 2023.

Landslide

Barangays that have 'high' to 'very high' susceptibility to landslides are Payatas, Bagong Silangan, Pansol, Batasan Hills, Commonwealth, Matandang Balara, Greater Lagro, and Loyola Heights, as shown in *Figure RP-12*. Around 20-40% of the population of Barangays Payatas, Bagong Silangan, and Pansol are located in 'high' to 'very high' susceptible areas. Meanwhile, Barangays that have moderate to high landslide susceptibility include Pasong Tamo, Holy Spirit, Escopa 2, Escopa 3, Escopa 4, Fairview, Blue Ridge A, Blue Ridge B, and Sta. Cruz, as shown in *Figure RP-13*.

The rest of Quezon City falls under 'no' to 'low' susceptibility based on data from the Mines and Geosciences Bureau. Five health centers in District 2 are in areas of moderate susceptibility. Barangays Bagong Silangan, Pansol, Batasan Hills, Matandang Balara, Greater Lagro, Commonwealth, and Loyola Heights with most road lengths on high to very high landslide susceptibility. Markers are placed in landslide-prone areas in Barangays Bagong Silangan, Payatas, Batasan Hills, and Matandang Balara.

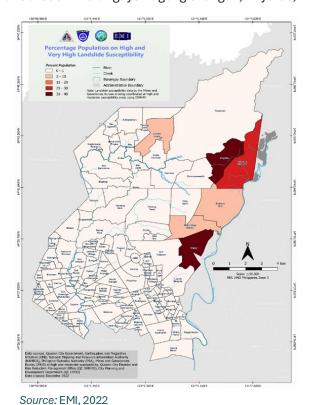
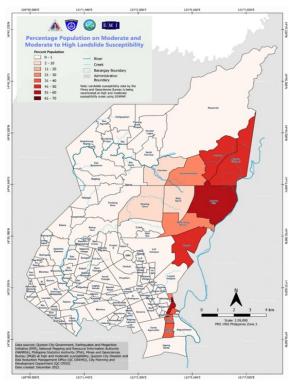


Figure RP-12. Percentage Population on High and Very High Landslide Susceptibility



Source: EMI, 2022

Figure RP-13. Percentage Population on Moderate and Moderate to High

Landslide Susceptibility

7.1.2 Geological Hazards

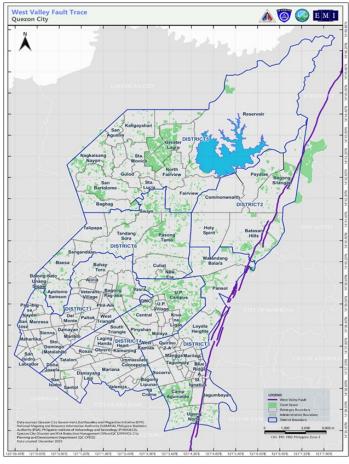
Earthquake

One of the major active faults in the Philippines is the Valley Fault System (VFS). The West Valley Fault (WVF), one of the two major segments of the VFS, transects various parts of Metro Manila including Quezon City. The 100-kilometer-long fault runs from the northeast through the southeast sections of Quezon City and passes through Barangays Bagong Silangan, Batasan Hills, Matandang Balara, Pansol, Blue Ridge B, St. Ignatius, Libis, White Plains, Bagumbayan, and Ugong Norte (See Figure RP-14).

The WVF moves roughly every 400 to 600 years and has moved four (4) times in the last 1,400 years. The last major earthquake generated by this fault was 360 years ago, in 1658. This means that the fault could possibly trigger a large earthquake within the next few years.

Also, the 2004 Metro Manila Earthquake Impact Reduction Study (MMEIRS) conducted by Japan International Cooperation Agency (JICA) projects the occurrence of a magnitude 7.2 earthquake from the movement of the WVF.

The Hazard Vulnerability Risk Assessment (HVRA) for earthquakes in the 2022 CDRA Report also focused on analyzing the impact of a



Source: EMI, 2022

Figure RP-14. West Valley Fault Trace

Magnitude 7.2 earthquake generated by the West Valley Fault (WFV) on the buildings and population of Quezon City. It is important to note that said analysis for earthquake-related hazards is scenario-based and was not derived from any actual event. The succeeding data and discussions were sourced from the 2022 CDRA Report.

Earthquake Risk Assessment

Ground Shaking Severity

The earthquake intensity in Quezon City from the 7.2 Magnitude on the West Valley Fault scenario is expected to range from about 8.25 to 10.0 on the Modified Mercalli (MMI) Scale.

The highest intensities will be in areas with soft soil conditions, particularly in areas close to the West Valley Fault, as illustrated in *Figure RP-15*.

Ground Rupture

This occurs when the movement caused along the fault by an earthquake breaks the earth's surface. This can cause severe damage to buildings, can displace roads and bridges, and could translate buried pipes and structures into cracking or lead to complete rupture.

Table RP-13. The Modified Mercalli Intensity (MMI) Scale

Intensity	Shaking	Description/Damage
I	Not felt	Not felt except by a very few under especially favorable conditions.
II	Weak	Felt only by a few persons at rest, especially on upper floor of buildings
III	Weak	Felt quite noticeably by persons indoors, especially of upper buildings. Many people do not recognize it as an earthquake. Standing motor cars may rock slightly.
IV	Light	Felt indoors by many, outdoors by few during the day. At night, some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.
V	Moderate	Felt by nearly everyone; many awakened. Some dishes, windows broken. Unstable objects overturned. Pendulum clocks may stop.
VI	Strong	Felt by all, many frightened. Some heavy furniture moved; a few instances of fallen plaster. Damage slight.
VII	Very Strong	Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable damage in poorly built or badly designed structures; some chimneys broken.
VIII	Severe	Damage slight in specially designed structures; considerable damage in ordinary substantial buildings with partial collapse. Damage great in poorly built structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned.
IX	Violent	Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb. Damage great in substantial buildings, with partial collapse. Buildings shifted off foundations.
X	Extreme	Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations. Rails bent.

Source: Wood & Neumann, 1931

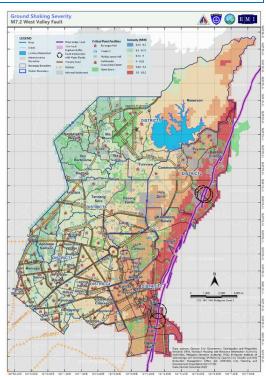
The highest intensities will be in areas with soft soil conditions, particularly in areas close to the West Valley Fault, as illustrated in *Figure RP-15*.

Districts II and III intersect the rupture zone of the West Valley Fault where Barangays Bagong Silangan, Batasan Hills, Matandang Balara, Pansol, Loyola Heights, Blue Ridge B, Libis, St. Ignatius, Bagumbayan, White Plains and Ugong Norte are situated. Major roads such as the Batasan-San Mateo Road and E. Rodriguez, Jr. Avenue intersects the fault rupture as shown in *Figure RP-16*.

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Source: EMI, 2022 guided by GMMA-RAP

Figure RP-15. Ground Shaking Intensity Range in Quezon City in the MMI Scale

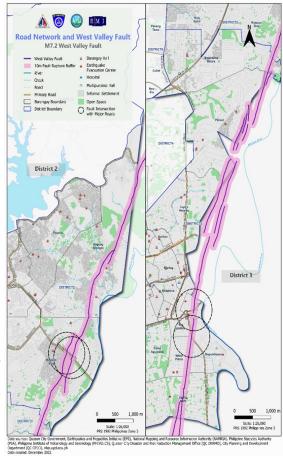
Blue Ridge B, Libis, St. Ignatius, Bagumbayan, White Plains and Ugong Norte are situated. Major roads such as the Batasan-San Mateo Road and E. Rodriguez, Jr. Avenue intersects the fault rupture as shown *in Figure RP-16*.

Liquefaction

Liquefaction will impact areas where the soil is unsaturated sandy-type soils. Based on *Figure RP-17* the barangays susceptible to landslide include Barangays Bagumbayan, Ugong Norte, Bagong Silangan, Batasan Hills, Doña Imelda, Damayan Lagi, Tatalon, Kalusigan, San Isidro Labrador, Sta. Teresita, Paang Bundok, Salvacion, NS Amoranto, Pag-ibig sa Nayon, San Jose, Sto. Domingo and Talayan.

Fire Following Earthquake

Multiple fires typically occur after a major earthquake. Areas with high potential for conflagration are gas stations, chemical factories, and power stations. In addition, the presence of informal settlements can increase the potential of fire spread due to high-density housing, combustible construction materials and narrow roads (See Figure RP-18).



Source: EMI, 2022

Figure RP-16. Fault Rupture Map

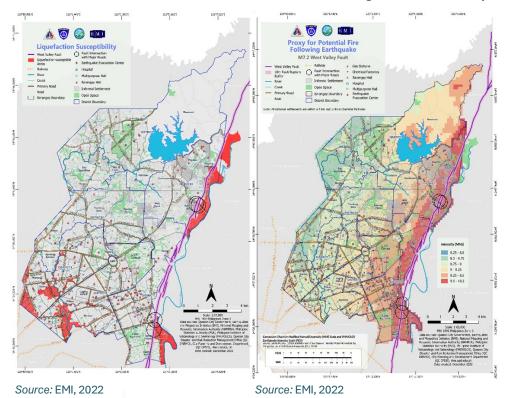


Figure RP-17. Liquefaction Susceptibility

Figure RP-18. Proxy for Potential Fire Following Earthquake

Building Damage

Damage to buildings from a 7.2 Magnitude earthquake is classified in the HVRA into six (6) increasing levels. In the event of this magnitude, the majority of fatalities will be caused by collapsed buildings.

Based on the HVRA, 48% of the existing floor area in the City is expected to suffer extensive to complete damage including collapse. *Table RP-14* shows damaged floor area should a magnitude 7.2 earthquake occur, while *Table RP-15* shows the damaged floor area for each damage level per district.

Table RP-14. Damaged Floor Area for a M7.2 Earthquake Scenario
Aggregated to the Whole Quezon City

Damage State Level	Damaged Floor Area* (sq.m.)	Percent
None	32,901,887	38.8
Slight	3,362,561	4.0
Moderate	7,831,166	9.2
Extensive	7,831,166	13.5
Complete without collapse	29,209,699	34.5
Complete Collapse	3,250,624	*
Total Area	84,710,208	100

^{*}Expressed as the sum of floor area in sq m for each damage state level

Table RP-15. Damaged Floor Area at Each Damage State for M7.2 Earthquake Scenario. Per District. OC: 2022

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Damage State		District				
Level	1	Ш	III	IV*	V**	VI
Complete with collapse	556,630	581,976	778,108	543,109	319,110	471,695
Complete without collapse	4,535,239	4,404,559	6,415,078	4,546,725	2,478,767	3,578,709
Extensive	2,364,070	1,624,414	2,352,799	2,205,332	1,202,027	1,656,256
Moderate	1,810,261	999,677	1,308,710	1,506,091	929,152	1,277,270
Slight	818,914	388,942	513,210	647,898	422,442	571,156
None	8,497,356	3,374,594	4,955,066	6,623,774	4,176,901	5,274,200

^{*} Including QMC, ** Including reservoir

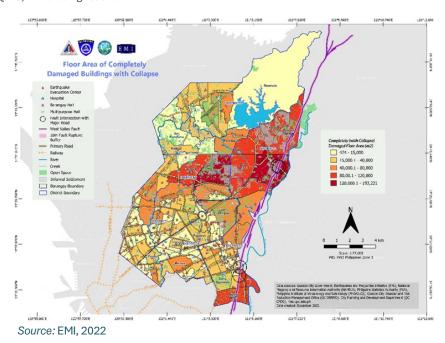


Figure RP-19. Floor Area (m²) of Completely Damaged Buildings with Collapsep Floor Area for Construction per Barangay, QC: 2022

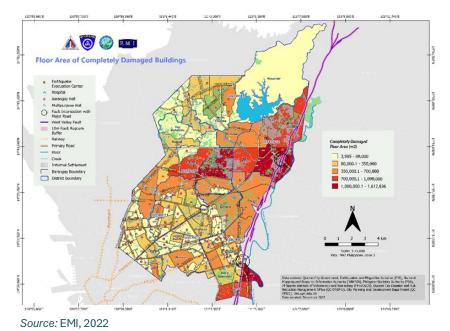


Figure RP-20: Floor Area (m²) of Completely Damaged Buildings,

Table RP-16. Top Ten Barangays for Damaged Floor Area in m2 compared to the Total Floor Area of the Barangay for Complete Damage State Level for a M7.2 Earthquake Scenario

QC:2022

Barangay	Complete with collapse	Complete without collapse	Extensive	Moderate	Slight	None
Batasan Hills	193,220	1,419,615	437,579	231,228	84,856	690,097
Pasong Tamo	121,196	890,841	345,992	241,189	102,452	832,819
Ugong Norte	110,849	837,986	264,357	135,063	48,994	452,927
Bagong Silangan	105,578	811,085	248,166	135,702	51,012	435,721
Tandang Sora	102,592	759,537	340,638	262,246	117,618	1,007,603
Holy Spirit	97,605	734,007	324,999	217,970	86,373	757,676
Commonwealth	93,535	699,300	326,653	227,956	91,059	820,604
Bagumbayan	92,111	964,165	279,357	119,159	49,203	502,074
Payatas	92,038	740,552	287,017	186,821	75,642	670,496
Matandang Balara	91,775	700,511	254,823	156,484	62,254	544,892

Source: EMI, 2022

Displaced Population

Based on the CDRA Report, out of the 3.2 million residents in Quezon City, approximately 1.5 million (48%) might be displaced from their homes in the event of an M7.2 earthquake.

All barangays in the city may have a portion of their population displaced, ranging from 25% to 75% of the total number of residents.

Fifty-four (54) of the 142 barangays in Quezon City may see between 50-75% of their total population displaced from their homes.

Fatalities and Injuries

Building collapse is the primary cause of fatalities and injuries during earthquakes. The estimated number of casualties and injuries in Quezon City based on the nighttime residential population is presented in *Table RP-17*. Should a magnitude 7.2 earthquake happen, the number of people requiring hospitalization is estimated at 41,935.

Table RP-17. Estimates of Casualties in Quezon City for a M7.2 Earthquake Scenario

Severity Level	Estimate No. of Residents	% to City Population
Slight Injuries	104,955	3.24
Serious Injuries	35,618	1.10
Life-threatening Injuries	6,317	0.19
Injuries for hos- pitalization*	41,935	1.29
Fatalities	12,494	0.39

^{*} Injuries for hospitalization = serious injuries + life threatening injuries (1.10%+0.19%=1.29%) Source: EMI, 2022

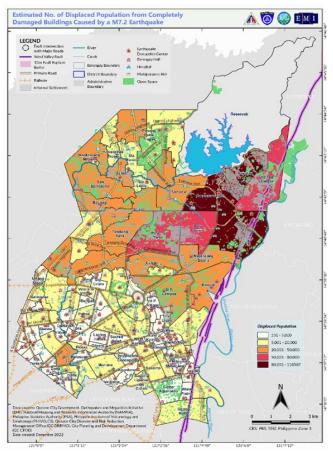


Figure RP-21. Estimated Number of Displaced Population from Completely Damaged Buildings

The top ten barangays in terms of the greatest number of fatalities and injuries requiring hospitalization are shown in *Table RP-18*.

Table RP-18. **Top 10 Barangays in terms of Displaced Population**

Barangay	Displaced Population					
Batasan Hills	118,587					
Commonwealth	106,591					
Payatas	80,212					
Pasong Tamo	70,405					
Bagong Silangan	67,639					
Holy Spirit	64,540					
Tandang Sora	45,354					
Culiat	43,507					
Matandang Balara	40,918					

Source: EMI, 2022

Earthquake Hotspots Barangays

The earthquake hotspot barangays are presented in Table 20 and graphically shown in *Figure 20*. There are twenty-four (24) barangays considered as earthquake hotspots in Quezon City. Twenty (20) barangays are in District 3, two (2) are in District 2 and two (2) are in District 4. All the barangays are very close to or transected by the West Valley Fault and rank high in terms of lack of open space, density of injuries, fatalities and displaced population compared to their total populations.

Table RP-19: Top Ten Barangays for Fatalities and Injuries Requiring Hospitalization

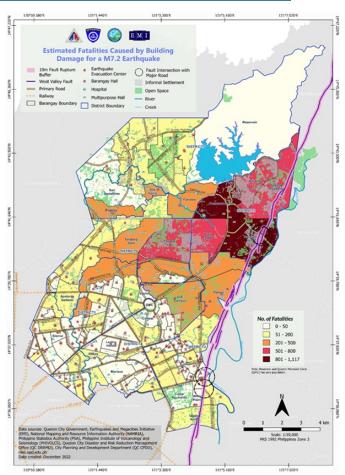
Barangay	Slight Inju- ries	Serious Injuries	Life-threatening Injuries	Fatalities
Batasan Hills	8863	3085	563	1116
Commonwealth	7259	2485	447	885
Payatas	5530	1874	329	649
Pasong Tamo	5037	1741	316	626
Bagong Silangan	4972	1714	307	607
Holy Spirit	4440	1521	273	541
Tandang Sora	3136	1076	194	385
Culiat	3062	1049	188	371
Matandang Balara	2919	1003	180	356
Bagbag	2227	745	130	257

Source: EMI, 2022

These barangays possess the highest physical and social vulnerability for earthquakes as measured by the Barangay Vulnerability Index (BVI).

In Tier 1, four (4) out of the six (6) barangays are in District 3 whereas two (2) are in District 2. The latter two barangays are large-sized barangays. All the barangays are very close to or are transected by the West Valley Fault, have severe earthquake intensities (MMI>9.6) and rank high in terms of lack of open space, density of injuries, fatalities, and displaced population compared to their total populations.

Barangay Libis in Tier 2 is expected to have the highest shaking severity with MMI close to 10 and ranked third in terms of density of displaced population, but it is in Tier 2 because it has more open space and a lower density of injuries and fatalities than the barangays in Tier 1. Most of the barangays in Tier 2 are very constrained by a lack of open space, severely impairing their mobility and access to critical-point facilities such as hospitals, health care centers, and shelters.



Source: EMI, 2022

Figure RP-22. Estimated Fatalities for M7.2
WFV Earthquake Scenario Caused by Building Damage

Table RP-20: Earthquake Hotspot Barangays as Established by the 3-tier **Barangay Vulnerability Index (BVI)**

Tier	District	BVI	Barangay
1 Very High	III	100	Blue Ridge B
Vulnerability	Ш	92	Batasan Hills
	III	90	Ugong Norte
	Ш	89	Bagong Silangan
	III	88	Escopa 4
	III	88	Blue Ridge A
2 High Vulnerability	III	85	Libis
vullerability	III	78	Villa Maria
	III	78	White Plains
	III	78	Amihan
	III	77	Escopa 3
3 Moderate	III	72	Bagumbayan
Vulnerability	III	71	Escopa 2
	IV	71	Teachers Village East
	III	70	Quirino 2-B
	III	70	Escopa 1
	III	68	Masagana
	III	68	Pansol
	III	67	Loyola Heights
	III	67	Quirino 2-C
	III	63	Marilag
	III	63	Milagrosa
	III	60	Quirino 3-B
	III	60	Teachers Village West

Earthquake Measuring Devices

1. DRRM Building, Quezon City Hall Compound

West Valley Fault Markers

1. Bagong Silangan 2. Batasan Hills 3. Matandang Balara 4. Pansol 6. Libis 5. Blue Ridge B 8. White Plains 7. St. Ignatius 9. Ugong Norte 10. Bagumbayan

Social Media Accounts

- *1 Facebook Account
- 1 Twitter Account

Long Range Acoustic Device 100x

- *3 DRRM Building, City Hall Compound
- 1 Department of Public Order and Safety

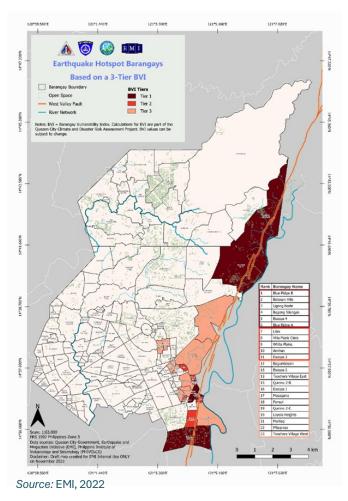


Figure RP-23. Earthquake Hotspot Barangays **Based on 3-Tier BVI**

Informative LED Panels (13)

- 1. Kalayaan Avenue in front of DRRM Building, Quezon City Hall Compound
- 2. Sta. Mesa in front of SM Sta. Mesa
- 3. Welcome Rotonda
- 4. Aurora Blvd, corner Katipunan
- 5. Fairview in front of SM Fairview
- 6. Quezon City Circle, Philcoa
- 7. Katipunan Avenue Mirriam College
- 8. C5 Eastwood Libis (2 units)
- 9. Quirino Highway Footbridge
- 10. IBP Road, Brgy. Batasan Hills
- 11. Quezon Avenue Delta (2 units)

Hand Crank Sirens

*142 units for all Quezon City Barangays

Emergency Text Alert System

*1 Emergency Text Alert System

Closed-Circuit Televisions (CCTVs)



Climate Change

A section in the CDRA Report also summarized climate projections in Metro Manila, the implications of climate change in Quezon City, and the tools for climate risk assessment in terms of mean values of temperature and rainfall as well as in terms of trends of extreme temperature and rainfall. The succeeding discussions were derived from the said report.

Climate Type

Quezon City is endowed with a climate best characterized as Climate Type I (based on the rainfall-dependent Modified Coronas Climate Classification. The city has distinct wet (June to September) and dry (December to April) periods (PAGASA 2018).

Temperature

Quezon City has also been experiencing some changes in terms of weather/climate variables called climate impact drivers notably, temperature and rainfall. The mean annual rainfall has been steadily increasing but in a highly variable way. A gradual increase is seen in the first two assessment periods (1961-1990 and 1971-2000), then a more significant increase, as much as 13%, between the two assessment periods, then a decrease in the 1981-2020 assessment.

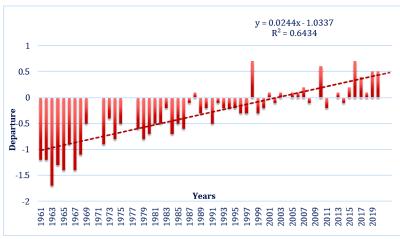
Minimum temperatures are increasing faster than maximum temperatures; and mean temperatures have also steadily increased.

Table RP-21: Decadal Changes In Climatological Normals of Temperatures and Rainfall Observed in Science Garden, Quezon City

	Climatological Normals				
Weather variable	(1961-1990)	(1971-2000)	(1981-2010)	(1991-2020)	
Maximum Temperature (°C)	31.8	32.1	32.2	32.1	
Minimum Temperature (°C)	22.3	22.8	23.1	23.6	
Mean Temperature (°C)	27.1	27.4	27.7	27.8	
Rainfall (mm)	2,403.8	2,531.0	2,574.4	2,785.6	
Number of rainy days	134	135	153	143	

Note: Climatological normals are 30-year averages of these weather parameters and being indicated here are essentially moving 30-year averages. (Adopted from PAGASA's Climatological Normals)

Figures RP-24 and RP-25 show the observed trends in the climate of Quezon City, in terms of temperature and rainfall anomalies or departures from 30-year (1990-2020) averages or normals. These indicate increasing annual trends in both mean temperatures and annual rainfall totals in Quezon City. Trend line analysis indicates that the yearly temperature has increased by one degree Celsius over 50 years.



Source: PAGASA

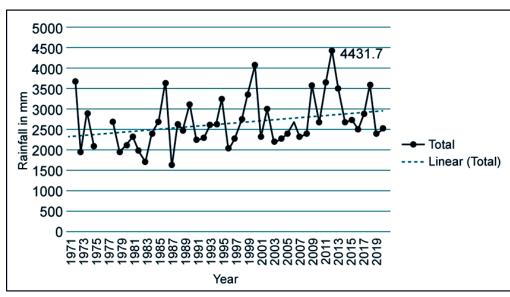
Figure RP-24. Annual Departure of Mean Temperature from the Normal (1991-2020) at Science Garden, Diliman, Quezon City

Source: PAGASA

Figure RP-25. Annual Departure of Rainfall from the Normal (1991-2020) at Science Garden, Diliman, Quezon City

Rainfall Distribution and Rainfall Extremes for Metro-Manila

The highest rainfall totals for a one-day rainfall recorded at Science Garden was on September 26, 2009, pouring 455mm of rainfall brought by tropical storm (International: Ketsana). People from Metro Manila remember that Ondoy produced one of the worst floods in Metro Manila. However. the southwest monsoon torrential rains from August 1 to 8, 2012 brought in the highest two-day rainfall totals in Metro Manila with 684mm.



Source: PAGASA

Figure RP-26. The Annual Rainfall Totals by Year Observed at the Science Garden Station in Quezon City: 1971-2020

Climate projections

Two sets of climate projections consist of changes in the mean values of temperature and rainfall, in the tropical cyclone occurrence, and in sea level rise in the country, based on data from PAGASA (2018), and in the extreme temperature and rainfall indices, according to the Philippine Climate Extremes Report (2020). (See Table RP-22).

Seasonal Mean Temperature and Rainfall Projections

A set of ranges in seasonal changes in temperature and rainfall under two emission scenarios (the moderate-emission or RCP 4.5 and the worst-emission scenario or RCP8.5) during the mid-century (2036-2065) for Metro Manila are provided in the PAGASA, 2018 Report and given below in *Table RP-23 and Table RP-24*, respectively.

Table RP-22: Characteristics and Features from Two Climate Trends and Projections Report

Characteristics	Climate Projections in the PAGASA Report, 2018	Climate Projections in the Philippine Extremes Report, 2020
Greenhouse gas emission scenarios used	RCP 4.5 and RCP 8.5	RCP 4.5 and RCP8.5
Time frames	Mid-21st century (2036-2065) Late-21st century (2070-2099)	Early future (2020-2039) Mid-future (2045-2065) Late-future (2080-2099)
Baseline used	1971-2000 climatological normals*	1986-2005 climatological normals
Weather/ climate varia- bles or parameters	Observed values based on 1971-2000 climatological normals and range of projected changes of temperatures (maximum, minimum and mean) and rainfall	Observed values based on 1986-2005 climatological normals and range of projected values of each of the climate extremes indices

^{*}Normals means the 30-year average value of the variable or parameter.

Table RP-23: Projected Seasonal changes in Temperature (°C) and Rainfall (%) under the Medium-Emission Scenario (RCP 4.5) in the Mid-21st Century (2036-2065)

Climate varia- ble	Dec-Jan-Feb	Mar-Apr-May	Jun-Jul-Aug	Sept-Oct-Nov
Mean Tempera- ture	1.0 to 1.6 °C	0.9 to 1.7°C	1.0 to 1.8°C	1.0 to 1.8°C
Rainfall	0.1%-decrease to 55%-increase	0.7% to 25.7%- increase	21.3%-decrease to 0.4%-decrease	10%-decrease to 7.7 %-increase

Source: PAGASA, 2020

Table RP-24: Projected Seasonal Changes in Mean Temperature (°C) and Rainfall (%) under the High-Emission Scenario (RCP 8.5) in the Mid-21st Century (2036-2065)

Climate varia- ble	Dec-Jan-Feb	Mar-Apr-May	Jun-Jul-Aug	Sept-Oct-Nov
Mean Tempera- ture	1.2 to 1.9 °C	1.3 to 2.2 °C	1.3 to 2.3 °C	1.3 to 2.2 °C
Rainfall	2.7% to 55%- increase	7.2%-decrease to 14.8 %-increase	17%-decrease to 7.7 %-increase	8%-decrease to 19.9 %-increase

Source: PAGASA, 2020

Tropical cyclone baseline data

A total of 71 tropical cyclones have crossed within 50 km from Metro Manila from 1948 to 2021. Among these 13 (18%) were tropical depressions, 19 (27%) were tropical storms, 4 (6%) were severe tropical storms, 26 (36%) were typhoons, and 9 (12%) were super typhoons. Thus, close to 50% of the tropical cyclones were either typhoons or super typhoons. About 18 of the 71 have crossed Metro-Manila. Typhoons that crossed within a 50 -kilometer radius of Metro Manila from 1960 to 2021.

The strongest of these windstorms were super typhoons Olive, Lusing, Welming in the 60's, Yuling and Unding in the 70s, Rosing and Loleng in the 90's. Typhoon Ulysses and Severe Tropical Storm Ondoy are shown for reference.

Frequency of recurrence of tropical cyclones

On the average, super typhoons recur almost every 90 months (7.5 years), while typhoons recure every 35 months (2.9 years).

Table RP-25: Estimated Average Return of Tropical Cyclones Within 50 km Crossing Metro Manila

Category*	Number of Occurrence	First Occur- rence	Last Occurrence	No. of months in between	Number of Recurrence	Average return (mos.)
TD	13	20/11/1948	11/08/2002	644	12	53.7
TS	19	12/10/1957	11/06/2020	751	18	41.7
STS	4	28/04/1971	24/09/2009	460	3	153.3
TY	26	23/07/1948	06/09/2021	877	25	35.1
STY	9	23/06/1960	29/10/2020	724	8	90.5

*TD – Tropical Depression; TS-Tropical Storm; STS-Sever Tropical Storm; TY-Typhoon and STY-Super Typhoon Source: PAGASA, 2020

Projections on tropical cyclone occurrence for Metro Manila

There are no detailed projections for tropical cyclone occurrence in Metro Manila. The PAGASA 2018 Report provides projections for the whole country. It is highlighted that tropical cyclones in the western North Pacific basin (in which the Philippine Area of Responsibility or the so-called PAR is situated) will see an increase in the intensity of those classified as typhoons and super typhoons. Tropical cyclone frequency is not projected to increase, although there have been changes in their trajectories.

Projection on the sea-level rise for Metro Manila

Projections on the sea-level rise as indicated in the PAGASA, 2018 Report is for the country and the increase is found to be slightly larger than the global rate. Under both emission scenarios (RCP 4.5 and RCP 8.5, the projected sea-level rise will be approximately the same until the mid-century (2036-2065), diverging only towards the end of the 21st century when that of the RCP 8.5 will be at 0.2m. It is being highlighted that the projected increase in sea level may worsen storm surge hazards and must be considered in disaster risk reduction planning.

The most important findings for Quezon City are: 1) Under a 1-m sea-level rise in the Manila Bay area, 16,365. 899 ha of land area in Quezon City will be affected, 0.03 % of which (or an estimated 5.463 ha) will be inundated; and 2) Under a 2-m sea-level rise, 14.735 ha (or approximately 0.09%) of the affected areas will be under water.

Climate Change initiatives undertaken by the Quezon City Government spearheaded by the Climate Change and Environmental Sustainability Department (CCESD) include the following:

Biodigester System

Twenty-five (25) kilograms of organic waste may be processed by these biodigesters every three (3) days, producing methane gas that can be utilized for cooking while the liquid and sludge can be used as a soil conditioner in farms.

As of 2022, a total of six (6) biodigesters were distributed to the following public markets/ urban farms: 1) KruNaLi Farm, Barangay Bagong Silangan; 2) Sharon Farm, Barangay Nova Proper; 3) New Greenland Farm, Barangay Bagong Silangan; 4) Sunnyville Farm, Barangay Tandang Sora; 5) Barangay Matandang Balara; and 6) Murphy Market.

Energy Efficiency Project – Replacement of LED Lighting Fixtures

More than 2,000 LED lights of varying specifications were procured to replace conventional lighting systems in the City Hall Compound. As of December 31, 2022, all buildings within the City Hall Compound, including the multilevel parking, have complete LED installations. All lighting fixtures in the city's community libraries have also been replaced with LEDs. Starting with Novaliches District Hospital, on-going replacement in all city-owned hospitals is underway.

Continuous Ambient Air Quality Monitoring Equipment (CAAQME)

As part of the Air Quality Monitoring Network expansion project, the Climate Change and

Environmental Sustainability Department (CCESD) procured an equipment capable of providing realtime air quality monitoring data for particulate matter with diameter size of 10 and 2.5 micrometers (PM10 and PM2.5), Nitrogen Dioxide (NO2), Sulfur Dioxide (SO2) and meteorological data (e.g. ambient temperature, relative humidity, wind speed, wind direction and rainfall).

After being identified as the final and suitable location, the reference equipment was delivered and installed at the Quezon City University-Korphil. Among the installation activities prepared were: 1) fixing of the shelter's footings; 2) installation of AC units, rail, tubing, inlets; 3) sealing; 4) installation of the project's infographics on the shelter's wall; and 5) installation of a lowcost sensor which will be permanently located at the reference station. Sensors comprised of continuous low to medium cost, non-reference air quality monitoring sensors, and automated weather sensors.

The CCESD also has a total of twenty (20) low-cost air quality sensors, eight (8) of which were donated by C40 Cities under the Baseline Air Quality Study Project in 2021. The Department also procured five (5) automated weather stations.

DENR's **Environment Management** Bureau (EMB) and Clean Air Asia (CAA) assisted in the installation of the twelve (12) sensors at Mehan Garden in Manila City (for PM2.5) and NAMRIA in Taguig City (for NO2).

As part of the monitoring network extension, ten (10) additional low-cost sensors will be procured for 2023, with six (6) sensors installed at chosen city footbridges. In accordance with this, an initial site survey was carried out on ten (10) footbridges managed by the city and MMDA, which are as follows:

- 1. Road 8
- 2. Road 20
- 3. Old Balara Footbridge
- 4. Libis Barangay Hall Footbridge
- bridge along Aurora Blvd.
- 6. Capitol Medical Center Footbridge
- 7. Sgt. Esguerra Footbridge
- 8. GMA 7 Footbridge along Timog Ave.
- 9. North Fairview/Atherton
- 5. Araneta Ave. Foot- 10. Tandang Sora Intersection, Bgy. Tandang Sora

The monitoring equipment installed on the rooftop of the Quezon City Public Library has its ozone filters changed monthly. The following locations also hold quarterly maintenance checks on their Automated Weather Stations (AWS) and Air Quality Sensors (Clarity): 1) Barangay Silangan; 2) Cubao Arayat; 3) Quirino High School; 4) Novaliches Market PS 4; 5) Quirino Highway cor. Mindanao Avenue; 6) Quirino Highway cor. St. Dominic Drive; 7) Susano Road.

Site visits have also been carried out for the automated weather stations at various areas that the Disaster Risk Reduction and Management Office and the Climate Change & Environmental Sustainability Department have identified.

Air Quality Management Plan

The drafting of the Air Quality Management Plan is underway after the Technical Assistance by C40 Cities' output was completed. This will cover air quality communication planning, emission inventory development, health impact assessment, and institutionalization mainstreaming of AQMP, with Clean Air Asia (CAA) being selected as the project's consultant.

Additionally, exploratory meetings with the DRRMO were set up to talk about the potential for integrating the city's air quality monitoring network's ground-based air quality data with the IRISEUP website.

Water Quality Management Services

In line with the Republic Act 9275 or the Philippine Clean Water Act, a Water Quality Management Plan will be developed by the City Government through the CCESD. The plan will include an assessment of the city's river system water quality, identification of water quality problems, determination of interventions, initiatives, control and preventive/mitigating measures, stakeholders' participation, recommendations, and other ways forward.

The activities and expected outputs are based on the requirements stipulated in the DENR Memorandum Circular No. 006, S-2013 (Guidelines for Water Quality Management Area Action Planning and LGU Compliance Scheme) and DENR Administrative Order No. 2013-08 (Adoption of the Integrated Water Quality Management Framework).

Reusable Materials Distribution

Field observations, orientations with retailers, and coordination with the Barangays on plastic ordinances have been carried out in accordance with the City's goal of reducing wastes by 50%.

During the whole month of September 2022, reusable bag distribution drive was conducted with over 14,700 reusable bags distributed to eight (8) Quezon City-owned public markets. The team also reminded the owners and customers on the implementation of City Ordinance No. SP-2868, S-2019. The number of reusable bags distributed per market is listed in *Table RP-26*.

Table RP-26: Number of Reusable Bags Distributed per Market, QC: 2022

Market	Date	No. of Reusa- ble Bags
1. San Jose Market	September 9, 2022	102
2. Kamuning Market	September 10, 2022	1,000
3. Murphy Market	September 16, 2022	1,500
4. Project 2 Market	September 17, 2022	300
5. Project 4 Market	September 23, 2022	1,700
6. Frisco Market	September 24, 2022	3,300
7. Roxas Market	September 30, 2022	800
8. Galas Market	October 1, 2022	6,000
TO	14,702	

Trash to Cashback

The Trash to Cashback is the City's flagship program on circular economy. Launched in March 2021, the program allows QCitizens to trade and convert their recyclables into Environmental Points (EP) which can be used to purchase essential goods and pay utility bills.

As of 2022, a total of ten (10) trading booths have been established and operational. Six (6) have been put up in each district, while three (3) trading booths in Meralco Business Centers and one (1) at the Lagoon area in the Quezon City Hall Compound have been set up.

Pop-up trading was launched on Earth Day

to barangays and schools upon their request. As of December 2022, thirty-three (33) pop-up trading events generated almost 31,250 kg of recyclables and single-use plastic traded, which converts to over 83,446 Environmental Points or Php 83,446. Additionally, more than 600 kg of election materials were converted to 333 Environmental Points in May through a pop-up trading event at the Manila Seedling Bank.

By the end of 2022, the city recorded a total of 124,000 kgs recyclables traded and earned a total of 380,000 Environmental Points (EP).

Webinar Series on Climate Change and Environmental Sustainability

The CCESD held a series of webinars which comprised of lectures, interactive virtual presentation, and face-to-face seminars participated in by students from various schools. The events highlighted the importance of climate change and environmental sustainability and emphasized the role of students as well as the importance of stakeholder engagement to the city's climate actions.

The series included a Water Education Webinar series which sought to raise awareness on the importance of water conservation and provide information on the city's water source, and the management of water and wastewater. Modules on other topics relevant to climate change and environmental sustainability are currently being developed for future webinars and seminars.

Eco-Market

The city also hosted an Eco Market at Quezon Memorial Circle every Saturday in December 2022. The initiative is aimed at encouraging local businesses that market sustainable and healthy goods to offer ecofriendly alternatives to the community throughout the Christmas season.

Urban farmers from Sunnyville and Sharon Farm, in Quezon City displayed their fresh produce and post-harvest goods. Others also displayed a variety of eco-friendly goods,

including bamboo straws, toothbrushes, organic shampoo, and body bars.

Tree Planting

In 2022, the Climate Change and Sustainability Department (CCSD) in partnership with Parks Development and Administrative Department (PDAD) launched the One Million Trees initiative. Aimed at reaching one million endemic trees throughout the city by 2030, the project is pursued in accordance with the City's commitment to pursue net-zero emissions by 2050.

To kick start the project, the city held a tree-planting event at Barangay Pasong Putik, Sacred Heart Village. The Sacred Heart Village Homeowners' Association (SHVHA) identified the tree-planting location while the PDAD coordinated the launching event. Present were personnel from the Department, PDAD, Quezon City's Youth Development Office, SHVHA, together with youth volunteers, composed of members of the Sangguniang Kabataan (SK) and youth clubs in the city.

7.1.3 Anthropogenic Hazards

Anthropogenic hazards also known as human-made hazards which can result in the form of a man-made disaster. "Anthropogenic" means threats having an element of human intent, error or negligence or involving a failure of a man-made system causing one or more identifiable disastrous events. This hazard may include fire, industrial explosion, stampede, and terrorism, as discussed in the succeeding sections.

Fire

Fire Incidence

In 2022, the Quezon City Fire District responded to 597 fire incidences, a decrease of 460 incidences from the 2019 figure of 1,057. The amount of losses due to these fire incidences is ₱105,980,560.00. Of the said fire incidences, 36.68% or 219 were structural in nature involving buildings, houses and other structures while 63.32% or 378 are non-structural (grass, rubbish, forest, motor vehicle). More than half (67.06%) of the causes of fire

were electrical or those involving MERALCO/ NAPOCOR facilities such as electrical posts, primary and secondary distribution lines and transformers, while 32.94% of the fire incidences are non-electrical causes such as cigarette butts smoke and LPG tanks/stove.

Fire Protection and Prevention

Fire protection and prevention services are rendered by the Quezon City Fire District (QCFD) which has thirty-one (31) fire sub-stations in 2022 against twenty-nine (29) fire sub-stations in 2020. These facilities are distributed in the city's six (6) congressional districts. 25.

There were 532 firefighters complemented by 39 fire brigades and 25 private fire volunteers. The present firemen-population ratio stands at 1:5,867 way below the standard ratio of 1:2,000. At the present ratio, the number of persons a city fireman services is more than twice the number of people he can effectively serve. Clearly there is a shortage in the city's firefighting force of about 1,029 firemen. The QCFD has thirty-three (33) fire trucks.

The 2022 fire-substation to land area ratio is 1:5 sq.km. against 1:6 sq.km. in 2019. Although there was a reduction in the fire-substation-land area ratio due to the existence of additional two (2) fire-substations from the previous number of said facility, the ratio is still below the standard fire-substation land area ratio of 1:4 sq.km. The required fire-substation in the city therefore is 40, thus with the existing 31 fire-substation there is still an acute shortage of 9 fire-substations.

Industrial Hazards

Industrial hazards are threats to people and life-support systems that arise from the mass production of goods and services. When these threats exceed human coping capabilities or the absorptive capacities of environmental systems they give rise to industrial disasters. Industrial hazards can occur at any stage in the production including extraction, processing, process, manufacture, transportation, storage, use, and disposal. This usually occurs in the form of explosions, fires, spills, leaks, or wastes. Releases may occur because of factors that are internal to the industrial system or they may occur because of external factors. Releases may be sudden and intensive, as in a power-plant explosion, or gradual and extensive, as in the build-up of ozone-destroying chemicals in the stratosphere or the progressive leakage of improperly disposed toxic wastes.

Industrial Explosion

Industrial explosion involves the production of a pressure discontinuity or blast wave resulting from a rapid release of energy. A pressure disturbance is generated into the surrounding medium. Air becomes heated due to its compressibility and this leads to an increase in the velocity of sound, causing the front of disturbance to steepen as it travels through the air. The loading and hence the damage to the nearby targets are governed by the magnitude of and duration of pressure waves. The explosion mainly occurs due to the rapid combustion of a flammable material but can be brought about by the chemical reactions other than combustion, provided they release large amount of energy (heat).

Types of Industrial Explosion

♦ Chemical Explosion

Chemical explosions in plant or in vessel can arise due to exothermic reaction occurring internally. Such reaction may involve decomposition of unstable substances. polymerization of monomers, or combustion of fuel oxidant mixtures. Heating and increase of molecular number can result in a rise in pressure to the bursting point of the vessel, and explosives decompose SO quickly that confinement and the development of pressure are self-imposed.

♦ Physical Explosion

Physical Explosion occurs simply due to over pressure as in the case of steam boiler and air receiver explosions. Fire is not necessarily a consequence. But fire involving stock, buildings and plant ancillaries can cause physical explosions due to overheating followed by overpressure in vessels and also fireballs if contents are flammable.

Industrial establishments commonly used hazardous substances. Said substances are compounds and mixtures that pose a threat to health and property because of their toxicity, flammability, explosive potential, radiation or other dangerous properties. Hazardous chemicals may present physical hazards, although this is more common in transportation and industrial incidents. Common causes of industrial explosion include:

- Boilers that are not properly cared for;
- Careless cigarette smoking while on premises;
- Malfunctioning and dangerous equipment;
- Improper maintenance of machinery;
- Unseen corrosion;
- The use of impure or dirty chemicals; and
- Failing to properly train all employees.
- Environmentally-sound management of these hazardous chemicals being produced, stored, used, treated or disposed of in industrial facilities should be done to minimize the incidence of explosion.

♦ Incidence of Industrial/Gas Explosion

In 2012, incidence of gas leakage was reported in Barangay Sta. Cruz where about 300 people was affected. Some of the victims were temporarily sheltered in the barangay hall while some were brought to the hospital due to eye irritation and difficulty in breathing. It was known that the gas that has leaked was Ammonia or "anhydrous ammonia" a colorless, corrosive and highly irritating gas with suffocating smell that can irritate or burn the nose, throat and respiratory tract, eyes and skin and can cause dizziness and nausea among victims. Ammonia is commonly used refrigerant in large freezing and refrigeration plants such as those involved in ice making, dairy products manufacturing and cold storage.

Meanwhile, fume leakage was also experienced in Barangay Pinyahan. Said fumes leaked from a chemical tank which was described as the smell of a muriatic acid. Victims of such leak were brought to hospitals.

Another incident was in Bgy. Pinyahan, wherein several people were hospitalized due to fumes that leaked from a chemical tank which was described the smell to that of muriatic acid.

Industrial explosion may possibly occur in industrial establishments under high risk category such as big scale manufacturing industry, junkshops, gasoline station, LPG retailer, etc.

Mass Hysteria/Stampede

Human stampede is global phenomenon. It has occurred in various parts of the world over the years. One stampede incident occurred in the Philippines is the Wowowee Stampede. This incident happened on February 4, 2006 at the Philsports Football Stadium (formerly ULTRA) in Pasig City. The stampede resulted in the loss of many lives and injured hundreds of people from the almost 30,000 people who waited in long queue outside the stadium to participate in the said event. According to reports, most of the victims were elderly women who were crushed against a steel gate on the stadium's slope entrance and one child also died. A fact-finding team created to investigate the case revealed that there was lack of coordination between the security guards of the organizers, PhilSport security guards, local police and relevant government agencies and the absence of a worked-out contingency plan for the huge crowd.

It may also be recalled that a stampede occurred when a fire broke out in the Ozone Disco Nightclub in Quezon City on the tragic night of March 18, 1996 where there were reported 162 deaths and 95 injuries. Generally, the cases of human stampede have resulted in massive human injury as well as appreciable death tolls.

Quezon City is not spared from possible occurrences of stampede due to the presence of big shopping malls, concert, sports, entertainment venues such as the Araneta Coliseum, SM Skydome, etc. The existence of train systems such as the Light Rail Transit (LRT) and Metro Rail Transit (MRT) in the city is also a potential location of human stampede.

The city observes the following interventions on how to mitigate this form of disaster, especially for planned mass

gatherings or where mass crowding is anticipated

- Make sure that the infrastructure such as roads, corridors, open spaces, entrances and exits is suitable for the mass gathering so that there is enough capacity and there are no bottlenecks or other compression points.
- There should be crowd management plan that is followed, which includes crowd monitoring, scheduling and control.
- There should be good contingency plans (e.g. evacuation) in case anything goes wrong
- Creation of functional mobile clinics.
- Provision of stationary ambulance(s).
- Provision of well multiple "marked and manned" emergency entrances and exits in public event centers.
- There should be pragmatic crowd control mechanism based on pro-active and early warning techniques to prevent occurrence of crowd disasters.
- Optimization of human volume and movements at public event centers to avoid stiff congestion as well as pressure on available space and facilities.

Terrorism

Terrorism, as defined by Merriam-Webster dictionary, is the systematic use of terror especially as a means of coercion. It is the unlawful use of force or violence by a person or an organized group against people or property with the intention of intimidating or coercing societies or government, often for ideological or political reasons. In the Philippines, terrorism perpetrated by rebel organizations against the government, its citizens and supporters. Most terrorist acts in the country are conducted by separatist groups like the Moro Islamic Liberation Front (MILF), Moro National Liberation Front (MNLF) and the Abu Sayyaf Group (ASG). The Philippine government is also fighting a long running war with the communist New People's Army who are much larger that the Islamic terrorist groups.

Public mass transport and places of big gatherings such as churches, street markets and people assemblies are favorite targets of terrorists.

Incidence of Terrorism

The Rizal Day bombings were a series of bombings that occurred during a national holiday (December 30, 2000) in close sequence within a span of a few hours. More than twenty (20) fatalities were reported and about a hundred more were non-fatal injuries. The blast occurred in five (5) different locations in Manila namely: Plaza Ferguson in Malate; cargo handling area of the Ninoy Aquino International Airport; at a gasoline station along EDSA across the Dusit Hotel in Makati City; inside a bus while travelling along EDSA and a train cab at the Blumentritt Station of the LRT Line 1. The explosion at the LRT Line 1 claimed the most number of casualties. Three of the several arrested members of the Jemaah Islamiyah were later sentenced by the Manila Trial Court of imprisonment for multiple murder and multiple frustrated murder.

In Quezon City, one recorded terrorist act is the vehicle bomb explosion which happened on November 13, 2007 near the south lobby of the main building of the House of Representatives and claimed the lives of six (6) people including Basilan congressman Wahab Akbar and his congressional aides. Several staffs were also hospitalized in the attack. It was alleged that the Abu Sayyaf group claimed responsibility for the act.

7.2 RISK REDUCTION AND MANAGEMENT

Disaster Risk Reduction and Management (DRRM) policy and practice in Quezon City are regulated and organized by several related executive orders and ordinances. The most pertinent of these are the following:

7.2.1 Executive Orders

- Executive Order No. 07, S-2010, organizing the QCDRRMC and defining the functions, the composition, and the specific roles and responsibilities of its members.
- Executive Order No. 23, S-2010, organizing the Quezon City Disaster Risk Reduction and Management Council (QCDRRMC), redefining its functions, providing for its composition and for other purposes, pursuant to Republic Act No. 10121 otherwise known as "Philippine Disaster

Risk Reduction and Management Act of 2010"

• Executive Order No. 71, S-2011, creating a special task group called the West Valley Fault Task Group under the QCDRRMC. This group is tasked to focus on earthquake mitigation measures and to ensure the safety off the inhabitants within the five (5) to ten (10) meter buffer zone of the West Valley Fault, and to determine the response of the Quezon City Government (QCG). The task group is led by the City Vice Mayor and represented by different offices of the QCG.

Quezon City Disaster Risk Reduction and Management Plan 2021-2027

- Executive Order No. 5, S-2013, establishing and tasking the QCDRRMO to begin a coherent, integrated, proficient, and responsible management system to address all forms of disasters, reduce risk to human life and property, mitigate potential damage and destruction including the implementation of fast recovery and rehabilitation efforts in postdisaster conditions.
- Executive Order No. 11, S-2016, reorganizing the Quezon City Disaster Risk Reduction and Management Council (QCDRRMC), pursuant to RA 10121, Ordinance No. SP-2290, S-2014, and Ordinance No. SP-2424, S-2015, redefining its functions, providing for its composition and for other purposes
- Executive Order No. 11A, S-2016, authorizing
 the Quezon City Disaster Risk Reduction and
 Management Council (QCDRRMC) and the
 Barangay Disaster Risk Reduction and
 Management Council (BDRRMC) to implement
 preemptive or forced evacuation as a last resort
 in areas declared to be in imminent danger of
 loss of lives in times of natural or man-made
 disaster.
- Executive Order No. 11B, S-2016, institutionalizing the use of the Incident Command System (ICS) as an on-scene disaster response and management mechanism
- Executive Order No. 9, S-2017, implementing City Ordinance No. SP-2502, S-2016, otherwise known as the Quezon City Comprehensive Zoning Ordinance of 2016

- Executive Order No. 4, S-2019, reconstituting the Quezon City Disaster Risk Reduction and Management Council (QCDRRMC), and reaffirming with modifications the composition, organization, functions, and funding thereof
- Executive Order No. 7, S-2019, reorganizing the Quezon City Disaster Risk Reduction and Management Council to include the Novaliches District Center
- Executive Order No. 8, S-2019, constituting the Quezon City Infrastructure Audit Team, pursuant to Department of the Interior and Local Government Memorandum Circular No. 2011-47

7.2.2 QCDRRMC Resolutions

- QCDRRMC Resolution No. 1, S-2013, adopting the "Quezon City Disaster Risk Reduction and Management Plan 2014-2020 and its Annexes," subject to all laws and existing legal rules and regulations
- QCDRRMC Resolution No. 2, S-2016, adopting the "Quezon City Operations Manual," subject to all laws and existing legal rules and regulations
- QCDRRMC Resolution No. 3, S-2016, adopting the four (4) Civil Society Organizations (CSOs) as members of the Quezon City Disaster Risk Reduction and Management Council (QCDRRMC)
- QCDRRMC Resolution No. 4, S-2017, adopting the "Local Disaster Risk Reduction and Management Fund for 2017 and Quick Response Fund 2017," subject to all laws and existing legal rules and regulations
- QCDRRMC Resolution No. 6, S-2017, adopting the "Quezon City Emergency Operations Center Protocols," subject to all laws and existing legal rules and regulations
- QCDRRMC Resolution No. 4, S-2018, adopting the updated "Quezon City Contingency Plan for Earthquake," subject to all laws and existing legal rules and regulations

- QCDRRMC Resolution No. 6, S-2018, adopting the "Quezon City Disaster Risk Reduction and Management Plan (QCDRRMP 2018)," subject to all existing laws, rules, and regulations
- QCDRRMC Resolution No. 7, S-2018, formalizing the agreements among the hospitals and other medical facilities located along the Novaliches Area and to subsume their resources under the Health Response Cluster of the Contingency Plan for Earthquake
- QCDRRMC Resolution No. 9, S-2018, requiring businesses, educational institutions, and health care facilities to submit their DRRM Plans, Contingency, Emergency Plans, and other related plans to the Quezon City Government for integration into the City's Plans for DRRM
- QCDRRMC Resolution No. 10, S-2018, adopting the "Unexpended Fund 2013-2017," subject to all relevant laws and existing rules and regulations
- QCDRRMC Resolution No. 11, S-2018, adopting the updated "Quezon City Contingency Plan for Hydrometeorological Hazards-Extreme Rainfall," subject to relevant laws and existing rules and regulations
- QCDRRMC Resolution No. 12, S-2018, adopting the "Local Disaster Risk Reduction and Management Fund and Quick Response Fund for Fiscal Year 2019," subject to relevant laws and existing rules and regulations
- QCDRRMC Resolution No. 13, S-2018, adopting the "Quezon City Disaster Risk Reduction and Management Plan (QCDRRMP 2019)", subject to all existing laws, rules, and regulations
- QCDRRMC Resolution No. 1, S-2019, adopting the "Local Disaster Risk Reduction and Management Plan and Fund 2020 amounting to PHP 1,180,380,939.00 subject to relevant laws and existing rules and regulations
- QCDRRMC Resolution No. 2, S-2019, adopting the Unexpended Fund 2014-2018 amounting to the available appropriation

- transferred to Special Trust Fund of PHP 1,571,690,344.82 subject to relevant laws and existing rules and regulations
- QCDRRMC Resolution No. 1, S-2020, recommending a State of Calamity due to the Coronavirus Disease 2019 (COVID-19)
 Outbreak in Relation to the Inter-Agency Task Force for the Management of Emerging Infectious Disease (IATF-EID) Resolution No. 11, S-2020, declaring Community Quarantine of the Entire Metro Manila
- QCDRRMC Resolution No. 2, S-2020, adopting the "Quezon City Operations Center Manual," subject to relevant laws and existing rules and regulations Quezon City Disaster Risk Reduction and Management Plan 2021-2027
- QCDRRMC Resolution No. 3, S-2020, adopting the Guidelines for the Selection of Representatives from the Civil Society Organizations (CSOs) to the Quezon City Disaster Risk Reduction and Management Council
- QCDRRMC Resolution No. 4, S-2020, recommending amendments to the Composition of the Four (4) Thematic Committees under the Quezon City Disaster Risk Reduction and Management Council (QCDRRMC)
- QCDRRMC Resolution No. 5, S-2020, adopting the Guidelines on COVID-19 Preparedness Measures for Rainy Season and Response to Fire Situations
- QCDRRMC Resolution No. 6, S-2020, adopting the Quezon City Disaster Risk Reduction and Management Plan 2021-2027, subject to Laws and existing Legal Rules and Regulations
- QCDRRMC Resolution No. 7, S-2020, recommending World Vision Development Foundation, Inc. and Task Force Streetlights as Members of the Quezon City Disaster Risk Reduction and Management Council
- QCDRRMC Resolution No. 8, S-2020, establishing the Quezon City Continuity Core Team for the Formulation of the Public Service

- Continuity Plan
- QCDRRMC Resolution No. 1, S-2021 adopting the Quezon City Public Service Continuity Plan
- QCDRRMC Resolution No. 2, S-2021, approving the enhancements of the Quezon City Contingency Plans and Amending the Response Clusters Thereof
- QCDRRMC Resolution No. 3 S-2021, adopting the Local Disaster Risk Reduction and management Fund Investment Plan 2022 and the Unexpended amount to PhP1,295,162,500.00 subject to relevant laws and existing rules and regulations
- QCDRRMC Resolution No. 4, S-2021, extending the Amount of Thirty Million Pesos (30,000,000.00) to Selected Local Government Units in Southern Leyte, Cebu, Negros Oriental and the Provincial Government of Bohol and Other Means of Humanitarian Support by the Quezon City Government
- CEPC Resolution No. 1, S 2022 Resolution Authorizing the Ad Hoc Committee to Approve and Adopt the Localized Comprehensive Emergency Program for Children
- QCDRRMC Resolution No. 1, S 2022
 Resolution Recommending the Honorable Mayor the Approval of the Procedures on Preemptive or Forced Evacuation of Local Residents in Times of Emergency or Disaster
- QCDRRMC Resolution No. 2, S 2022
 Resolution Extending Various Humanitarian
 Assistance to the Provincial Government of Abra and the City Government of Vigan, Ilocos Sur by the Quezon City Government
- QCDRRMC Resolution No. 3, S 2022
 Resolution Adopting the Minimum
 Requirements and Guidelines for
 Accreditation, Mobilization, and Protection
 of Community Disaster Volunteers to
 enhance volunteer readiness and
 effectiveness in disaster response

- QCDRRMC and QCPC Joint Resolution No. 1,
 S 2022 Joint Resolution Requesting the 22nd
 City Council to Adopt the Localized
 Comprehensive Emergency Program for
 Children (CEPC) for 2021-2023
- QCDRRMC Resolution No. 4, S-2022
 Resolution Recognizing Manila Observatory,
 UNTV Rescue, Center for Disaster
 Preparedness Foundation Inc., Holy Name of
 San Pedro Bautista Parish, and Philippine
 disaster Resilience Foundation as Members of
 the Quezon City Disaster Risk Reduction and
 Management Council
- QCDRRMC Resolution No. 5, S-2022 A
 Resolution Adopting the Local Disaster Risk
 Reduction and Management Fund Investment
 Plan (LDRRMFIP) and Quick Response Fund
 (QRF) FY 2023 Amounting to One Billion Three
 Hundred Fifteen Million Eight Hundred Nineteen
 Thousand Three Hundred Ninety-Seven Pesos
 and Zero Centavos Only PHP 1,315, 819,
 397.00 Subject to Relevant Laws and Existing
 Rules and Regulation

7.2.3 City Council Resolutions

- Resolution No. SP-6006, S-2014, requesting the City Mayor to direct the concerned Department/Office of the Quezon City Government in accrediting potential disaster response volunteers in the Quezon City Disaster Risk Reduction and Management Office and the barangay where the employee-volunteers are residing
- Resolution No. SP-6111, S-2014, urging the Quezon City Disaster Risk Reduction and Management Council to institutionalize the conduct of semi-annual synchronized emergency and disaster drills in all schools, shopping malls, hospitals, office buildings, and residential condominiums in Quezon City every first Monday of March and first Monday of September in coordination with the Department of Public Order and Safety and the Quezon City Fire District, and with the assistance of Government Hospitals in Quezon City

- Resolution No. SP-7086, S-2017, adopting "The Quezon City Local Climate Change Action Plan (QCLCCAP) and its Annexes," subject to existing laws, rules, and regulations
- Resolution No. SP-7092, S-2017, adopting the "Quezon City Contingency Plan for Flood," subject to all laws and existing legal rules, and regulations
- Resolution No. SP-7098, S-2017, adopting the "Quezon City Contingency Plan for Earthquake," subject to all laws and existing legal rules, and regulations
- Resolution No. SP-7099, S-2017, adopting the "Quezon City Disaster Risk Reduction and Management Plan 2014-2020 and its Annexes," subject to all laws and existing legal rules and regulations
- Resolution No. SP-7104, S-2017, adopting the "Quezon City Operations Manual," subject to all laws and existing legal rules and regulations
- Resolution No. SP-7460, S-2018, adopting the updated "Quezon City Contingency Plan for Earthquake," subject to all laws and existing legal rules and regulations

7.2.4 Ordinances

- Ordinance No. SP-1560, S-2005, mandating that all personnel of Barangay Disaster Coordinating Councils in Quezon City shall undergo periodic and refresher courses in Safety and Disaster Prevention and Mitigation in order to improve the capability of the barangay councils to immediately address such incidents and problems in their areas of jurisdictions.
- Ordinance No. SP-2029, S-2010, mandating the establishment of an emergency and information help line to be known as "QC 122" under the Radio Communications Service of the Office of the City Mayor defining its functions and responsibilities
- Ordinance No. SP-2112, S-2012, requiring every Barangay to organize a Barangay Emergency Response Team and to address

- cases of immediate risk to life and health, to ensure prompt and efficient response to emergencies within the barangay.
- Ordinance No. SP-2232, S-2013, establishing the Guidelines for the transfer of Quezon City Disaster Risk Reduction and Management Fund to other Local Disaster Risk Reduction and Management Councils which are declared under state of calamity
 - Ordinance No. SP-2262, S-2014, mandating all private and public school teaching and nonteaching personnel to undergo risk reduction training, pursuant to Republic Act No. 10121, otherwise known as the Philippine Disaster Risk Reduction Management Act of 2010
 - Ordinance No. SP-2290, S-2014, creating the Quezon City Disaster Risk Reduction and Management Office (QCDRRMO), defining its functions, duties, and responsibilities, providing for its composition, appropriating funds thereof and for other purposes
 - Ordinance No. SP-2424, S-2015, amending Ordinance No. SP-2290, S-2014, to correct the position titles, qualification standards, and salary grades of the technical staff of the Quezon City Disaster Risk Reduction and Management Office (QCDRRMO), pursuant to Joint Memorandum Circular 2014-1, and other pertinent civil service commission circulars
 - Ordinance No. SP-2549, S-2016, establishing a mandatory seismic retrofitting program for Quezon City-Owned and Barangay -Owned Buildings, particularly those built before the 1990 Earthquake, adopting Engineering and Environmental/Green Building findings of local conditions, appropriating funds thereof, and for other purposes
 - Ordinance No. SP-2674, S-2017, requiring owners, managers, administrators, operators, or principals of all establishments within the territorial jurisdiction of Quezon City to conduct earthquake drills among tenants, occupants, students, and employees therein twice a year

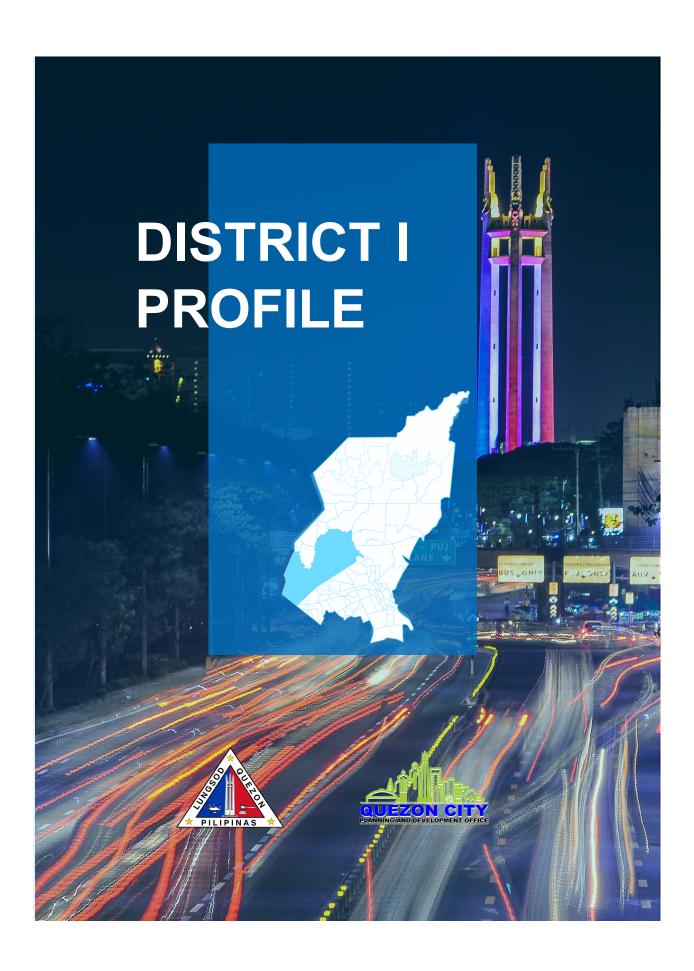
- Ordinance No. SP-2688, S-2018, institutionalizing the use of the Incident Command System (ICS) as an on-scene Disaster Response and Management Mechanism
- Ordinance No. SP-2711, S.2018, creating the Quezon City Emergency and Risk Reduction Management Program for the Youth and Children and providing funds thereof
- Ordinance No. SP-2865, S-2019, An Ordinance providing free Mortuary Services for qualified indigent Quezon City Residents, appropriating funds therefore and for other purposes

7.2.5 Memorandum Circulars

- Joint Memorandum Circular No. 2019-01, Amendment to the DILG QC Field Office -Liga ng mga Barangay and Quezon City Government Joint
- Memorandum Circular No. 2017-01 dated April 17, 2017 re: Preparation of Annual Budget and Supporting Development/ Sectoral Plans
- Memorandum Circular No. 01, S-2020, General Guidelines for Public on the Localized Cancellation or Suspension of Classes and Work in Government Offices
- Guidelines on COVID-19 Preparedness Measures for Rainy Season
- Guidelines for Response Operations in Fire Situations during the COVID-19 Pandemic
- Disinfection and Cleaning Operations Protocol for COVID-19

ANNEXURES

Annex 1
DISTRICT PROFILES



SOCIAL PROFILE

Health Facilities

Public Hospitals	3
Regular Health Centers	12
Super Health Centers (with lying-in clinics)	1
Health Stations	-
Social Hygiene Clinics	1
Sundown Clinics	1
Adolescent Teen Health Quarters	-
QC Hall Employee's Clinic	-
Microscopy Centers	3
Clinical Laboratory	1
Social Hygiene Clinic/ Sundown Clinic Laboratory	1
Quality Assurance Center	1
Molecular Laboratory	-
Public Cemeteries	-
Public Crematorium	-
Private Hospitals	7
COVID-19 Hope Facilities	2
Source: Quezon City Health Department, 2	022

Social Welfare Facilities

Day Care Centers	44
Supervised Neighborhood Play (SNP)	5
Kabahagi Center/ Community-based Therapeutic Rehabilitation Center for PWDs	-
QC Women Crisis/ Protection Center	1
Reception and Action Center	-
Molave Youth Home	-
Senior Citizens Day Center	1
QC Drug Treatment and Rehabilitation Center (TAHANAN)	-
Bahay Arugaan (Home for the Elderly)	-
Bahay Kanlungan	-
Bahay Kalinga	1
Sources: Social Services Development Departmen (SY 2021-2022)	et, 2022

Park Facilities

Basketball Court	23
Half Court	2
Covered Basketball Court	28
Badminton Court	2
Volleyball Court	0
Tennis Court	9
Covered Tennis Court	4
Swimming Pool	2
Playsystem	25
Multi-purpose Hall	27
Barangay Hall	21
Health center	7
Day care Center	14
Entrance Arch	14
Gazebo	16
Stage	8
Police Station	3
Fire Station	7
Library	4
Deeds of Donation	63
Source: PDAD, 2021	

Housing

Number of Households	103,448 (projected 2020)
Number of Occupied Housing Units	99,470 (projected 2020)
Number of Informal Settler Families	
Number of Socialized Housing Projects Completed (as of 2020)	11
Number of Socialized Housing units Completed (as of 2020)	2,804
Number of Economic Housing Projects Completed (as of 2020)	1
Number of Economic Housing units Completed (as of 2020)	99
New Housing Needs (2020)	
Doubled Up Households Unacceptable Housing Units Displaced Units Homeless	3,978
Source: Housing Community Development a	nd Resettlement

Source: Housing Community Development and Resettlement Department, 2020

Educational Facilities

Kindergarten	95	
Public Elementary Schools	95	
Public Secondary Schools	63	
Private Schools	579	
Colleges and Universities	95	
Public Libraries	19	
Vocational/Technical Schools	123	
Sources: School Division Office Department of Ed		

Sources: School Division Office, Department of Education, QC Public Library, 2022

Protective Services

Police Stations	4
Police Force	651
Police-Population Ratio	1:592
Fire Substations	7
Firemen	85
Firemen-Population Ratio	1:4,530
Sources: QCPD and QCFD, 2021	

ECONOMIC PROFILE

No. of Business Establishments (2022)	17,477
New Establishments	2,212
Establishments for Renewal	15,265
Tourism areas, zones and spots	18
Heritage Sites	2
Historical Sites	2
Landmarks	6
Other Cultural Properties	8

DOT Accredited Accommodation	
Facilities	20
Hotels	5
Mabuhay Accommodation	15
Apartment hotel	-
PEZA-Accredited Information Technology (IT) Parks	
and Centers	11
IT Park	3
IT Center	8

Sources: QC Information Technology Development Department (QC-ITDD), QC Tourism Department (QC-TD), 2022

ENVIRONMENTAL MANAGEMENT

Status of Parks & Open Spaces (With Deed of Donation)

Donation)		
Developed	33	
Undeveloped	57	
TOTAL	70	
Source: PDAD, 2022		

Waste Management

	2021 Estimated Population	385,041
	Projected per Capita per Kg/Person/Day	1.1437
	Projected Waste Generation per Day	440,371.39
1	Annual Projected Waste Generation	160,735,557.97
	Source: EPWMD, 2018	

DRRM

Public Evacuation Centers	92
Private Evacuation Centers	20
Fiber Boats	3
Rescue Boats	7
Public Fire Trucks (City-wide)	71
Private Fire Trucks (City-wide)	117
Source: QCDRRMO, 2022	

Material Recovery

Materials Recovery System	15
Materials Recovery Facility	18
Source: DSQC, 2022	

INFRA INDICATORS

Existing Roads	Length (Kms.)			
Concrete	258.38			
Asphalt	66.64			
Natural/Earth Surface	0.10			
	227.12			
Total	325.12			
Source: CPDD-GIS, 2022				

LEGISLATIVE DISTRICT HEADS

Period	Representative
1987-1995	Renato A. Yap
1995-2004	Reynaldo A. Calalay
2004-2013	Vincent P. Crisologo
2013-2016	Francisco A. Calalay, Jr.
2016-2019	Vincent P. Crisologo
2019-2022	Anthony Peter D. Crisologo
2022-Present	Juan Carlos O. Atayde
Source: https://en.v	wikipedia.org/wiki/

Source: https://en.wikipedia.org/wiki/ Legislative_districts_of_Quezon_City



DISTRICT ACTION OFFICE

District Action Officer Oliviere T. Belmonte

Location 176 E. Beltran St., Bgy. Katipunan, Quezon City

PHYSICAL ENVIRONMENT

Location: Western part of the city bounded by Manila and Caloocan City

Land Area 1,959.39 has (19.5939 km²)

Number of Bgys 37

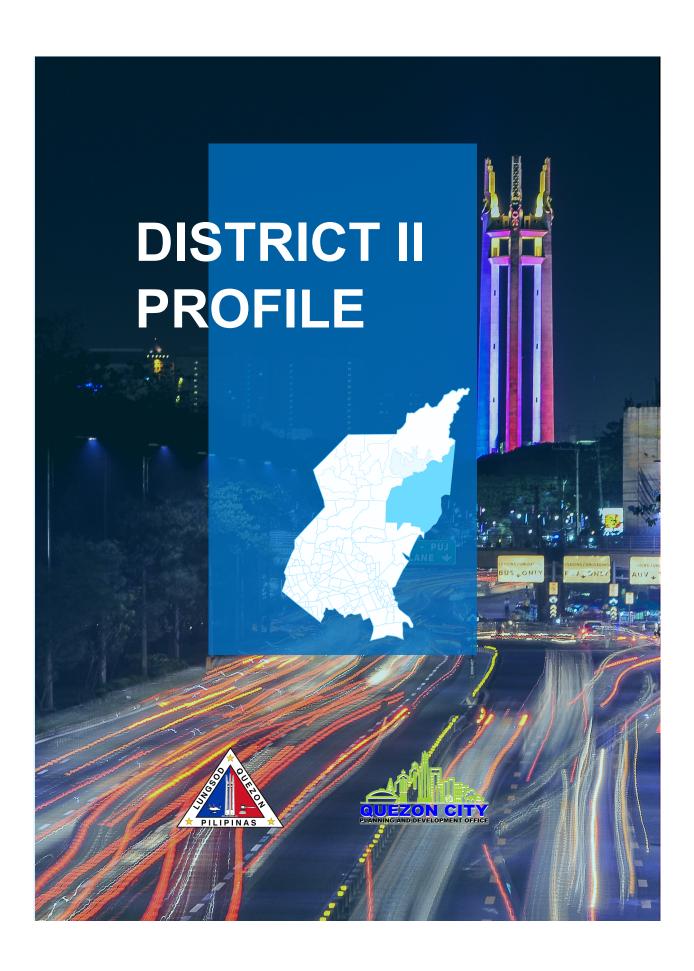
DEMOGRAPHICS

Population (2020)	384,384
% to QC Population	12.99%
Annual Growth Rate (2015-2020)	0.17
Est'd Population (2030)	391,005
Population Density (2020)	196
No. of Households (2020)	101,193
Ave Household Size (2020)	4.0
Sex Distribution (2015)	
Male	201,697
Female	207,466
School Age Population (3-21 y/o)	145,496
Aging Population	27,368
Source: 2020 Census of Population, Philippine Statistics Authority	



DISTRIBUTION OF POPULATION

Barangay	Area (in Has)	2020 Pop'n	2020 Growth Rate	2020 Pop'n Density	2025 Actual Pop'n (PSA)	2030 Projected Pop'n
Alicia	11.46	6,119	0.17	534	6,171	6,224
Bagong Pag-asa including North Triangle - West Portion	109.68	29,389	0.17	268	29,641	29,895
Bahay Toro	295.49	59,639	0.17	202	60,150	60,666
Balingasa	78.76	19,260	0.17	245	19,425	19,592
Bungad	50.68	7,014	0.17	138	7,074	7,135
Damar	20.93	952	0.17	45	960	968
Damayan	20.72	6,007	0.17	290	6,059	6,110
Del Monte	53.92	10,595	0.17	197	10,686	10,777
Katipunan	13.01	10,508	0.17	808	10,598	10,689
Lourdes	74.71	4,523	0.17	61	4,562	4,601
Maharlika	38.85	4,349	0.17	112	4,386	4,424
Manresa	83.13	17,224	0.17	207	17,372	17,521
Mariblo	13.34	3,433	0.17	257	3,462	3,492
Masambong	34.15	8,800	0.17	258	8,875	8,952
N. S. Amoranto (Gintong Silahis)	23.57	5,952	0.17	252	6,003	6,055
Nayong Kanluran	14.16	2,456	0.17	173	2,477	2,498
Paang Bundok	15.41	4,806	0.17	312	4,847	4,889
Pag-ibig sa Nayon	36.90	5,918	0.17	160	5,969	6,020
Paltok	65.77	18,124	0.17	276	18,279	18,436
Paraiso	15.36	3,537	0.17	230	3,567	3,598
Phil-Am	44.43	2,524	0.17	57	2,546	2,567
Project 6 including North Triangle - East Portion	152.82	11,899	0.17	78	12,001	12,104
Ramon Magsaysay	34.50	14,321	0.17	415	14,444	14,568
Saint Peter	26.94	4,049	0.17	150	4,084	4,119
Salvacion	20.46	6,681	0.17	326	6,738	6,796
San Antonio	74.55	22,229	0.17	298	22,420	22,612
San Isidro Labrador	24.19	6,247	0.17	258	6,301	6,355
San Jose	27.72	5,844	0.17	211	5,894	5,945
Santa Cruz	44.17	3,945	0.17	89	3,979	4,013
Santa Teresita	32.34	11,776	0.17	364	11,877	11,979
Santo Cristo	55.13	25,783	0.17	468	26,004	26,227
Sto. Domingo (Matalahib)	90.69	11,476	0.17	127	11,574	11,674
Sienna	38.69	2,072	0.17	54	2,090	2,108
Talayan	49.41	4,402	0.17	89	4,440	4,478
Vasra	54.03	7,345	0.17	136	7,408	7,472
Veterans Village	51.83	12,755	0.17	246	12,864	12,975
West Triangle	67.47	2,431	0.17	36	2,452	2,473
TOTAL Source: 2020 Census of Pop	1,959.39	384,384	0.17	196	387,680	391,005



SOCIAL PROFILE

Health Facilities

Public Hospitals	1	
Regular Health Centers	10	
Super Health Centers (with lying-in clinics)	3	
Health Stations	1	
Social Hygiene Clinics	1	
Sundown Clinics	1	
Adolescent Teen Health Quarters	-	
QC Hall Employee's Clinic	-	
Microscopy Centers	9	
Clinical Laboratory	1	
Social Hygiene Clinic/Sundown Clinic	1	
Laboratory		
Quality Assurance Center	-	
Molecular Laboratory	-	
Public Cemeteries	-	
Public Crematorium	-	
Private Hospitals	-	
COVID-19 Hope Facilities	-	
Source: Quezon City Health Department, 2022		

Social Welfare Facilities

Day Care Centers	59	
Supervised Neighborhood Play	5	
Kabahagi Center/Community-based Therapeutic Rehabilitation Center for PWDs	1	
QC Women Crisis/Protection Center	-	
Reception and Action Center	1	
Molave Youth Home	1	
Senior Citizens Day Center	-	
QC Drug Treatment and Rehabilitation Center (TAHANAN)	1	
Bahay Arugaan (Home for the Elderly)	-	
Bahay Kanlungan	1	
Bahay Kalinga	-	
Sources: Social Services Development Department, 2022 (SY 2021-2022)		

Park Facilities

Basketball Court	8
Half Court	1
Covered Basketball Court	17
Badminton Court	3
Volleyball Court	1
Tennis Court	5
Covered Tennis Court	0
Swimming Pool	1
Playsystem	18
Multi-purpose Hall	15
Barangay Hall	2
Health center	4
Day care Center	4
Entrance Arch	10
Gazebo	10
Stage	5
Police Station	1
Fire Station	0
Library	1
Deeds of Donation	17
Source: PDAD, 2021	

Housing

Number of Households	170,568 (projected 2020)	
Number of Occupied Housing Units	163,998 (projected 2020)	
Number of Informal Settler Families		
Number of Socialized Housing Projects Completed (as of 2020)	1	
Number of Socialized Housing units Completed (as of 2020)	355	
Number of Economic Housing Projects Completed (as of 2020)		
Number of Economic Housing units Completed (as of 2020)		
New Housing Needs (2020)		
Doubled Up Households Unacceptable Housing Units Displaced Units Homeless	6,569	
Source: Housing Community Development and Resettlement Department, 2020		

Educational Facilities

Kindergarten	13
Public Elementary Schools	13
Public Secondary Schools	7
Private Schools	-
Colleges and Universities	-
Public Libraries	5
Vocational/Technical Schools	-
Sources: School Division Office, Department of	

ECONOMIC PROFILE

Education, QC Public Library, 2020

No. of Business Establishments (2022)	4,559
New Establishments	894
Establishments for Renewal	3,665
Tourism areas, zones and spots	2
Heritage Sites	-
Historical Sites	1
Landmarks	1
Other Cultural Properties	-

Protective Services

Police Stations	3
Police Force	481
Police-Population Ratio	1:1,538
Fire Substations	5
Firemen	65
Firemen-Population Ratio	1:11,378
Sources: Quezon City Police Department and Quezon Cit	

Sources: Quezon City Police Department and Quezon City Fire Department, 2021

	DOT Accredited Accommodation
	Facilities
	Hotels
-	Mabuhay Accommodation
	Apartment hotel
	PEZA-Accredited Information Technology (IT) Parks
3	and Centers
-	IT Park
3	IT Center

Sources: QC Information Technology Development Department (QC-ITDD), QC Tourism Department (QC-TD), 2022

ENVIRONMENTAL MANAGEMENT

Status of Parks & Open Spaces (With Deed of Donation)

Donation)	
Developed	13
Undeveloped	5
TOTAL	18
Source: PDAD 2022	

DRRM

Public Evacuation Centers	62
Private Evacuation Centers	20
Fiber Boats	4
Rescue Boats	2
Public Fire Trucks (City-wide)	71
Private Fire Trucks (City-wide)	117
Source: QCDRRMO, 2022	

Waste Management

2021 Estimated Population	739,590
Projected per Capita per Kg/Person/Day	1.1437
Projected Waste Generation per Day	845,869.08
Annual Projected Waste Generation	308,742,215.30
Source: EPWMD, 2018	

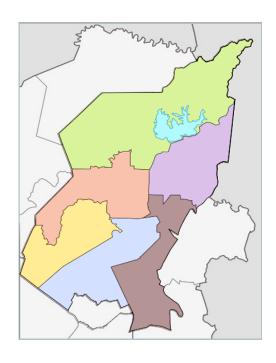
Material Recovery

Materials Recovery System	4
Materials Recovery Facility	1
Source: DSOC, 2022	

INFRA INDICATORS

Existing Roads	Length (Kms.)
Concrete	304.82
Asphalt	60.23
Natural/Earth Surface	10.79
Total	375.84
Source: CPDD-GIS, 2022	

Period	Representative		
1987-1992	Antonio L. Aquino		
1992-2001	Dante V. Liban		
2001-2004	Ismael G. Mathay III		
2004-2010	Mary Ann L. Susano		
2010-2019	Winston T. Castelo		
2019-2022	Mari Grace Preciosa H. Castelo		
2022-Present	Ralph Wendel P. Tulfo		
Source:https://en.wikipedia.org/wiki/ Legislative_districts_of_Quezon_City			



DISTRICT ACTION OFFICE

District Action Officer Enrile L. Teodoro

Location Commonwealth Barangay Hall, Commonwealth Ave, Bgy. Commonwealth, Quezon City

PHYSICAL ENVIRONMENT

Location:

Western part of the city bounded by Manila and Caloocan City

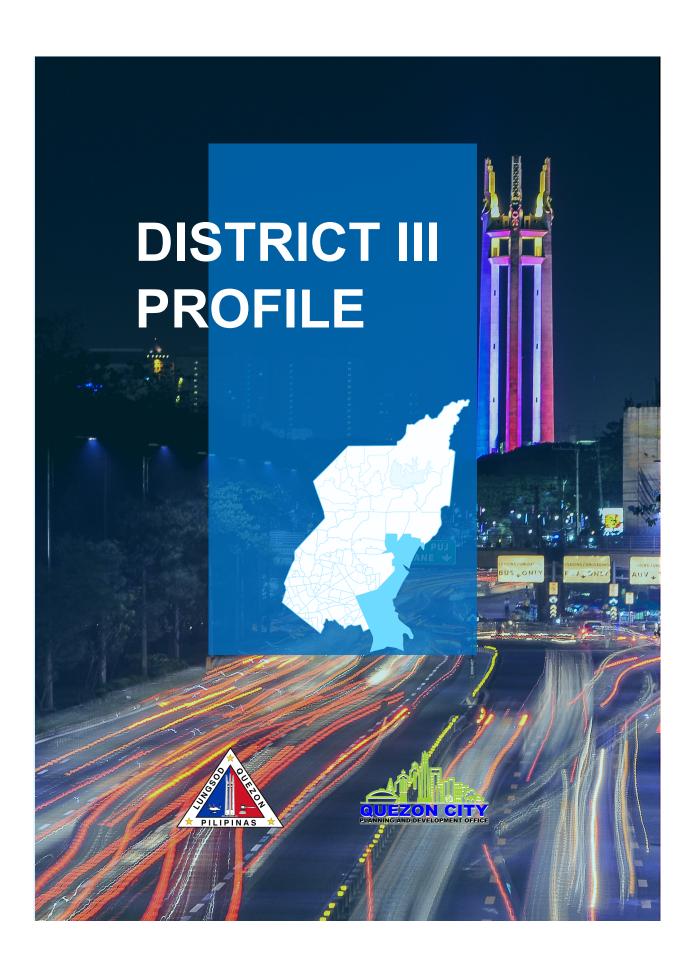
 $\begin{array}{cc} \textit{Land Area} & 2,182.37\; Has\ (46.26\)\; km^2) \\ \textit{Number of Bgys} & 5 \end{array}$

DEMOGRAPHICS

Population (2020)	738,328
% to QC Population	24.94%
Annual Growth Rate (2015-2020)	0.17
Est'd Population (2030)	751,045
Population Density (2020)	338
No. of Households (2020)	175,996
Ave Household Size (2020)	4.0
Sex Distribution (2015)	
Male	339,529
Female	349,244
School Age Population (3-21 y/o)	244,925
Aging Population	46,070
Source: 2020 Census of Population, Philipp Authority	ine Statistics



Barangay	Area (in Has)	2020 Pop'n	2020 Growth Rate	2020 Pop'n Density	2025 Actual Pop'n (PSA)	2030 Projected Pop'n
Bagong Silangan	594.82	88,299	1.17	148	106,886	99,223
Batasan Hills	592.11	161,409	1.17	273	166,572	181,377
Common- wealth	346.25	198,285	1.17	573	213,229	222,815
Holy Spirit	328.19	110,447	1.17	337	111,901	124,110
Payatas	321.01	130,333	1.17	406	139,740	146,457
Reservoir	2,444.15					
TOTAL	4,626.52	688,773	1.17	149	738,328	773,981
Source: 2020 Cer	nsus of Populatio	on. Philippine St	atistics Authori	tv		



Health Facilities

Public Hospitals	2	
Regular Health Centers	8	
Super Health Centers (with lying-in clinics)	1	
Health Stations	1	
Social Hygiene Clinics	0	
Sundown Clinics	-	
Adolescent Teen Health Quarters	-	
QC Hall Employee's Clinic	-	
Microscopy Centers	5	
Clinical Laboratory	1	
Social Hygiene Clinic/Sundown Clinic	-	
Laboratory		
Quality Assurance Center	-	
Molecular Laboratory	-	
Public Cemeteries	-	
Public Crematorium	-	
Private Hospitals	4	
COVID-19 Hope Facilities	2	
Source: Quezon City Health Department, 2022		

Social Welfare Facilities

Day Care Centers	50
Supervised Neighborhood Play	5
Kabahagi Center/Community-based Therapeutic Rehabilitation Center for PWDs	1
QC Women Crisis/Protection Center	-
Reception and Action Center	-
Molave Youth Home	-
Senior Citizens Day Center	-
QC Drug Treatment and Rehabilitation Center (TAHANAN)	-
Bahay Arugaan (Home for the Elderly)	-
Bahay Kanlungan	-
Bahay Kalinga	-
Sources: Social Services Development Departmen	t. 2022

Sources: Social Services Development Department, 2022 and Schools Division Office, 2022 (SY 2021-2022)

Park Facilities

Basketball Court	11
Half Court	4
Covered Basketball Court	29
Badminton Court	0
Volleyball Court	1
Tennis Court	6
Covered Tennis Court	1
Swimming Pool	3
Playsystem	22
Multi-purpose Hall	26
Barangay Hall	21
Health center	11
Day care Center	15
Entrance Arch	7
Gazebo	9
Stage	9
Police Station	1
Fire Station	4
Library	1
Deeds of Donation	36
Source: PDAD, 2021	

Number of Households	77,409 (projected 2020)	
Number of Occupied Housing Units	74,432 (projected 2020)	
Number of Informal Settler Families		
Number of Socialized Housing Projects Completed (as of 2020)	2	
Number of Socialized Housing units Completed (as of 2020)	188	
Number of Economic Housing Projects Completed (as of 2020)	0	
Number of Economic Housing units Completed (as of 2020)	0	
New Housing Needs (2020)		
Doubled Up Households Unacceptable Housing Units Displaced Units Homeless	2,978	
Source: Housing Community Development and Resettlement Department, 2020		

Educational Facilities

Kindergarten	17
Public Elementary Schools	17
Public Secondary Schools	8
Private Schools	-
Colleges and Universities	-
Public Libraries	3
Vocational/Technical Schools	-
g g1 1D: om og D .	

Source: School Division Office, QC, Dept. of Education, QC Public Library, 2020

Protective Services

Police Stations	3
Police Force	383
Police-Population Ratio	1:835
Fire Substations	5
Firemen	37
Firemen-Population Ratio	1:8,646
Sources: QCPD and QCFD, 2021	

ECONOMIC PROFILE

No. of Business Establishments (2022)	13,040
New Establishments	1,936
Establishments for Renewal	11,104
Tourism areas, zones and spots	7
Heritage Sites	_
Historical Sites	1
Landmarks	2
Other Cultural Properties	4

DOT Accredited Accommodation	
Facilities	34
Hotels	11
Mabuhay Accommodation	22
Apartment hotel	1
PEZA-Accredited Information Technology (IT) Parks	
and Centers	9
IT Park	4
IT Center	5

Sources: QC Information Technology Development Department (QC-ITDD),QC Tourism Department (QC-TD), 2022

ENVIRONMENTAL MANAGEMENT

Status of Parks & Open Spaces (With Deed of Donation)

Donation)	
Developed	36
Undeveloped	8
TOTAL	44
Source: PDAD, 2022	

DRRM

Public Evacuation Centers	83
Private Evacuation Centers	21
Fiber Boats	1
Rescue Boats	-
Public Fire Trucks (City-wide)	71
Private Fire Trucks (City-wide)	117
Source: OCDRRMO, 2022	

Waste Management

2021 Estimated Population	319,917
Projected per Capita per Kg/Person/Day	1.1437
Projected Waste Generation per Day	3,815 tons
Annual Projected Waste Generation	133,549,511.61
Source: EPWMD, 2022	

Material Recovery

Materials Recovery System	21
Materials Recovery Facility	14
Source: DSQC, 2022	

INFRA INDICATORS

Length (Kms.)
259.44
81.68
0.19
341.31

Period	Representative
1987-1992	Anna Dominique M.L. Coseteng
1992-1995	Dennis Roldan
1995-2001	Michael T. Defensor
2001-2004	Ma. Theresa T. Defensor
2004-2010	Matias V. Defensor, Jr.
2010-2019	Jorge John B. Banal, Jr.
2019-2022	Allan Benedict S. Reyes

Source:https://en.wikipedia.org/wiki/ Legislative_districts_of_Quezon_City



DISTRICT ACTION OFFICE

District Action Officer John Thomas F. De Castro

Location No. 25 Calderon St., Bgy. Marilag, Quezon City

PHYSICAL ENVIRONMENT

Location:

Western part of the city bounded by Manila and Caloocan City

 $\begin{array}{ccc} \textit{Land Area} & 2,184.82 \; has \; (21.8482) \; km^2) \\ \textit{Number of Bgys} & 37 \end{array}$

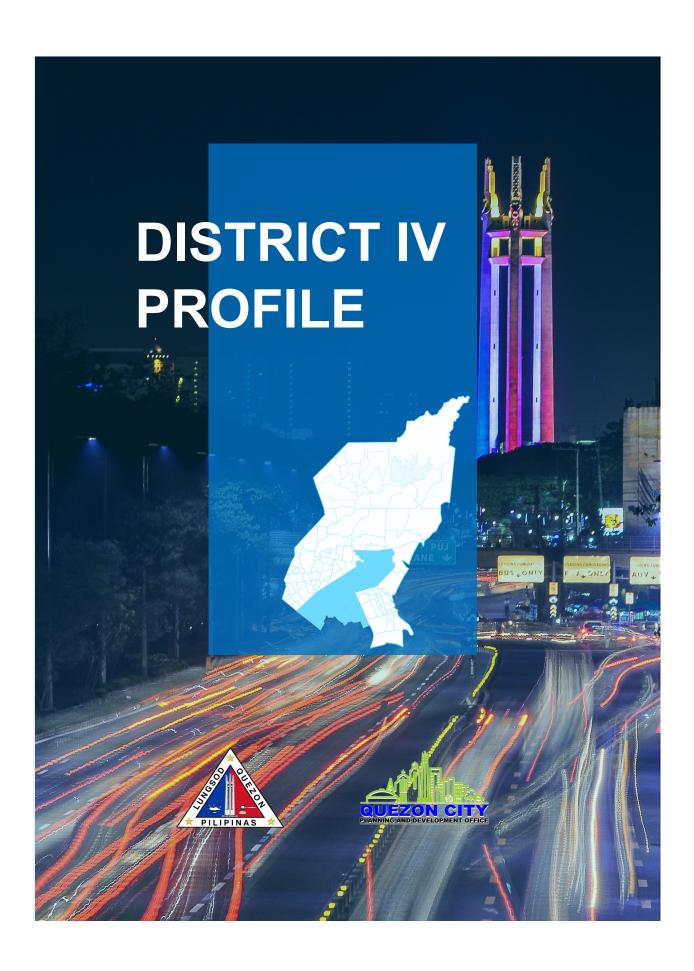
DEMOGRAPHICS

Authority

Population (2020)	319,371
% to QC Population	10.79%
Annual Growth Rate (2010-2015)	1.17
Est'd Population (2025)	364,834
Population Density (2015)	149
No. of Households (2015)	75,504
Ave Household Size (2015)	4.3
Sex Distribution (2015)	
Male	160,045
Female	164,624
School Age Population (3-21 y/o)	115,451
Aging Population	21,716
Source: 2020 Census of Population, Philipp	ine Statistics



Barangay	Area (in Has)	2020 Pop'n	2020 Growth Rate	2020 Pop'n Density	2025 Actual Pop'n (PSA)	2030 Projected Pop'n
Amihan	12.95	4,788	1.17	370	3,513	5,380
Bagumbuhay	23.52	6,767	1.17	288	22,147	7,604
Bagumbayan	127.64	13,832	1.17	108	6,681	15,543
Bayanihan	6.35	1,222	1.17	192	613	1,373
Blue Ridge A	26.30	1,730	1.17	66	1,534	1,944
Blue Ridge B	13.96	1,701	1.17	122	1,071	1,911
Camp Aguinaldo	184.36	4,977	1.17	27	3,269	5,593
Claro (Quirino 3-B)	10.13	4,432	1.17	438	3,885	4,980
Dioquino Zobel	4.26	1,887	1.17	443	1,805	2,120
Duyan Duyan	16.53	3,870	1.17	234	3,357	4,349
E. Rodriguez	65.27	19,594	1.17	300	17,363	22,018
East Kamias	27.15	6,206	1.17	229	6,395	6,974
Escopa I	1.28	2,221	1.17	1,735	2,110	2,496
Escopa II	1.89	1,766	1.17	936	1,683	1,984
Escopa III	8.99	8,554	1.17	952	7,985	9,612
Escopa IV	1.61	1,919	1.17	1,194	1,837	2,156
Libis	8.45	4,018	1.17	475	4,208	4,515
Loyola Heights	237.99	18,884	1.17	79	21,140	21,220
Mangga	8.10	1,158	1.17	143	913	1,301
Marilag	46.24	9,812	1.17	212	12,555	11,026
Masagana	16.39	4,421	1.17	270	4,166	4,968
Matandang Balara	334.86	71,022	1.17	212	69,475	79,808
Milagrosa	26.94	6,130	1.17	228	6,775	6,888
Pansol	330.51	34,240	1.17	104	35,254	38,476
Quirino 2-A	17.44	5,520	1.17	317	4,622	6,203
Quirino 2-B	14.81	3,612	1.17	244	3,938	4,059
Quirino 2-C	7.50	2,830	1.17	378	3,189	3,180
Quirino 3-A	5.64	1,141	1.17	202	1,070	1,282
Saint Ignatius	25.81	2,005	1.17	78	2,054	2,253
San Roque	65.11	20,095	1.17	309	19,093	22,581
Silangan	22.47	5,036	1.17	224	4,831	5,659
Socorro	117.38	25,073	1.17	214	22,227	28,175
Гадитрау	9.64	2,208	1.17	229	2,257	2,481
Ugong Norte	275.22	9,953	1.17	36	6,301	11,184
Villa Maria Clara	8.40	2,393	1.17	285	2,442	2,689
West Kamias	18.04	4,918	1.17	273	4,055	5,526
White Plains	55.72	4,734	1.17	85	3,558	5,320
ΓΟΤΑL	2,184.82	324,669	1.17	149	319,371	364,834
Source: 2020 Census of P				I		, , , , , , , , , , , , , , , , , , ,



Health Facilities

Public Hospitals	9
Regular Health Centers	9
Super Health Centers (with lying-in clinics)	1
Health Stations	-
Social Hygiene Clinics	1
Sundown Clinics	1
Adolescent Teen Health Quarters	-
QC Hall Employee's Clinic	1
Microscopy Centers	3
Clinical Laboratory	2
Social Hygiene Clinic/Sundown Clinic Laboratory	1
Quality Assurance Center	-
Molecular Laboratory	1
Public Cemeteries	-
Public Crematorium	-
Private Hospitals	8
COVID-19 Hope Facilities	3
Source: Quezon City Health Department 20	022

Social Welfare Facilities

-		
	Day Care Centers	43
	Supervised Neighborhood Play	5
	Kabahagi Center/Community-based Therapeutic Rehabilitation Center for PWDs	-
	QC Women Crisis/Protection Center	-
1	Reception and Action Center	-
1	Molave Youth Home	-
1	Senior Citizens Day Center	-
	QC Drug Treatment and Rehabilitation Center (TAHANAN)	-
	Bahay Arugaan (Home for the Elderly)	1
1	Bahay Kanlungan	-
1	Bahay Kalinga	-
	Sources: Social Services Development Department	nt, 2022

and Schools Division Office, 2022

Park Facilities

Basketball Court	6
Half Court	1
Covered Basketball Court	29
Badminton Court	2
Volleyball Court	2
Tennis Court	3
Covered Tennis Court	3
Swimming Pool	2
Playsystem	10
Multi-purpose Hall	9
Barangay Hall	11
Health center	6
Day care Center	9
Entrance Arch	9
Gazebo	4
Stage	6
Police Station	2
Fire Station	2
Library	5
Deeds of Donation	30
Source: PDAD, 2021	

	109,068
Number of Households	(projected 2020)
Number of Occupied Housing Units	104,874 (projected 2020)
Number of Informal Settler Families	
Number of Socialized Housing Projects Completed (as of 2020)	
Number of Socialized Housing units Completed (as of 2020)	
Number of Economic Housing Projects Completed (as of 2020)	
Number of Economic Housing units Completed (as of 2020)	
New Housing Needs (2020)	
Doubled Up Households Unacceptable Housing Units Displaced Units Homeless	4,193
Source: Housing Community Development Department, 2020	and Resettlement

Educational Facilities			
Kindergarten	13		
Public Elementary Schools	13		
Public Secondary Schools	14		
Private Schools	-		
Colleges and Universities	-		
Public Libraries	5		
Vocational/Technical Schools	-		
Sources: School Division Office, Depart	irtment of		

Protective Services

Police Stations	2
Police Force	432
Police-Population Ratio	1:945
Fire Substations	5
Firemen	73
Firemen-Population Ratio	1:5,590
Sources: QCPD and QCFD, 2020	

ECONOMIC PROFILE

Education, QC Public Library, 2020

No. of Business Establishments (2022)	18,188
New Establishments	2,371
Establishments for Renewal	15,817
Tourism areas, zones and spots	27
Heritage Sites	5
Historical Sites	3
Landmarks	4
Other Cultural Properties	15

DOT Accredited Accommodation Facilities	40
Hotels	20
Mabuhay Accommodation	20
Apartment hotel	-
PEZA-Accredited Information Technology (IT) Parks	
and Centers	7
IT Park	3
IT Center	4

Sources: QC Information Technology Development Department (QC-ITDD), QC Tourism Department (QC-TD), 2022

ENVIRONMENTAL MANAGEMENT

Status of Parks & Open Spaces (With Deed of Donation)

Developed	29
Undeveloped	21
TOTAL	50
Source: PDAD, 2022	

DRRM

Public Evacuation Centers	107
Private Evacuation Centers	35
Fiber Boats	10
Rescue Boats	4
Public Fire Trucks (Citywide)	71
Private Fire Trucks (Citywide)	117
Source: QCDRRMO, 2022	

Waste Management

2021 Estimated Population	408,098
Projected per Capita per Kg/Person/Day	1.1437
Projected Waste Generation per Day	466,741.68
Annual Projected Waste Generation	170,360,714.15
Source: EPWMD, 2018	

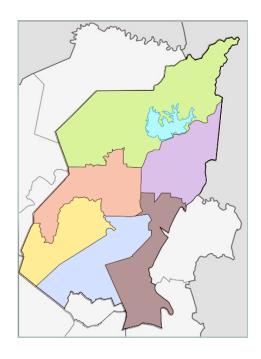
Material Recovery

Materials Recovery System	21
Materials Recovery Facility	14
Source: DSQC, 2022	

INFRA INDICATORS

Existing Roads	Length (Kms.)
Concrete	283.48
Asphalt	69.95
Natural/Earth Surface	0.39
Total	353.82
Source: CPDD-GIS, 2022	

Period	Representative
1987-1992	Ismael A. Mathay, Jr.
1992-2001	Feliciano R. Belmonte, Jr.
2001-2010	Nanette Castelo-Daza
2010-2019	Feliciano R. Belmonte, Jr.
2019-2022	Jesus Manuel C. Suntay
Source:https://en.w Legislative	ikipedia.org/wiki/ districts of Quezon City



DISTRICT ACTION OFFICE

District Action Officer Alberto C. Flores

Location Archival Center, Scout Reyes St., Bgy. Paligsahan, Quezon City

PHYSICAL ENVIRONMENT

Location:

Western part of the city bounded by Manila and Caloocan City

Land Area 2,341.89 has (23.418.90) km²⁾

Number of Bgys 38

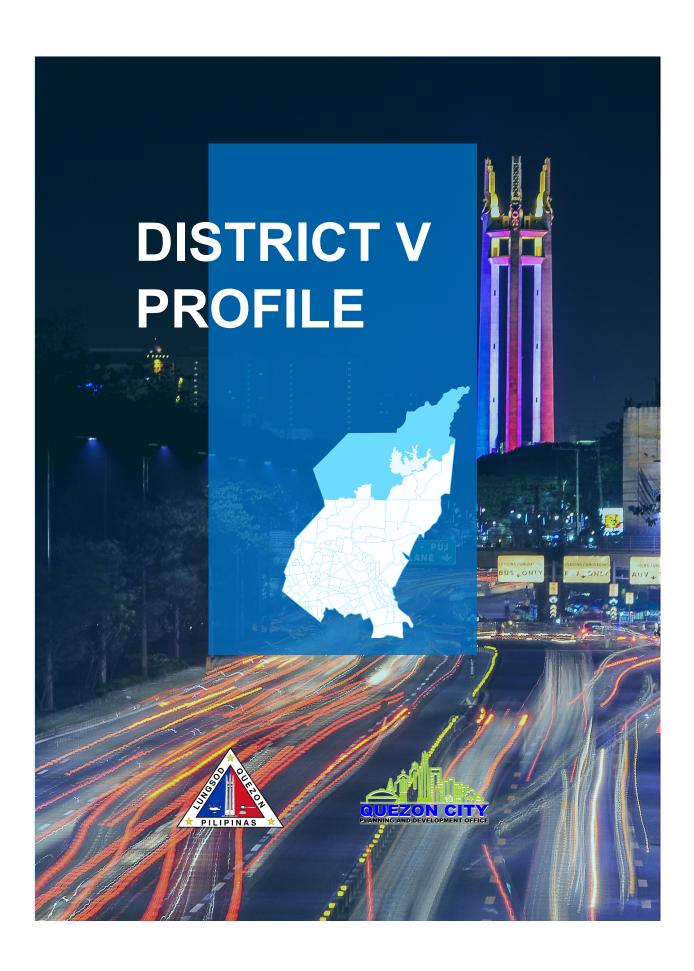
DEMOGRAPHICS

Authority

Population (2020)	407,402
% to QC Population	13.76%
Annual Growth Rate (2010-2015)	1.17
Est'd Population (2025)	501,312
Population Density (2015)	190
No. of Households (2015)	103,749
Ave Household Size (2015)	4.3
Sex Distribution (2015)	
Male	219,915
Female	226,207
School Age Population (3-21 y/o)	158,639
Aging Population	29,839
Source: 2020 Census of Population, Philipp	ine Statistics



Barangay	Area (in Has)	2015 Pop'n	2015 Growth Rate	2015 Pop'n Density	2020 Actual Pop'n (PSA)	2025 Projected Pop'n
Bagong Lipunan ng Crame	104.21	14,996	1.17	144	13,630	16,851
Botocan	3.78	8,234	1.17	2178	7,501	9,253
Central including East Triangle - East Portion	103.16	17,590	1.17	171	19,331	19,766
Damayang Lagi	80.08	18,599	1.17	232	19,466	20,900
Don Manuel	22.52	3,753	1.17	167	1,728	4,217
Doña Aurora	13.24	5,636	1.17	426	4,221	6,333
Doña Imelda	92.61	16,915	1.17	183	11,724	19,008
Doña Josefa	28.33	2,909	1.17	103	1,857	3,269
Horseshoe	37.10	3,004	1.17	81	2,866	3,376
Immaculate Concepcion	50.93	8,670	1.17	170	8,169	9,743
Kalusugan	42.88	1,745	1.17	41	4,786	1,961
Kamuning	48.42	15,661	1.17	323	14,258	17,598
Kaunlaran	55.08	8,167	1.17	148	12,387	9,177
Kristong Hari	33.89	4,089	1.17	121	6,055	4,595
Krus na Ligas	35.47	21,513	1.17	606	21,287	24,174
Laging Handa	62.18	6,750	1.17	109	4,812	7,585
Malaya	13.14	4,109	1.17	313	2,605	4,617
Mariana	165.25	11,227	1.17	68	11,967	12,616
Obrero	24.89	8,269	1.17	332	9,500	9,292
Old Capitol Site	18.16	1,192	1.17	66	1,319	1,339
Paligsahan	57.84	5,611	1.17	97	3,518	6,305
Pinagkaisahan	33.58	6,929	1.17	206	4,366	7,786
Pinyahan including East Triangle - West Portion	156.86	27,653	1.17	176	21,868	31,074
Roxas	44.85	16,060	1.17	358	10,670	18,047
Sacred Heart	52.84	8,282	1.17	157	6,089	9,307
San Isidro	11.14	8,578	1.17	770	6,550	9,639
San Martin de Porres	20.88	12,315	1.17	590	11,632	13,838
San Vicente	9.37	7,274	1.17	776	7,160	8,174
Santo Niño	18.74	10,278	1.17	548	7,070	11,549
Santol	43.25	7,548	1.17	175	6,410	8,482
Sikatuna Village	41.66	6,996	1.17	168	6,121	7,861
South Triangle	112.44	15,546	1.17	138	14,494	17,469
Tatalon	92.36	63,129	1.17	684	55,404	70,939
Teachers Village East	21.81	3,401	1.17	156	2,401	3,822
Teachers Village West	23.45	4,270	1.17	182	2,986	4,798
U. P. Campus	453.18	45,520	1.17	100	47,127	51,151
U. P. Village	37.46	5,157	1.17	138	3,167	5,795
Valencia	44.40	8,547	1.17	193	10,900	9,604
Quezon Memorial Circle	30.46	· · · ·			,	<u> </u>
TOTAL Source: 2020 Census of Popu	2,341.89	446,122	1.17	190	407,402	501,312



Health Facilities

Public Hospitals	1	
Regular Health Centers	10	
Super Health Centers (with lying-in clinics)	2	
Health Stations	1	
Social Hygiene Clinics	1	
Sundown Clinics	1	
Adolescent Teen Health Quarters	-	
QC Hall Employee's Clinic	-	
Microscopy Centers	4	
Clinical Laboratory	1	
Social Hygiene Clinic/Sundown Clinic	1	
Laboratory		
Quality Assurance Center	-	
Molecular Laboratory	-	
Public Cemeteries	2	
Public Crematorium	-	
Private Hospitals	11	
COVID-19 Hope Facilities	2	
Source: Quezon City Health Department 2022		

Social Welfare Facilities

Day Care Centers	65
Supervised Neighborhood Play	5
Kabahagi Center/Community-based Therapeutic Rehabilitation Center for PWDs	-
QC Women Crisis/Protection Center	-
Reception and Action Center	-
Molave Youth Home	-
Senior Citizens Day Center	-
QC Drug Treatment and Rehabilitation Center (TAHANAN)	-
Bahay Arugaan (Home for the Elderly)	-
Bahay Kanlungan	-
Bahay Kalinga	-
Sources: Social Services Development Departmen	it, 2022

and Schools Division Office, 2022

Park Facilities

Basketball Court	25
Half Court	2
Covered Basketball Court	66
Badminton Court	4
Volleyball Court	4
Tennis Court	20
Covered Tennis Court	6
Swimming Pool	8
Playsystem	56
Multi-purpose Hall	65
Barangay Hall	11
Health center	16
Day care Center	30
Entrance Arch	31
Gazebo	26
Stage	32
Police Station	5
Fire Station	2
Library	0
Deeds of Donation	71
Source: PDAD, 2021	

Number of Households	129,514 (projected
Trumoer of frouseholds	2020)
	124,532
Number of Occupied Housing Units	(projected
	2020)
Number of Informal Settler Families	
Number of Socialized Housing Projects	11
Completed (as of 2020)	11
Number of Socialized Housing units	2,804
Completed (as of 2020)	2,004
Number of Economic Housing Projects	1
Completed (as of 2020)	1
Number of Economic Housing units	99
Completed (as of 2020)	99
New Housing Needs (2020)	
Doubled Up Households	4,982
Unacceptable Housing Units	
Displaced Units Homeless	
Source: Housing Community Development and Resettlement	
Department, 2020	

Educational Facilities

Kindergarten	18
Public Elementary Schools	18
Public Secondary Schools	11
Private Schools	-
Colleges and Universities	-
Public Libraries	2
Vocational/Technical Schools	-
C C-11 Division Off D	4 6

Sources: School Division Office, Department of Education, QC Public Library, 2020

Protective Services

Police Stations	3
Police Force	307
Police-Population Ratio	1:1,945
Fire Substations	7
Firemen	88
Firemen-Population Ratio	1:6,785
Sources: QCPD and QCFD, 2020	·

ECONOMIC PROFILE

No. of Business Establishments (2022)	9.901
New Establishments	1,766
Establishments for Renewal	8,135
Tourism areas, zones and spots	5
Heritage Sites	-
Historical Sites	1
Landmarks	-
Other Cultural Properties	4

DOT Accredited Accommodation	
Facilities	7
Hotels	1
Mabuhay Accommodation	6
Apartment hotel	-
PEZA-Accredited Information Technology (IT) Parks	
and Centers	4
IT Park	-
IT Center	4

Sources: QC Information Technology Development Department (QC-ITDD), QC Tourism Department (QC-TD), 2022

ENVIRONMENTAL MANAGEMENT

Status of Parks & Open Spaces (With Deed of Donation)

Donation	
Developed	64
Undeveloped	9
TOTAL	73
Source: PDAD, 2022	

DRRM

Public Evacuation Centers Private Evacuation Centers	56 116
Fiber Boats	1
Rescue Boats	6
Public Fire Trucks (Citywide)	71
Private Fire Trucks (Citywide)	117
Source: QCDRRMO, 2022	

Waste Management

2021 Estimated Population	597,066
Projected per Capita per Kg/Person/Day	1.1437
Projected Waste Generation per Day	682,864.38
Annual Projected Waste Generation	249,245,500.23
Source: EPWMD, 2018	

Material Recovery

Materials Recovery System	10
Materials Recovery Facility	-
Source: DSQC, 2022	

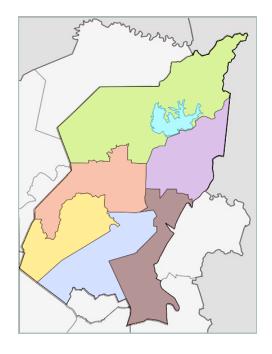
Existing Roads Length (Kms.) Concrete 446.50 Asphalt 80.27 Natural/Earth Surface 34.82 Total 561.59 Source: CPDD-GIS, 2022 561.59

Period Representative

2013-2022 Alfredo Paulo D. Vargas III

2022-present Patrck Michael D. Vargas

Source:https://en.wikipedia.org/wiki/ Legislative_districts_of_Quezon_City



DISTRICT ACTION OFFICE

District Action Officer William R. Bawag

Location Novaliches District Center, Jordan Plaines, Bgy. Sta. Monica, Quezon

City

PHYSICAL ENVIRONMENT

Location:

Western part of the city bounded by Manila and Caloocan City

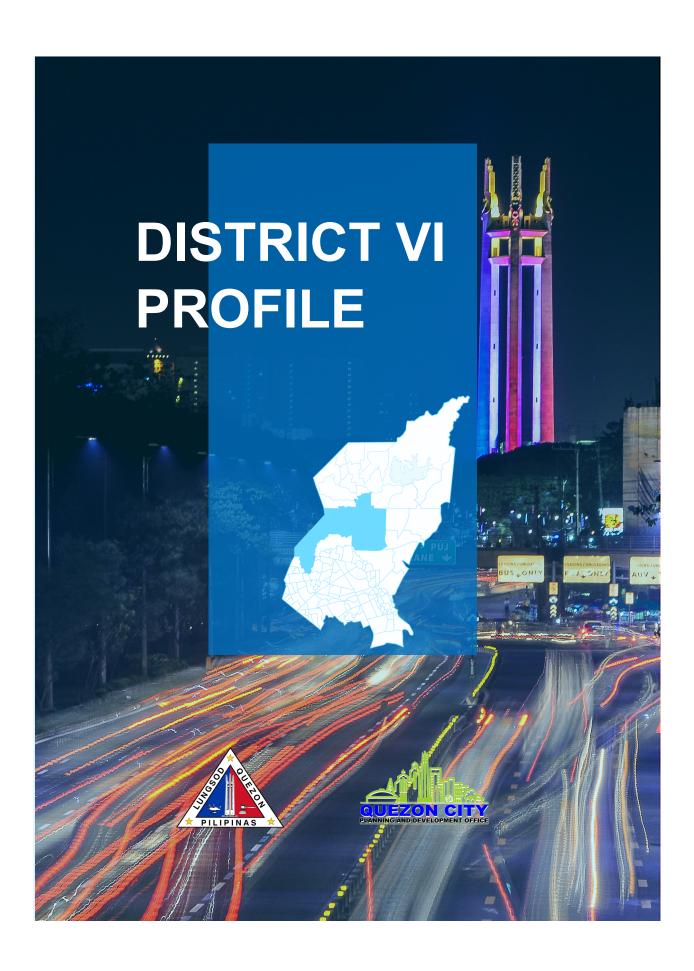
Land Area 2,802.57 has (28.02 km²)

Number of Bgys 14

DEMOGRAPHICS

Population (2020)	596,047
% to QC Population	20.14%
Annual Growth Rate (2010-2015)	1.17
Est'd Population (2025)	602,082
Population Density (2015)	191
No. of Households (2015)	124,604
Ave Household Size (2015)	4.3
Sex Distribution (2015)	
Male	264,120
Female	271,678
School Age Population (3-21 y/o)	190,528
Aging Population	35,838
Source: 2020 Census of Population, Philipp Authority	pine Statistics

Barangay	Area (in Has)	2015 Pop'n	2015 Growth Rate	2015 Pop'n Density	2020 Actual Pop'n (PSA)	2025 Projected Pop'n
Bagbag	207.17	56,936	1.17	275	64,653	63,980
Capri	8.93	14,587	1.17	1633	12,903	16,392
Fairview	311.68	53,151	1.17	171	61,813	59,726
Greater Lagro	420.68	22,764	1.17	54	23,569	25,580
Gulod	128.25	53,325	1.17	416	62,542	59,922
Kaligayahan	251.34	54,576	1.17	217	60,462	61,328
Nagkaisang Nayon	282.23	49,048	1.17	174	53,781	55,116
North Fairview	196.02	41,154	1.17	210	44,408	46,245
Novaliches Proper	65.69	15,381	1.17	234	15,468	17,284
Pasong Putik Proper	239.78	35,135	1.17	147	39,896	39,482
San Agustin	102.09	22,423	1.17	220	25,355	25,197
San Bartolome	356.75	45,188	1.17	127	51,148	50,778
Santa Lucia	67.45	25,577	1.17	379	28,215	28,741
Santa Monica	164.52	46,553	1.17	283	51,834	52,312
TOTAL	2,802.57	535,798	1.17	191	596,047	602,082
Source: 2020 Census of Population, Philippine Statistics Authority						



Health Facilities

Public Hospitals	-
Regular Health Centers	9
Super Health Centers (with lying-in clinics)	-
Health Stations	-
Social Hygiene Clinics	-
Sundown Clinics	-
Adolescent Teen Health Quarters	-
QC Hall Employee's Clinic	-
Microscopy Centers	3
Clinical Laboratory	1
Social Hygiene Clinic/Sundown Clinic	-
Laboratory	
Quality Assurance Center	-
Molecular Laboratory	-
Public Cemeteries	1
Public Crematorium	1
Private Hospitals	4
COVID-19 Hope Facilities	
Source: Quezon City Health Department 20	22

Social Welfare Facilities

Day Care Centers	39	
Supervised Neighborhood Play	5	
Kabahagi Center/Community-based Therapeutic Rehabilitation Center for PWDs	-	
QC Women Crisis/Protection Center	-	
Reception and Action Center	-	
Molave Youth Home	-	
Senior Citizens Day Center	-	
QC Drug Treatment and Rehabilitation Center (TAHANAN)	-	
Bahay Arugaan (Home for the Elderly)	-	
Bahay Kanlungan	-	
Bahay Kalinga	-	
Sources: Social Services Development Department, 2022 and Schools Division Office, 2022		

Park Facilities

Basketball Court	42
Half Court	2
Covered Basketball Court	40
Badminton Court	5
Volleyball Court	1
Tennis Court	9
Covered Tennis Court	3
Swimming Pool	5
Playsystem	50
Multi-purpose Hall	49
Barangay Hall	1
Health center	4
Day care Center	4
Entrance Arch	29
Gazebo	20
Stage	18
Police Station	0
Fire Station	0
Library	0
Deeds of Donation	51
Source: PDAD, 2021	

Number of Households	133,815 (projected 2020)	
Number of Occupied Housing Units	128,676 (projected 2020)	
Number of Informal Settler Families		
Number of Socialized Housing Projects Completed (as of 2020)	1	
Number of Socialized Housing units Completed (as of 2020)	26	
Number of Economic Housing Projects Completed (as of 2020)	1	
Number of Economic Housing units Completed (as of 2020)	156	
New Housing Needs (2020)		
Doubled Up Households Unacceptable Housing Units Displaced Units Homeless	5,139	
Source: Housing Community Development and Resettlement Department, 2020		

Educational Facilities

Kindergarten	12	
Public Elementary Schools	12	
Public Secondary Schools	9	
Private Schools	-	
Colleges and Universities	-	
Public Libraries	2	
Vocational/Technical Schools	-	

Sources: School Division Office, Department of Education, QC Public Library, 2020

Protective Services

Police Stations	1	
Police Force	177	
Police-Population Ratio	1:2,912	
Fire Substations	30	
Firemen	554	
Firemen-Population Ratio	1:14,726	
Sources: QCPD and QCFD, 2020		

ECONOMIC PROFILE

No. of Business Establishments (2022)	7,647
New Establishments	1,203
Establishments for Renewal	6,444
Tourism areas, zones and spots	6
Heritage Sites	-
Historical Sites	3
Landmarks	1
Other Cultural Properties	2

DOT Accredited Accommodation	
Facilities	1
Hotels	-
Mabuhay Accommodation	1
Apartment hotel	-
PEZA-Accredited Information Technology (IT) Parks	
and Centers	-
IT Park	-
IT Center	-

Sources: QC Information Technology Development Department (QC-ITDD), QC Tourism Department (QC-TD), 2022

ENVIRONMENTAL MANAGEMENT

Status of Parks & Open Spaces (With Deed of Donation)

,	
Developed	51
Undeveloped	5
TOTAL	56
Source: PDAD, 2022	

DRRM

Public Evacuation Cente Private Evacuation Cente	-10 - /
Fiber Boa	ats -
Rescue Boa	ats 1
Public Fire Trucks (Citywid	de) 71
Private Fire Trucks (Citywid	de) 117
Source: OCDRRMO, 2022	

Waste Management

2021 Estimated Population	587,094
Projected per Capita per Kg/Person/Day	1.1437
Projected Waste Generation per Day	671,459.41
Annual Projected Waste Generation	245,082,683.85
Source: EPWMD, 2018	

Material Recovery

Materials Recovery System	5
Materials Recovery Facility	2
Source: DSQC, 2022	

INFRA INDICATORS

Existing Roads	Length (Kms.)
Concrete	315.80
Asphalt	51.50
Natural/Earth Surface	3.23
Total	370.53

Period Representative

2013-2022 Jose Christopher Y. Belmonte

Source:https://en.wikipedia.org/wiki/ Legislative_districts_of_Quezon_City



DISTRICT ACTION OFFICE

District Action Officer Mark Anthony C. Aldave

Sanville Multi-Purpose Hall, Bgy. Culiat, Location

Ouezon City

PHYSICAL ENVIRONMENT

Location:

Western part of the city bounded by Manila and Caloocan City

 $\begin{array}{ccc} \textit{Land Area} & 2,197.39 \text{ has } (21.97.\text{km}^2) \\ \textit{Number of Bgys} & 11 \end{array}$

DEMOGRAPHICS

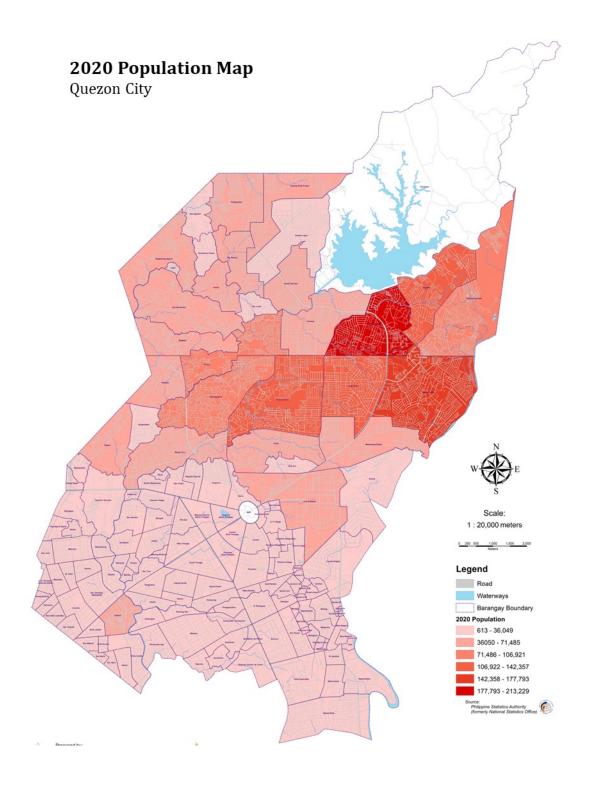
Authority

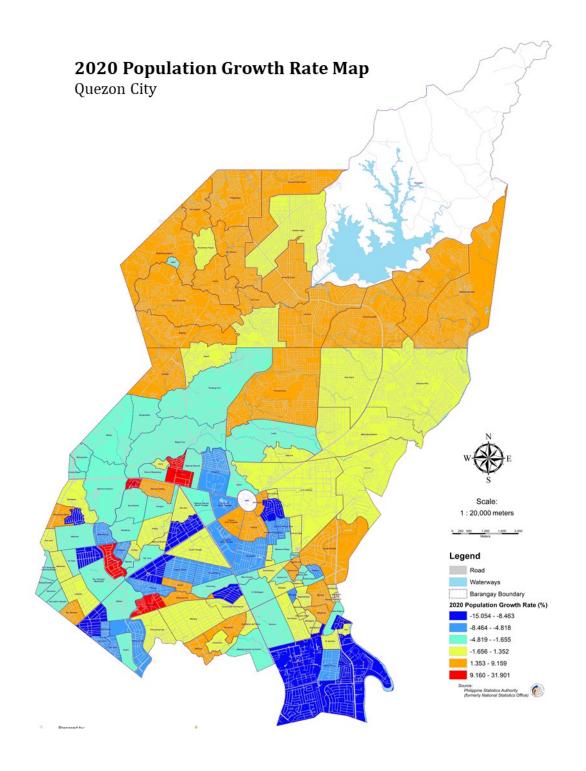
Population (2020)	514,516			
% to QC Population	17.38%			
Annual Growth Rate (2010-2015)	1.17			
Est'd Population (2025)	597,355			
Population Density (2015)	242			
No. of Households (2015)	123,626			
Ave Household Size (2015)	4.3			
Sex Distribution (2015)				
Male	262,047			
Female	269,545			
School Age Population (3-21 y/o)	189,032			
Aging Population	35,557			
Source: 2020 Census of Population, Philippine Statistics				

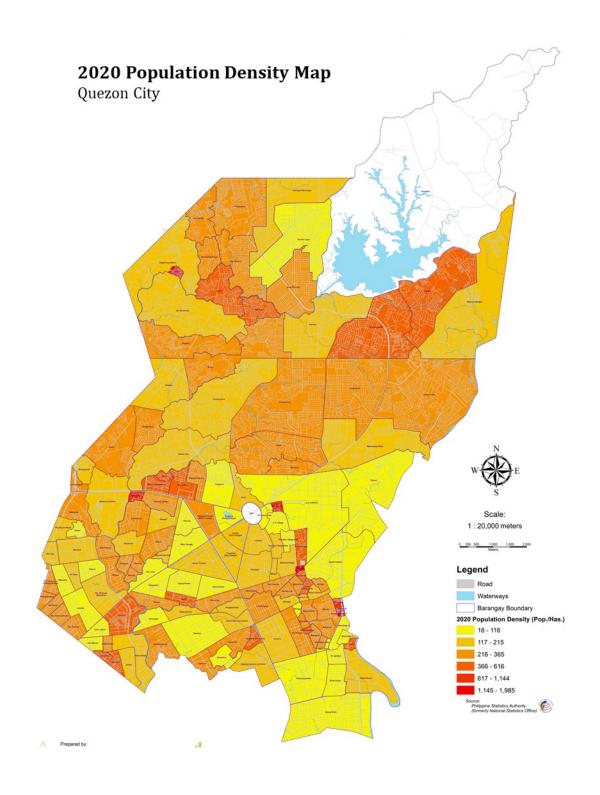


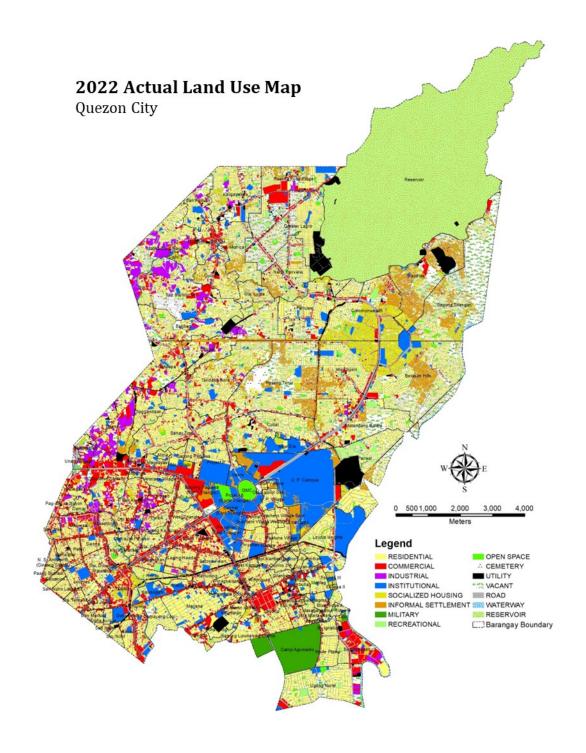
Barangay	Area (in Has)	2015 Pop'n	2015 Growth Rate	2015 Pop'n Density	2020 Actual Pop'n (PSA)	2025 Projected Pop'n
Apolonio Samson	192.51	38,583	1.17	200	33,629	43,356
Baesa	198.16	61,278	1.17	309	55,328	68,859
Balon-Bato	37.28	8,228	1.17	221	6,991	9,246
Culiat	251.66	74,304	1.17	295	67,804	83,496
New Era	61.96	13,365	1.17	216	14,105	15,018
Pasong Tamo	497.60	103,100	1.17	207	110,738	115,855
Sangandaan	89.58	24,061	1.17	269	21,061	27,038
Sauyo	275.96	76,039	1.17	276	76,289	85,446
Talipapa	181.96	35,077	1.17	193	38,949	39,416
Tandang Sora	390.78	90,290	1.17	231	83,114	101,460
Unang Sigaw	19.94	7,267	1.17	364	6,508	8,166
TOTAL	2,197.39	531,592	1.17	242	514,516	597,355
Source: 2020 Census o	f Population, Phi	ilippine Statist	ics Authority			

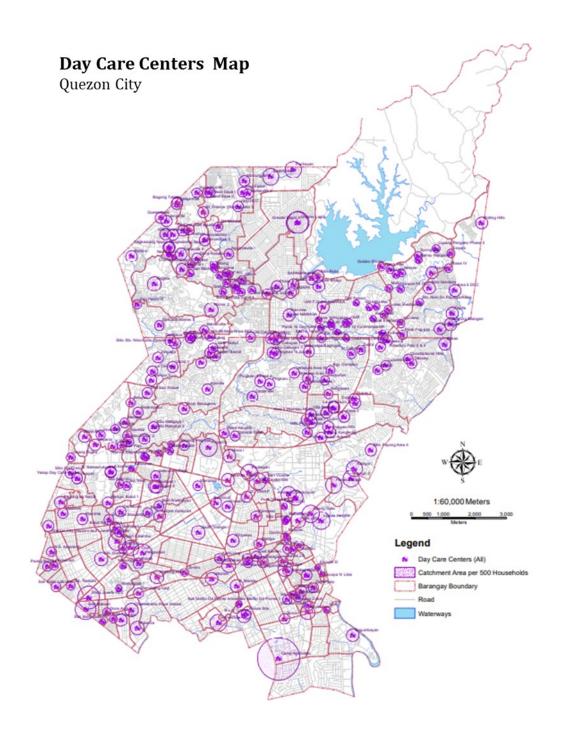
Annex 2
QC THEMATIC MAPS

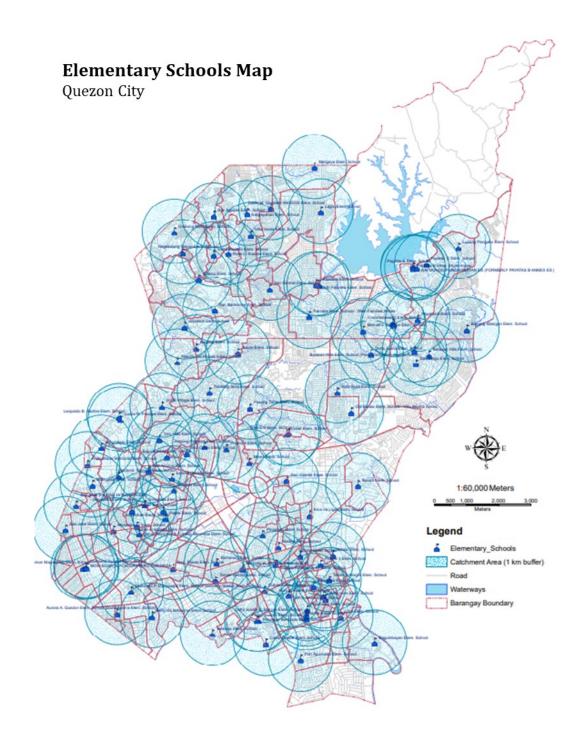


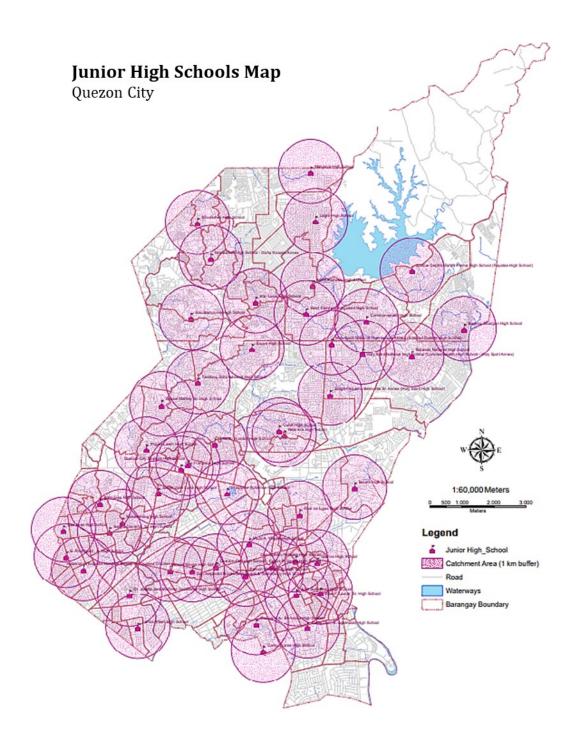


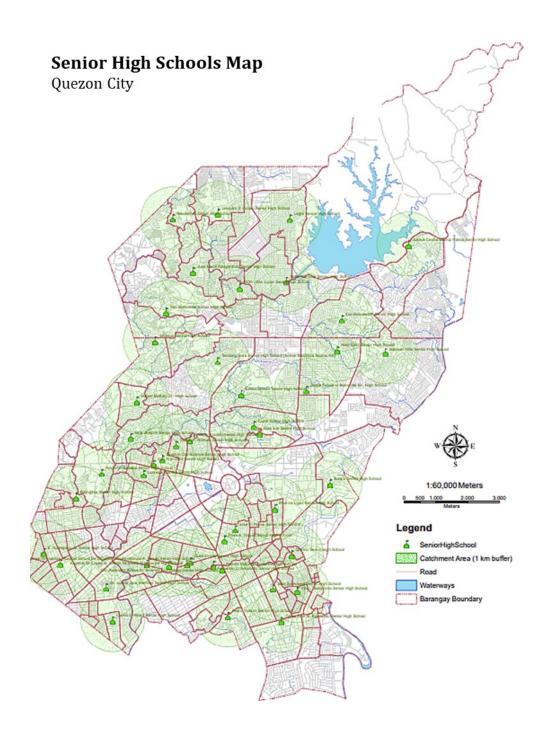


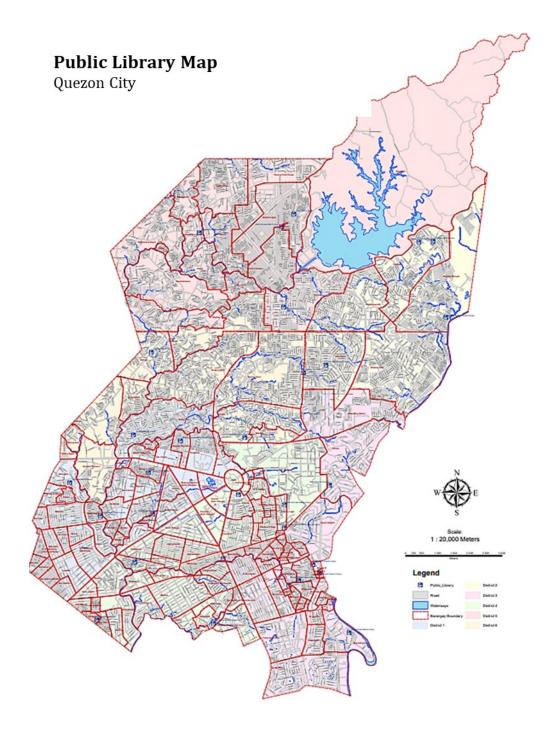


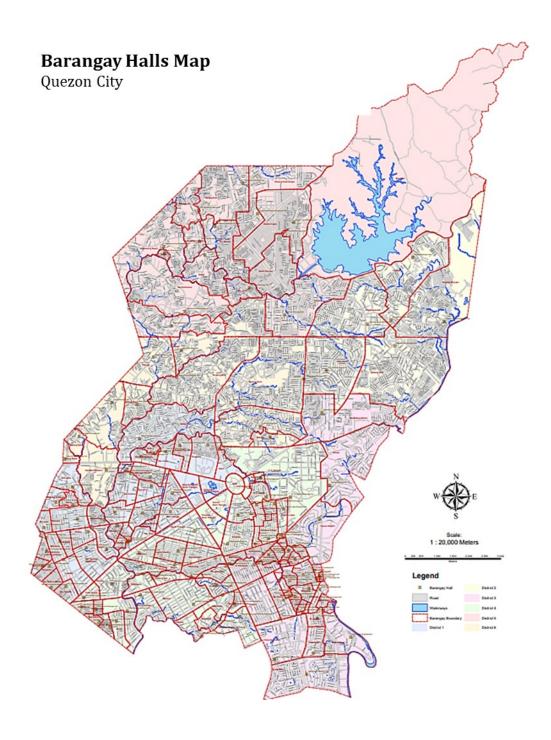


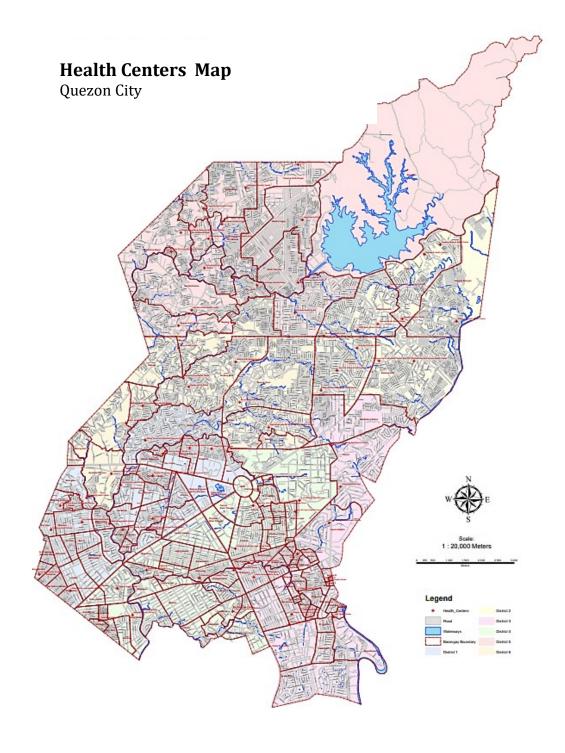


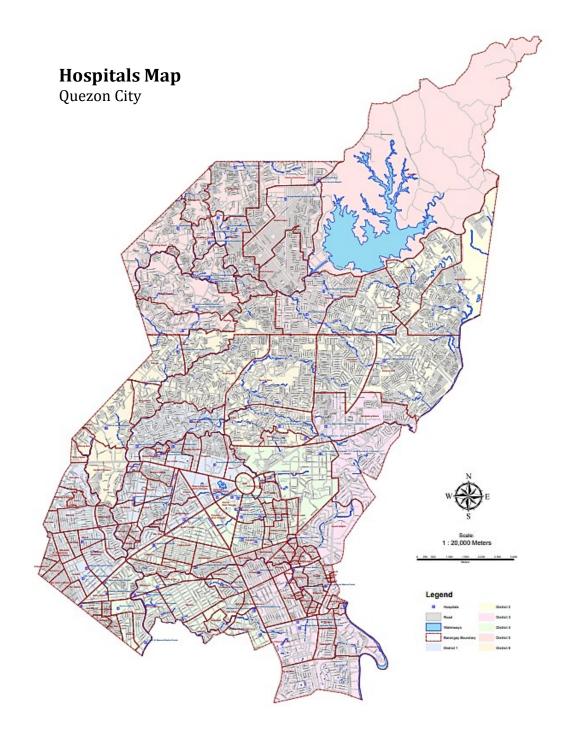


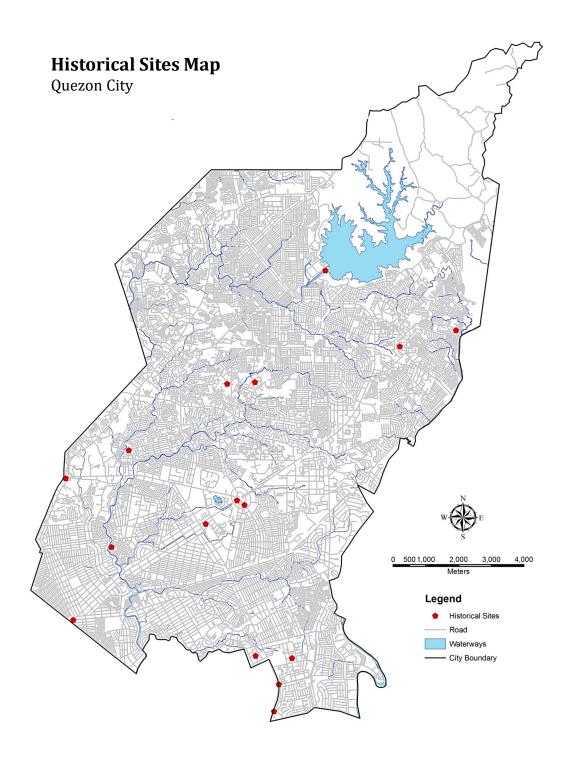


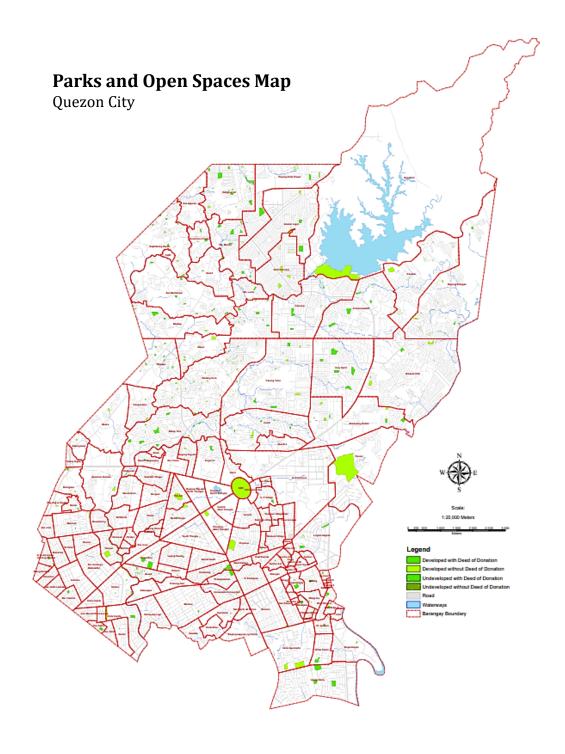


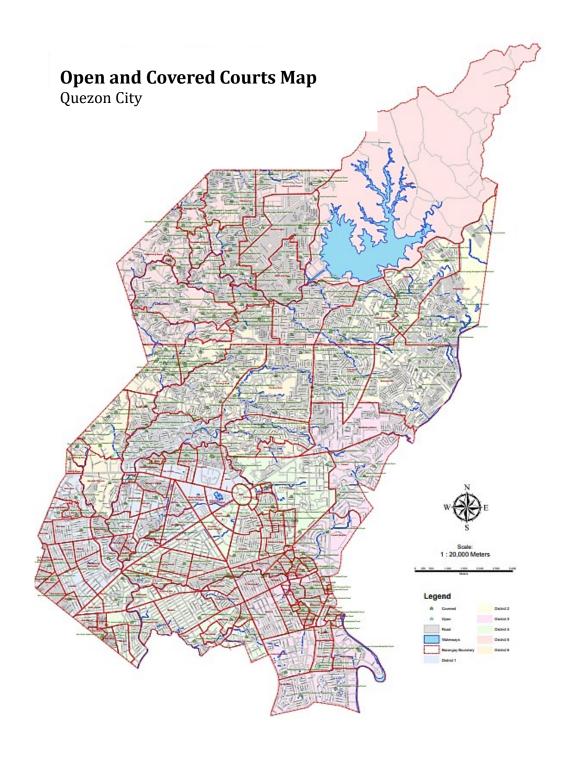


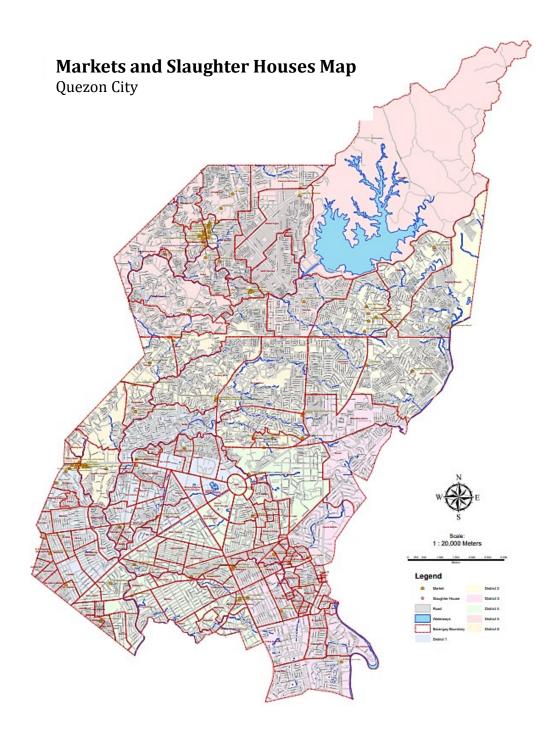


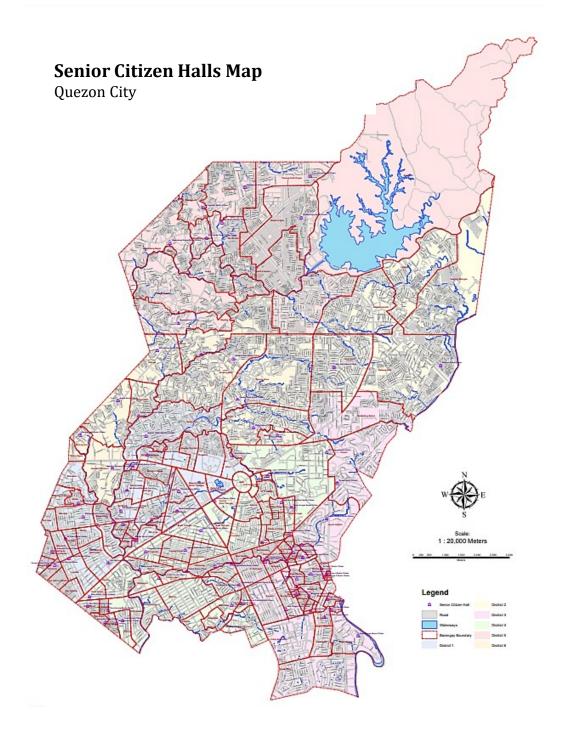


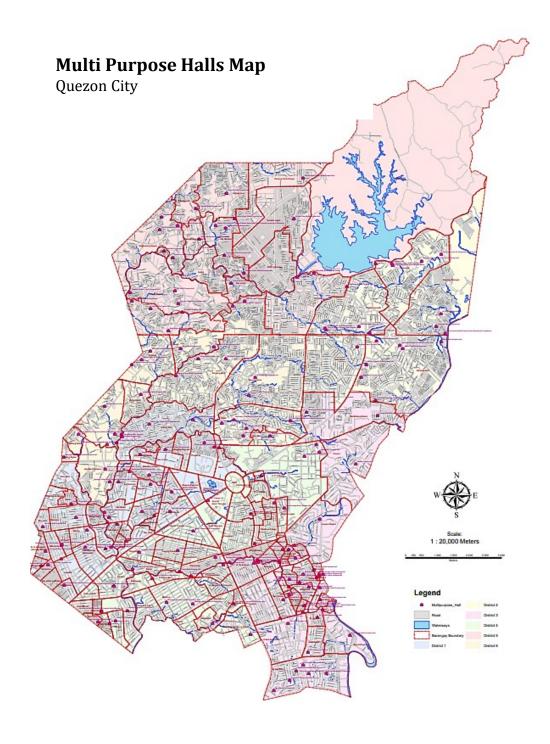


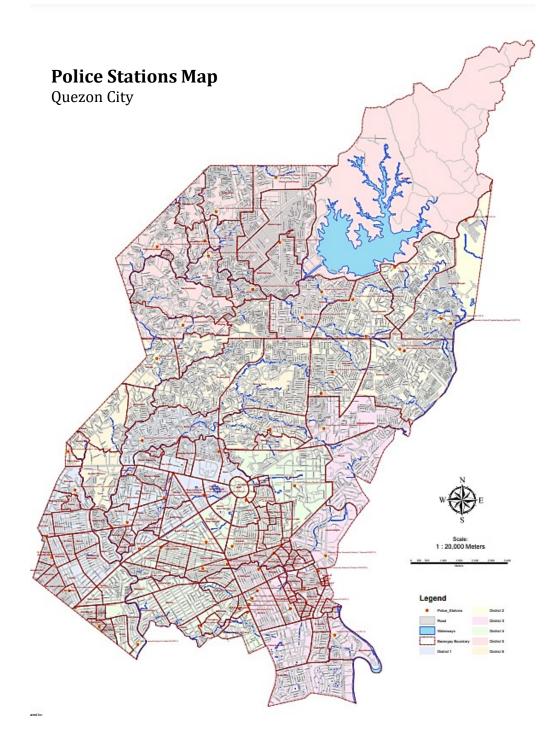


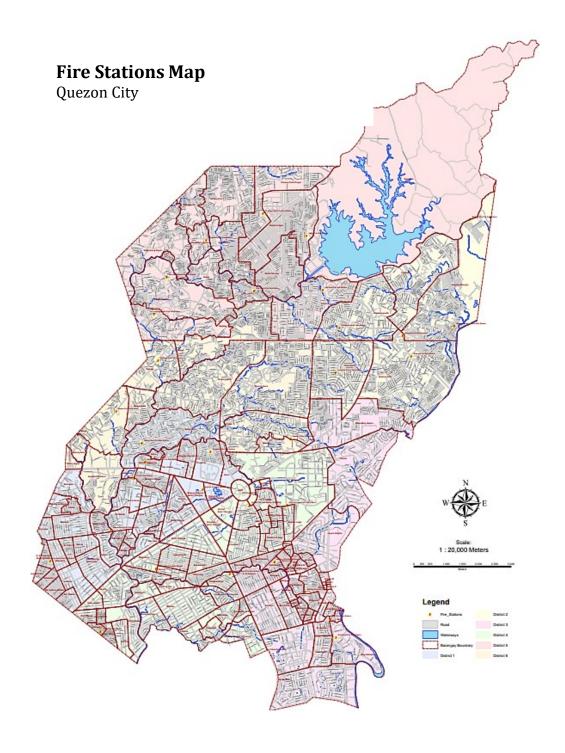












Annex 3

LIST OF QC AWARDS AND RECOGNITIONS RECEIVED, 2019-2022

Awards Received, Quezon City: 2019-2022

Award/ Recognition	Conferring Body		
2019			
Certificate of Commendation awarded to Quezon City for exhibiting the necessary qualities of a Comprehensive Development Plan (CDP) based on process parameters in line with the Assessment of the Comprehensive Development Plans of the Local Government Units in the National Capital Region	Metropolitan Manila Development Authority (MMDA)/Department of the Interior and Local Government (DILG)		
Most Outstanding Level 3 Government Hospital in the country awarded to Quezon City Government Hospital (QCGH)	Philippine Hospital Association (PHA)		
Seal of Good Local Governance (SGLG)	Philippine Hospital Association (PHA)		
2019 Overall Champion, 1st DSWD-NCR Parangal Para sa Pusong Magiting - Best Overall - Best in Yearly Accomplishment - Best in One-Practice Narrative - Best Presenter - 2nd-Best Advocacy Campaign - 3rd-Best Video Presentation - 3rd-Best in Innovation	Department of Social Welfare and Development (DSWD)		
Best Police District in NCR - Best District Unit: QCPD, for Project Double Barrel - Best Station Unit: Kamuning Police Station (PS-10), for Project Double Barrel - Most Firearms Confiscated - Best Police Community Precinct: Payatas-PCP of Batasan Police Station (PS-6)	NCR Police Office		
Gender and Development (GAD) Local Learning Hubs (LLH) for Quezon City's social hygiene and sundown clinics, and the Quezon City Protection Center	Philippine Commission on Women (PCW)		
21st Gawad Kalasag Awards - Top Disaster and Risk Reduction and Management Council in the Philippines, Highly Urbanized City Category	National Disaster Risk Reduction and Management Council (NDRRMC)		
Best Government Emergency Management Service	National Disaster Risk Reduction and Management Council (NDRRMC)		
2019 21st Gawad Kalasag Multiple Awardee - Best Local Hospital: Quezon City General Hospital - Best Specialty Hospital: Philippines Children's Medical Center - Best Civic Organization: World Mission Church of God - Best Higher Education Institutional: St. Paul	National Disaster Risk Reduction and Management Council (NDRRMC)		

Award/ Recognition	Conferring Body		
University Quezon City - Best Barangay DRRM Finalist: Barangay Batasan Hills			
- Best Public Elementary School Finalist: Rosa L. Susano Elementary School			
Most Outstanding Level 1 Government Hospital in the country awarded to Novaliches District Hospital (NDH)	Department of the Interior and Local Government (DILG)		
Hall of Fame Awardee as the Most Competitive Highly Urbanized City in the Philippines for four (4) consecutive years 2016-2019	DTI/National Competitiveness Council		
No. 1 Government Efficiency Pillar	DTI/National Competitiveness Council		
No. 1 Infrastructure Pillar	DTI/National Competitiveness Council		
No. 3 Economic Dynamism Pillar Meralsa Kurupatang Ligtas (K. Ligtas) Awardee	DTI/National Competitiveness Council		
Meralco Kuryenteng Ligtas (K-Ligtas) Awardee	Meralco		
2019 National Anti-Drug Abuse Council Performance Awardee	DILG		
OpenGov Asia Excellence Award for Innovative and Disruptive Use of Technology in Delivering Citizencentric services (Batas QC App)	Philippine Open Gov Leadership Forum		
2nd Place Dangal ng May Kapansanan Award	DSWD-NCR		
Seal of Child Friendly Local Governance	The Council for the Welfare of Children		
Highly Urbanized Cities Category - 2018 Local Legislative Award	Philippine Councilors League / Department of the Interior and Local Government		
 Top 2 on the 2019 Assessment of LGUs Compliance to MBCRPP Exemplary Performance in the Informal Settler Families Cluster Indicator Exemplary Performance in the IEC & Institutional	Department of the Interior and Local Government (DILG)		
HALL OF FAME AWARD / Outstanding Public Library with Special Programs and Outreach Services on "Malasakit" to the different sectors in the community	National Library of the Philippines (NLP), Philippine Librarians Association Inc. (PLAI), and Nation Commission for Culture and the Arts - National Committee on Libraries and Information Services (NCCA – NCLIS).		
3rd PRICE on AVP Public Libraries Marketing and Promotion AVP Competition / 2019 LIS month with	NLP, PLAI, and NCCA		

Award/ Recognition	Conferring Body		
the theme: Inclusive, Innovative, Interconnected			
3rd PLACE AWARD / for educating and inspiring the community in the Most Innovative Library Activity FY 2019	NLP		
QCPL TALIPAPA BRANCH awarded as Top Preforming Public Libraries – Barangay Category in 2019	NLP, PLAI, and NCCA		
CERTIFICATE OF COMPLETION FOR MONTHLY REPORTS FY 2018/ at Asturias Hotel, Palawan during the National Conference of Librarians	NLP		
MS. EMELITA L. VILLANUEVA was awarded as 2ND PLACE for "NATATANGING PROPESYUNAL NA TAGAPANGASIWA AT TAGAPAGLINGKOD NG PAMPUBLIKONG AKLATAN" by the NLP during the 60th Public Library Day celebration at the Librarians Conference held at Puerto Princesa City, Palawan.	NLP		
Finalist for Search for the Cleanest and Greenest LGU in the NCR (Barangay Holy Spirit)	DENR		
2019 Gabi ng Parangal - Best in HIV/AIDS and STI prevention and Control - Best in Dangerous Drug Abuse Prevention and Treatment - Best in Safe Motherhood	DOH - Center for Health Development		
Top 1 for Total Local Revenue Collection Top 1 for Fees and Charges Top 3 for Real Property Tax Collection Certificate of Recognition for Timely and Accurate Submission of Electronic Statement of Receipts and Expenditures	Department of Finance - Bureau of Local Government Finance (BLGF)		
2020			
2020 Assessment of LGU's Compliance to Manila Bay Cleanup, Rehabilitation and Preservation Program (MBCRP) Plaque of Recognition	Department of the Interior and Local Government (DILG)		
2020 Assessment of LGU's Compliance to Manila Bay Cleanup, Rehabilitation and Preservation Program (MBCRP) Special Award – ISF Category	Department of the Interior and Local Government (DILG)		
Southeast Asia - LGU of Quezon Citv - A-List City	Carbon Disclosure Project (CDP)		
Best Practices on Building Food and Nutrition Resilience	UNICEF		
City Green Recovery Stories / Green Recovery Plan focusing on Urban Agriculture and Livelihood	Global Covenant of Mayors for Climate and Energy (GCOM) / The New York Times		
22nd Gawad Kalasag Seal and Special Awards for Excellence in DRRM and Humanitarian Assistance	Office of the Civil Defense		
2020 Most Business-Friendly LGU Awards Special	Philippine Chamber of		

Award/ Recognition	Conferring Body			
Citation	Commerce and Industry (PCCI)			
iRISE UP (Intelligent, Resilient, and Integrated Systems for the Urban Population)	DRRM			
2nd place - Best in LGU Empowerment (G2G) City Level	Department of Information and Communications Technology			
COVID-19 Response Service Award	Department of Health / Metro Manila Center for Health Development			
2020 Highest Nominal Locally Sourced Revenues - Top1 among all cities in the Philippines	Department of Finance - Bureau of Local Government Finance (BLGF)			
2020 Highest Nominal Locally Sourced Revenues - Top1 among LGU in the National Capital region	Department of Finance - Bureau of Local Government Finance (BLGF)			
Year-on-Year Growth in Locally Sourced Revenues - Top3 among all cities in the Philippines	Department of Finance - Bureau of Local Government Finance (BLGF)			
Year-on-Year Growth in Locally Sourced Revenues - Top1 among LGU in the National Capital region	Department of Finance - Burea of Local Government Finance (BLGF)			
Unmodified Opinion - Highest Ever Commission on Audit (COA) Rating for its Annual Audit Report	Commission on Audit			
Maynilad Water Warrior - Advocacy Leadership	Maynilad Water Services, Inc.			
ASEAN-ROK Yellow Apron Hashtag Reading Challenges - 2nd Place all over the Philippines	National Library for Children and Young Adults			
Cirilo B. Perez Award 2020 to QCPL Librarian	Philippine Librarian Association Inc.			
Most Participative Innovators Best Team Most Collaborative Most Diligent Award Top 1	Network of Emerging Filipino Library Innovators			
Leadership Award to QCPL Librarian Stevie Gold Winner Award for Innovation in Government Publications	Asia-Pacific Stevie Awards			
ESRI SAG Award Special Achievement in GIS	ESRI			
2021				
Hall of Fame Awardee 2021 as an Outstanding Public Library	National Library of the Philippines (NLP) and The Asia Foundation (TAF)			
Most Creative Project Award to QCPL Librarian	Philippine Librarian Association Inc.			
Most Business-Friendly Local Government Unit (finalist)	Philippine Chamber of Commerce and Industry (PCCI)			

Award/ Recognition	Conferring Body		
Bronze Award in the National Bike Lane Awards - city's innovative practices and interventions for the	Department of Transportation & Dept. of the Interior and Local		
promotion of active transport Plaque of Recognition for Outstanding Commitment to the Field Health Service Information System	Government Department of Health / Metro Manila Center for Health		
Achievement of Universal Health Care - NCR	Development Department of Health / Metro		
Plaque of Recognition - Gawad Humanidades Awards	Manila Center for Health Development		
2nd place Best in Customer Empowerment -	Philippine Science High School		
Automated Inspection Audit System BPLD (G2C)	Digital Governance Awards		
3rd place Best in Government Internal Process Award QCDRRMO (G21)	Intelligent, Resilient and Integrated Systems for Urban Population (iRISE UP)		
Mark of Recognition and Gratitude Award	Regional Peace and Order Council / DILG		
Excellence in Digital Ecosystem Innovation	GCash Digital Excellence Awards		
Overall Most Competitive Highly Urbanized City in the Philippines	DTI/National Competitiveness Council - 9th Competitive Summit		
Top 2 Highly Urbanized Cities - Infrastructure Pillar	DTI/National Competitiveness Council - 9th Competitive Summit		
Top 2 Highly Urbanized Cities - Government Efficiency Pillar	DTI/National Competitiveness Council - 9th Competitive Summit		
Top 2 Highly Urbanized Cities - Economic Dynamism Pillar	DTI/National Competitiveness Council - 9th Competitive Summit		
Top 3 - Highly Urbanized Cities - Resiliency Pillar	DTI/National Competitiveness Council - 9th Competitive Summit		
Finalist 2021 Galing Pook Awards for Grow ΩC: Kasama Ka Sa Pag-Unlad, Sa Pagkain, Kabuhayan, at Kalusugan	Galing Pook Foundation / DILG/Local Government Academy (LGA)		
Finalist 2021 Galing Pook Awards for "Kabahagi sa Kyusi" – The Quezon City Community-Based Rehabilitation for Children with Disability	Galing Pook Foundation / DILG/Local Government Academy (LGA)		
Finalist 2021 Galing Pook Awards for Quezon City Human Milk Bank "Sharing Milk, Sharing Lives"	Galing Pook Foundation / DILG/Local Government Academy (LGA)		
Top 10 2021 Galing Pook Awards for Grow QC: Kasama Ka Sa Pag-Unlad, Sa Pagkain, Kabuhayan, at Kalusugan	Galing Pook Foundation / DILG/Local Government Academy (LGA)		

Award/ Recognition	Conferring Body		
Special Citation - Department of Building Official (DBO) - 3rd Big Impact Indicator	Anti-Red Tape Authority (ARTA)		
Doing Business Competitiveness Mover	Anti-Red Tape Authority (ARTA)		
MARK OF DISTINCTION set by the Safety Seal Certification Program	DILG		
2022			
Gawad Edukampyon for Early Childhood Care and Development (Highly Urbanized Cities Category)	Department of Education, Early Childhood Development Council, Center for Local Governance and Professional Development Inc.		
1st Place Most Number of Issued Safety Seals for Highly Urbanized City Category GrowQC: Kasama ka sa Pag-unlad sa Pagkain, Kabuhayan at Kalusugan sa Priority Area 1: Nutrition	Department of the Interior and Local Government (DILG) Department of Health (Philippines)		
and Physical Activity Camp Coordination and Camp Management Program ng QCDRRMO sa Priority Area 2: Environmental Health	Department of Health (Philippines)		
YOUR MENTAL HEALTH MATTERS: The Quezon City Community-Based Mental Health Program ng City Health Department para sa Priority Area 5: Mental Health	Department of Health (Philippines)		
2nd Unmodified Opinion - Highest Ever Commission on Audit (COA) Rating for its Annual Audit Report-	COA		
Certificate of Recognition - Vaccine-Preventable Diseases	Department of Health - National Capital Region		
Best Quarantine Facility - Quezon City Jail Ligtas COVID Center and Quarantine	Bureau of Jail Management and Penology - NCR		
99% rating in 2019 and 102% rating in 2021	2022 Peace and Order Council Performance Audit Department of the Interior and Local Government (DILG)		
Recognition of Quezon City's efforts to Strengthen it's Pandemic Response	International Finance Corporation (IFC) and International SOS		
MONTHLY REPORT COMPLETERS AWARD CY 2021	NLP – Public Libraries Division		
SAFETY SEAL CERTIFICATION/ as a compliant establishment with the minimum public health standards set by the government	DILG		
2021 TOP PERFORMING PUBLIC LIBRARY IN THE PHILIPPINES OCPL- LAGRO BRANCH (Barangay/Branch Category)	National Library of the Philippines and The Asia Foundation (TAF)		

Award/ Recognition	Conferring Body		
Quezon City's Trash to Cashback Program Finalist in the 9th CityNet Congress SDG Awards for Asia Pacific Cities and Municipalities in Kuala Lumpur, Malaysia	CityNet Congress SDG Awards		
Best in Future Customer Experience and Best in Future Digital Innovation	International Data Corporation (IDC) Future Enterprise Awards 2022		
Best in Future of Customer Experience ang QC Biz Easy - Online Unified Business Permit Application System (OUBPAS)	Future Enterprise Awards 2022 International Data Corporation (IDC)		
Best in Future of Digital Innovation naman ang QC iBIZ View - Automated Inspection Audit System (AIAS)	Future Enterprise Awards 2022 International Data Corporation (IDC)		
Circle of Excellence Award	International Association of Providers of AIDS Care (IAPAC)		
Plaque of Recognition - National AIDS/HIV/STI Prevention and Control Program	Department of Health (DOH)- Metro Manila Center for Health Development (MMCHD)		
Plaque of Appreciation - Universal Health Care	Department of Health (DOH)- Metro Manila Center for Health Development (MMCHD)		
Outstanding Mayor	Mandatory Continuing Legal Education (MCLE) Accredited National Convention of Public Attorneys		
1st Place Overall Most Competitive LGU in HUCs - 1st Place as Most Competitive in Innovation - 1st Place Intellectual Property Citation - 2nd Place as Most Competitive in Economic			
Dynamism - 2nd Place as Most Competitive in Government Efficiency - 2nd Place as Most Competitive in Infrastructure - 2nd Place as Most Competitive in Resiliency	DTI		
2022 Most Business-Friendly LGU HUC - special citation	Philippine Chamber of Commerce and Industry		
Hall of Famer - Top Performing LGU in Local Revenue Generation	Bureau of Local Government Finance -DOF		
Top1 Year-on-Year Growth in Locally Sourced Revenue	Bureau of Local Government Finance -DOF		
Bahaghari Champion Award	Philippine Financial and Inter- Industry Pride (PFIP)		
Plaque of Recognition	DOH - Metro Manila Center for Health Development (DOH- MMCHD)		

Award/ Recognition	Conferring Body		
Certificate of Recognition - Vax Baby Vax Campaign			
Gawad Pagkilala Award	Veterans Memorial Medical Center		
Top Government Employer for Government Agency - NCR	Pag-IBIG Fund StAR Stakeholder's Accomplishment Report (Quarter 1-3)		
Special Citation Award - for the city's contribution to the development of the Pag-Ibig Fund	Pag-IBIG Fund StAR Stakeholder's Accomplishment Report (Quarter 1-3)		
Gawad Kalasag Seal of Excellence - "Beyond Compliant"	NDRRMC - Gawad KALASAG National Awarding Ceremony		
Person of the Year	Rotary Club of Aseana Manila		
Best in Capstone Project	DOT		
Plaque of Appreciation - QCGH	Marilao Municipal Atrium		
Plaque of Appreciation - Mayor Joy Belmonte	Marilao Municipal Atrium		
Certificate of Recognition - Green City Champion	The International Finance Corporation (IFC) and World Bank		
Silver Awardee - Wheels For Work x Bike Lane Awards 2022	DOTr		
iRISE UP (Intelligent, Resilient, and Integrated System for Urban Population) - First Place	DENR		
Climate Technology for Resilience Award	DENR		
Plaque of Appreciation	QC Rainbow Pride Council		
Gawad Banyuhay ng Katatagan	CRB Group, Dr. Carl E. Balita Foundation Inc.		
People of the Year	Stargate People Asia		
Certificate of Appreciation	Build Better Best: Building Unified and Synergized Communities for the Management of Substance Use training and 2nd National Conference 2022		
SGLG	DILG		
Level 1 Accreditation (QCU)	Association of Local Colleges and Universities (ALCUCOA)		
Honorary Membership Award	47th Induction and Turnover Ceremonies of Junior Club International (JCI)		

Award/ Recognition		Conferring Body
2022 National Anti-Drug Abuse Council Performance Award - 85 functionality points during the conduct of 2021 ADAC Performance Audit.	DILG	
Certificate of Recognition - 100 points during the 2021 ADAC Performance Audit Assessment	DILG	

Annex 4
RELATED ORDINANCES



Republic of the Philippines OUEZON CITY COUNCIL

Quezon City 21st City Council

PR21CC-1189

76th Regular Session

RESOLUTION NO. SP-

8670

S-202

A RESOLUTION ADOPTING THE "ENHANCED QUEZON CITY LOCAL CLIMATE CHANGE ACTION PLAN (ENHANCED QC-LCCAP) 2021-2050 AND ITS ANNEXES", SUBJECT TO EXISTING LAWS, RULES, AND REGULATIONS.

Introduced by Councilors FRANZ S. PUMAREN and DOROTHY A. DELARMENTE, M.D.

Co-Introduced by Councilors Bernard R. Herrera, Lena Marie P. Juico, Tany Joe "TJ" L. Calalay, Nicole Ella V. Crisologo, Victor V. Ferrer, Jr., Winston "Winnie" T. Castelo, Eden Delilah "Candy" A. Medina, Ramon P. Medalla, Mikey F. Belmonte, Estrella C. Valmocina, Kate Galang-Coseteng, Wencerom Benedict C. Lagumbay, Jorge L. Banal, Sr., Peachy V. De Leon, Imee A. Rillo, Marra C. Suntay, Irene R. Belmonte, Resty B. Malangen, Ivy L. Lagman, Hero M. Bautista, Karl Castelo, Patrick Michael Vargas, Shaira L. Liban, Ram V. Medalla, Allan Butch T. Francisco, Marivic Co Pilar, Rogelio "Roger" P. Juan, Donato "Donny" C. Matias, Eric Z. Medina, Freddy S. Roxas and Noe Dela Fuente.

WHEREAS, the Quezon City Government crafted its Local Climate Change Action Plan (LCCAP) 2017 - 2027 as required of each local government unit (LGU) in the country under Republic Act No. 9729 or the Climate Change Act, consistent with the provisions of the Local Government Code, the National Framework Strategy on Climate Change, and the National Climate Change Action Plan;

WHEREAS, the LCCAP was adopted by the 20th City Council during the 28th regular session through Resolution No. SP-7086, S-2017 entitled "A Resolution Adopting the Quezon City Local Climate Change Action Plan (QC-LCCAP) and Its Annexes, Subject to Existing Laws, Rules and Regulations";



Res. No. SP- 8670, S-2021 Page -2- PR21CC-1189

WHEREAS, there is a need to update the QC-LCCAP to reflect changing social, economic, and environmental conditions, and emerging issues;

WHEREAS, the Quezon City Government reviewed the QC-LCCAP, conducted a Greenhouse Gas (GHG) inventory, revisited the impacts of climate-related hazards, vulnerabilities and risks, and reassessed its priority climate goals, outcomes, and actions, to develop the Enhanced Quezon City Local Climate Change Action Plan 2021-2050 (Enhanced QC-LCCAP) with the support of the C40 Cities Climate Leadership Group through their Climate Action Programme;

WHEREAS, the Enhanced QC-LCCAP provides a strategic framework and roadmap to help the City achieve its broad, overarching climate vision, which reads: "Quezon City aspires to be the leading city in advancing inclusive, ambitious, and evidence-based climate actions in the Philippines, building resilience and advancing green economic development while providing a livable and quality community for all";

WHEREAS, the City's climate change mitigation goal was also established in the Enhanced QC-LCCAP wherein it commits a reduction in GHG emissions by 30% in 2030 compared to the projected business-as-usual scenario while also pursuing net-zero emissions by 2050;

WHEREAS, the City's climate change adaptation goal was also established in the Enhanced QC-LCCAP, recognizing the need for progressive action to build on and strengthen the resilience of ecosystems and communities against risks and threats from the changing climate;

WHEREAS, the Enhanced QC-LCCAP also upholds the Quezon City's commitment to a sustainable urban future that is compatible with the objectives of the Paris Agreement, the United Nations' Sustainable Development Goals, and a green and just recovery in light of the COVID-19 pandemic.

NOW, THEREFORE,

BE IT RESOLVED BY THE CITY COUNCIL OF QUEZON CITY IN REGULAR SESSION ASSEMBLED, to adopt, as it does hereby adopt, the "Enhanced Quezon City Local Climate Change Action Plan (Enhanced QC-LCCAP) 2021-2050 and its Annexes", subject to existing laws, rules, and regulations.

Res. No. SP- 8670, S-2021 Page -3- PR21CC-1189

RESOLVED FURTHER, that relevant resolutions and ordinances shall be enacted to ensure that necessary policies are in place to support the implementation of the strategies and climate actions prioritized in the Enhanced QC-LCCAP.

RESOLVED FURTHERMORE, that the strategies and climate actions shall be considered by the concerned City Departments and Offices in the annual investment programming and budgeting processes.

RESOLVED FINALLY, that the Environmental Protection and Waste Management Department (Climate Change and Environmental Sustainability) shall serve the overarching function as the city-wide oversight for the implementation of climate actions through the development of mechanisms and institutional arrangements in line with the Climate Governance Framework and External Partnerships as integrated in the Enhanced QC-LCCAP and also the consolidation of monitoring and evaluation reports from the lead departments and offices.

ADOPTED: September 6, 2021.

GIAN G. SOTTO City Vice Mayor Presiding Officer

ATTESTED:

Atty. JOHN THOMAS S. ALPEROS III City Government Dept. Head III

CERTIFICATION

This is to certify that this Resolution was APPROVED by the City Council on Second Reading on September 6, 2021 and was CONFIRMED on September 13, 2021.

Atty. JOHN THOMAS S. A. FEROS III City Government Dept. Head III



Republic of the Philippines QUEZON CITY COUNCIL

Quezon City
21st City Council

PR21CC-905

60th Regular Session

RESOLUTION NO. SP. 8482, S-2021

A RESOLUTION ADOPTING THE "QUEZON CITY DISASTER RISK REDUCTION AND MANAGEMENT PLAN 2021-2027 AND ITS ANNEXES," SUBJECT TO ALL LAWS AND EXISTING LEGAL RULES AND REGULATIONS.

Introduced by Councilor HERO M. BAUTISTA and FRANZ S. PUMAREN.

Co-Introduced by Councilors Bernard R. Herrera, Lena Marie P.
Juico, Dorothy A. Delarmente, M.D., Nicole Ella V.
Crisologo, Victor V. Ferrer, Jr., Winston "Winnie" T.
Castelo, Atty. Bong Liban, Eden Delilah "Candy" A.
Medina, Ramon P. Medalla, Mikey F. Belmonte,
Estrella C. Valmocina, Kate Galang-Coseteng, Matias
John T. Defensor, Wencerom Benedict C. Lagumbay,
Jorge L. Banal, Sr., Peachy V. De Leon, Imee A. Rillo,
Marra C. Suntay, Irene R. Belmonte, Resty B. Malañgen,
Ivy L. Lagman, Jose A. Visaya, Karl Castelo, Patrick
Michael Vargas, Shaira L. Liban, Ram V. Medalla, Allan
Butch T. Francisco, Marivic Co Pilar, Melencio "Bobby" T.
Castelo, Jr., Rogelio "Roger" P. Juan, Diorella Maria G.
Sotto-Antonio, Donato "Donny" C. Matias, Eric Z. Medina,
Freddy S. Roxas and Noe Dela Fuente.

WHEREAS, the Quezon City Government desires to strengthen the City's resilience against human-induced or natural hazards by adopting the vision, policy framework and strategies encapsulating Disaster Risk Reduction and Management in Quezon City based on the Sendai Framework for Disaster Risk Reduction, the National DRRM Plan, and the National DRRM Framework;

WHEREAS, Section 12 (c) (6) of Republic Act No. 10121, otherwise known as the "Philippine Disaster Risk Reduction and Management Act of 2010", requires the Local Disaster Risk Reduction and Management Office (LDRRMO) to "Formulate and implement a comprehensive and integrated Local Disaster Risk Reduction and Management Plan (LDRRMP) in accordance with national, regional, and provincial framework, and policies on disaster risk reduction in close coordination with Local Development Councils (LDCs)";

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60th Regular Session

Res. No. SP- **8482**, S-2021 Page -2- PR21CC-905

WHEREAS, Section 11 (b) (1) of Republic Act No. 10121 provides that the Local Disaster Risk Reduction and Management Council (LDRRMC) shall "Approved, monitor and evaluate the implementation of the LDRRMPs" and "Monitor and evaluate the use and disbursement of the Local Disaster Risk Reduction and Management Fund based on the LDRRMP as incorporated in the local development plans and annual work and financial plan;

WHEREAS, Section 21 of Republic Act No. 10121 provides that the present Local Calamity Fund shall henceforth be known as the Local Disaster Risk Reduction and Management Fund (LDRRMF) and not less than five percent (5%) of the estimated revenue from regular resources shall be set aside as the LDRRMF which shall be used to support disaster risk management activities, such as but no limited to pre-disaster preparedness activities, post-disaster activities and other related activities; and thirty percent (30%) of the amount appropriated shall be allocated to the Quick Response Fund (QRF) or stand-by fund for relief and recovery projects and activities;

WHEREAS, the formulation of the LDRRMP 2021-2027 is anchored on the scientific knowledge and understanding of the city's hazards, vulnerability, and risks which had been the result of a collaborative and comprehensive planning process with the LDRRMC Technical Working Group;

WHEREAS, the QCDRRMP 2021-2027 and its annexes, was moved for the adoption during the regular meeting last 10 December 2020 by the Quezon City Disaster Risk Reduction and Management Council (QCDRRMC), optimizes and aligns the current DRRM investments and resources to comply with Republic Act No. 10121 and international standards while at the same time provides a clear road map on actions and decisions to reach the DRRM objectives set up by national and international actors in the specific context and parameters of Quezon City;

WHEREAS, the QCDRRMP 2021-2027 was completed and submitted for approval of the City Mayor, Honorable Ma. Josefina G. Belmonte, on 10 December 2020.

NOW, THEREFORE,

BE IT RESOLVED BY THE CITY COUNCIL OF QUEZON CITY IN REGULAR SESSION ASSEMBLED, to adopt, as it does hereby adopt the "Quezon City Disaster Risk Reduction and Management Plan 2021-2027 and its Annexes," subject to all laws and existing legal rules and regulations.









60th Regular Session

Res. No. SP- **8482**, S-2021 Page -3- PR21CC-905

RESOLVED FURTHER, that a copy of this Resolution be furnished to the QCDRRM Council and other offices/departments concerned for their information, guidance and reference.

ADOPTED: March 22, 2021.

GIAN G. SOTTO City Vice Mayor Presiding Officer

ATTESTED:

Atty. JOHN THOMAS S. ALFEROS III City Government Dept. Head III

CERTIFICATION

This is to certify that this Resolution was APPROVED by the City Council on Second Reading on March 22, 2021 and was CONFIRMED under Suspended Rules on the same date.

Atty. JOHN THOMAS S. ALFEROS III City Government Dept. Head III



Republic of the Philippines **QUEZON CITY COUNCIL**

Quezon City 21st City Council

> PR21CC-691/ PR21CC-691-A

42nd Regular Session

RESOLUTION NO. SP- 8303

S-2020

A RESOLUTION GRANTING AUTHORITY TO THE CITY MAYOR, HONORABLE MA. JOSEFINA G. BELMONTE, TO ENTER INTO AND SIGN, FOR AND IN BEHALF OF THE QUEZON CITY GOVERNMENT, THE MEMORANDUM OF AGREEMENT WITH THE UNIVERSITY OF THE PHILIPPINES (UP) RELATIVE TO THE FORMULATION OF THE QUEZON CITY COMPREHENSIVE DRAINAGE MASTER PLAN (QCCDMP).

Introduced by Councilors DOROTHY A. DELARMENTE, M.D. and HERO M. BAUTISTA.

Co-Introduced by Councilors Bernard R. Herrera, Lena Marie P. Juico, Tany Joe "TJ" L. Calalay, Nicole Ella V. Crisologo, Victor V. Ferrer, Jr., Winston "Winnie" T. Castelo, Atty. Bong Liban, Eden Delilah "Candy" A. Medina, Ramon P. Medalla, Mikey F. Belmonte, Estrella C. Valmocina, Franz S. Pumaren, Kate Galang-Coseteng, Wencerom Benedict C. Lagumbay, Jorge L. Banal, Sr., Peachy V. De Leon, Imee A. Rillo, Marra C. Suntay, Irene R. Belmonte, Resty B. Malangen, Jose A. Visaya, Karl Castelo, Patrick Michael Vargas, Shaira L. Liban, Ram V. Medalla, Allan Butch T. Francisco, Marivic Co Pilar, Melencio "Bobby" T. Castelo, Jr., Rogelio "Roger" P. Juan, Diorella Maria G. Sotto-Antonio, Donato "Donny" C. Matias, Eric Z. Medina, Freddy S. Roxas and Noe Dela Fuente.

WHEREAS, Section 2 (a) of Republic Act No. 10121, otherwise known as the Philippine Disaster Risk Reduction and Management Act of 2010, provides that it shall be the policy of the State to uphold people's constitutional rights to life and property by addressing the root causes of vulnerabilities to disaster, strengthening the country's institutional capacity for disaster risk reduction and management, and building the resilience of local communities to disasters including climate change impacts;

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WHEREAS, the Quezon City, as a local government unit, is mandated under Section 14 of Republic Act No. 9729 or the Philippine Climate Change Act of 2009, to regularly update their respective action plans to reflect changing social, economic, and environmental conditions and emerging issues;

WHEREAS, the Quezon City aims to develop its Comprehensive Drainage Master Plan (CDMP) that will be instrumental in linking economic planning and development projects (e.g., solid waste and water resources management, roads, ports, and other transport infrastructure, information and communications technology, power-generating and support facilities, coastal protection works and reclamation activities) to environmental and resources management goals for Quezon City and address social and ecological/environmental issues such as public health and biodiversity with appropriate financing/funding;

WHEREAS, the formulation of the City's Drainage Master Plan (CDMP) is one of the identified projects in the Local Development Investment Program (LDIP 2017-2020) and Local Disaster Risk Reduction and Management Plan 2020 (LDRRMP 2020). Moreover, it is also one of the requirements of the Supreme Court-Manila Bay Advisory Committee under the Manila Bay Clean-up, Rehabilitation, and Preservation Program (MCRPP);

WHEREAS, the formulation of CDMP requires the engagement of experts with scientific knowledge and technical know-how on the dynamics of storm drainage and hydraulics, flood modeling and simulation, tools, technology and mechanism, equipment, software, among others;

WHEREAS, under the University of the Philippines (UP) Charter of 2008, (Republic Act 9500), UP is mandated to perform its unique and district leadership in higher education and in nation building, and as public service institution provide various forms of community, public and volunteer service as well as scholarly and technical assistance to the government and private sector, and civil society while maintaining its standard of excellence, pursuant to its duty to serve the Filipino people as national university;

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WHEREAS, under the University of the Philippines Executive Order PDLC 17-03 signed by President Danilo L. Concepcion on March 21, 2017, the NOAH (National Operational Assessment of Hazards) Center was formally established in the UP System;

WHEREAS, under the University of the Philippine Executive Order PDLC 17-03, the NOAH Center for climate actions and disaster risk reduction and management was established for the purpose to attain the objective among others, that is to "assist the people and the communities throughout the country in climate change actions and disaster risk reduction by providing timely, reliable, and readily accessible data and information such as hazard and risk maps as basis for action by warning and response agencies (i.e. NDRRMC, DSWD, DILG, LGUs) against possible disaster that may occur from floods, typhoons, and other natural hazards;

WHEREAS, the UP through the UP NOAH Center has a pool of scientists who can provide technical expertise to Quezon City in formulating its programs, reviewing its policies, and implementing its various endeavors, including the formulation of the Quezon City Comprehensive Drainage Master Plan;

WHEREAS, there is a need for the City Council to grant authority to the City Mayor before signing the Memorandum of Agreement for and in behalf of the Quezon City Government.

NOW, THEREFORE,

BE IT RESOLVED BY THE CITY COUNCIL OF QUEZON CITY IN REGULAR SESSION ASSEMBLED, to authorize, as it does hereby authorize, the City Mayor, Honorable Ma. Josefina G. Belmonte, for and in behalf of the Quezon City Government, the Memorandum of Agreement with the University of the Philippines (UP) relative to the formulation of the Quezon City Comprehensive Drainage Master Plan (QCCDMP).



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RESOLVED FURTHER, to furnish copies of this Resolution to the Office of the City Mayor, City Legal Officer, City Accountant, City Treasurer, City Budget Officer, Local Disaster Risk Reduction and Management Officer, City Planning and Development Officer, City Engineering, all of this City and the University of the Philippines for information and appropriate action.

RESOLVED FINALLY, that a copy of the subject Memorandum of Agreement shall form an integral part of this Resolution.

ADOPTED: September 28, 2020.

GIAN G. SOTTO City Vice Mayor Presiding Officer

ATTESTED:

Atty. JOHN THOMAS S. ALFEROS III City Government Dept. Head III

CERTIFICATION

This is to certify that this Resolution was APPROVED by the City Council on Second Reading on September 28, 2020 and was CONFIRMED on October 5, 2020.

Atty. JOHN THOMAS S. ALFEROS III City Government Dept. Head III

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Republic of the Philippines QUEZON CITY COUNCIL

Quezon City 20th City Council

PR20CC-454

27th Regular Session

RESOLUTION NO. SP. 7092 , S-2017

A RESOLUTION ADOPTING THE "QUEZON CITY CONTINGENCY PLAN FOR FLOOD" SUBJECT TO ALL LAWS AND EXISTING LEGAL RULES AND REGULATIONS.

Introduced by Councilor RAMON P. MEDALLA.

Co-Introduced by Councilors Anthony Peter D. Crisologo, Lena Marie P. Juico, Elizabeth A. Delarmente, Victor V. Ferrer, Jr., Oliviere T. Belmonte, Alexis R. Herrera, Precious Hipolito Castelo, Voltaire Godofredo L. Liban III. Ranulfo Z. Ludovica, Estrella C. Valmocina, Roderick M. Paulate, Allan Benedict S. Reyes, Gian Carlo G. Sotto, Kate Abigael G. Coseteng, Franz S. Pumaren, Eufemio C. Lagumbay, Raquel S. Malangen, Irene R. Belmonte, Ivy Xenia L. Lagman, Marra C. Suntay, Karl Edgar C. Castelo, Godofredo T. Liban II, Allan Butch T. Francisco, Marivic Co-Pilar, Melencio "Bobby" T. Castelo, Jr., Rogelio "Roger" P. Juan, Diorella Maria G. Sotto, Donato C. Matias, Eric Z. Medina and Ricardo B. Corpuz.

WHEREAS, the Quezon City Government desires to strengthen the city's resiliency against human induced or natural disasters by recognizing the vision, policy framework and strategies capitalized on disaster risk reduction and management in Quezon City, and which envisages a Quality City with an empowered and responsive citizenry who live in a sustainable, well planned, and structurally sound environment with a vibrant economy under a progressive leadership;

WHEREAS, Section 12 (c) (6) of Republic Act No. 10121, states that "the Local Disaster Risk Reduction and Management Office (LDRRMO) shall formulate and implement a comprehensive and integrated Local Disaster Risk Reduction and Management Plan (LDRRMP) in accordance with national, regional, and provincial framework, and policies on disaster risk reduction in close coordination with Local Development Councils (LDCs)";

WHEREAS, Section 21 of R.A. No. 10121 also states that "the Local Disaster Risk Reduction and Management Council (LDRRMC) shall monitor and evaluate the use and disbursement of the Local Disaster Risk Reduction and Management Fund base on the LDRMMP as

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incorporated in the Local Development Plans and Annual Work and Financial Plan*;

WHEREAS, the formulation and implementation of the Quezon City Contingency Plan (QC CP) for Flood, Earthquake and Quezon City Disaster Risk Reduction and Management Council Operations Manual (QC DRRMC OM) is anchored on the scientific knowledge and deep understanding of the city hazards, vulnerability and risk to human induced or natural disaster or calamities, and has undertaken a collaborative and comprehensive planning process with the help of Earthquake and Megacities Initiatives (EMI);

WHEREAS, the QC CP and QC DRRMC OM states about the standard response during a worst case scenario and the standard operating procedure during emergencies;

WHEREAS, the QC CP and QC DRRMC OM were completed, submitted and approved by the City Mayor, Honorable Herbert M. Bautista as per QCDRRMC Resolution No. 03, S-2016.

NOW, THEREFORE,

BE IT RESOLVED BY THE CITY COUNCIL OF QUEZON CITY IN REGULAR SESSION ASSEMBLED, to adopt, as it does hereby adopt the "Quezon City Contingency Plan for Flood" subject to all the laws and existing legal rules and regulations.

RESOLVED, FURTHER, that a copy of this Resolution be furnished to the QCDRRM Council and other offices / departments concerned for their information, guidance and reference.

ADOPTED: March 27, 2017.

MA. JOSEFINA G. BELMONTE
Vice Mayor
Presiding Officer

ATTESTED:

Atty. JOHN THOMAS S. AUFEROS III City Gov't. Asst. Dept. Head III

CERTIFICATION

This is to certify that this Resolution was APPROVED by the City Council on Second Reading on March 27, 2017 and was CONFIRMED on May 29, 2017.

Atty. JOHN THOMAS S. ALFEROS III
City Gov't. Asst. Dept. Head III



Republic of the Philippines OUEZON CITY COUNCIL

Quezon City 21st City Council

PO21CC-310

46th Regular Session

ORDINANCE NO. SP. 2988 , S-2020

AN ORDINANCE PROMOTING SAFE CYCLING AND ACTIVE TRANSPORT AS AN ALTERNATIVE MODE OF TRANSPORTATION IN QUEZON CITY, CREATING THE BICYCLE AND ACTIVE TRANSPORT SECTION UNDER THE DEPARTMENT OF PUBLIC ORDER AND SAFETY - GREEN TRANSPORT OFFICE, AND FOR OTHER PURPOSES.

Introduced by Councilor MIKEY F. BELMONTE.

Co-Introduced by Councilors Bernard R. Herrera, Lena Marie P. Juico, Dorothy A. Delarmente, M.D., Tany Joe "T.J" L. Calalay, Nicole Ella V. Crisologo, Victor V. Ferrer, Jr., Winston "Wirnie" T. Castelo, Atty. Bong Liban, Eden Delilah "Candy" A. Medina, Ramon P. Medalla, Estrella C. Valmocina, Franz S. Pumaren, Kate Galang-Coseteng, Matias John T. Defensor, Wencerom Benedict C. Lagumbay, Jorge L. Banal, Sr., Peachy V. De Leon, Imee A. Rillo, Marra C. Suntay, Irene R. Belmonte, Resty B. Malañgen, Ivy L. Lagman, Hero M. Bautista, Jose A. Visaya, Karl Castelo, Patrick Michael Vargas, Shaira L. Liban, Ram V. Medalla, Allan Butch T. Francisco, Marivic Co Pilar, Melencio "Bobby" T. Castelo, Jr., Rogelio "Roger" P. Juan, Diorella Maria G. Sotto-Antonio, Donato "Donny" C. Matias, Eric Z. Medina, Freddy S. Roxas and Noe Dela Fuente.

WHEREAS, the outbreak of the Coronavirus Disease 2019 (COVID-19) has caused the World Health Organization (WHO) to declare it as a pandemic, thus, President Rodrigo Roa Duterte signed Proclamation No. 922 entitled "Declaring a State of Public Health Emergency Throughout the Philippines on 8 March 2020":

WHEREAS, Section 1 of Presidential Proclamation No. 929, dated 16 March 2020, declared a State of National Calamity over a period of six (6) months. Section 2 of the abovementioned, likewise imposed an Enhanced Community Quarantine beginning 16th of March 2020 until the 13 April 2020;

WHEREAS, in a Memorandum from the Executive Secretary dated 16 March 2020, with the Subject "Community Quarantine over the entire Luzon and Further Guidelines for the Management of the Coronavirus Disease 2019 (COVID-19) Situation", Enhanced Community Quarantine and Stringent Social Distancing Measures were imposed over the entire Luzon, effective 17 March 2020 until 13 April 2020. The said measures suspended all school activities in all levels, prohibited mass gatherings, imposed strict home quarantine, and restricted the operation of private businesses, allowing only the operation of those which provide basic necessities. Further, pursuant to IATF Resolution No. 35, various areas were placed under a Modified Enhanced Community Quarantine (MECQ);

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WHEREAS, the IATF guidelines issued on May 13, 2020 state that public transport will continue to be disallowed in areas declared under the Modified Enhanced Community Quarantine (MECQ). Public transport will be allowed in General Community Quarantine (GCQ), but with a limited load factor which will vary by mode of transport. The stringent physical distancing protocols required to maintain safe public transportation systems will therefore continue to limit the capacity of these systems. Therefore, the use of bicycles and other light mobility and walking have been promoted as essential modes of transport for citizens who need to commute to work and other allowable daily activities. In addition, streets are considered vital public spaces for active transport and exercise as allowed under the IATF guidelines for MECQ and GCQ;

WHEREAS, a main barrier to cycling as daily means of commuting and transportation is the perceived risk to health due to the possibility of physical injury or exposure to pollution. Both factors have been proven over decades of research and evidence to be mitigated by the establishment of a network of cycling lanes throughout a municipality/city/province;

WHEREAS, existing scientific literature has shown overwhelmingly that cycling lanes improve mobility outcomes throughout a municipality/city/province by encouraging citizens to adopt the less-congestive mode of cycling as transportation rather than resorting to the more congestive mode of private motorized transport;

WHEREAS, cycling is established as a primary mode of transportation around the world, in cities of varying geographies and weather conditions, including those which are hilly, hot and humid, and subject to harsh precipitation, proving that it is possible for biking to be made viable as everyday transport regardless of a municipality's/city's/province's specific natural environment;

WHEREAS, cycling allows people of varying ages, physical abilities, and economic conditions to access mobility through the use of specially sized, modified, or improvised bicycles and personal mobility devices, and a network of cycling lanes would thus result in the expansion of economic opportunity for all residents of Quezon City;

WHEREAS, cycling and active transportation addresses the problem of the limited availability of public transportation especially for frontliners required to report to essential work. In the context of COVID19, it also ensures the avoidance of crowding in public transportation settings and facilitates social distancing;

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WHEREAS, Section 16 of Republic Act No. 7160, otherwise known as the Local Government Code of 1991, provides that "Every Local Government unit shall exercise the powers expressly granted, those necessarily implied therefrom, as well as powers necessary, appropriate, or incidental for its efficient and effective governance, and those which are essential to the promotion of the general welfare. Within their respective territorial jurisdictions, local government units shall ensure and support, among other things, the preservation and enrichment of culture, promote health and safety, enhance the right of the people to a balanced ecology, encourage and support the development of appropriate and self-reliant scientific and technological capabilities, improve public morals, enhance economic prosperity and social justice, promote full employment among their residents, maintain peace and order, and preserve the comfort and convenience of their inhabitants":

WHEREAS, there is a need to establish bike lanes and bike-friendly zones in order to safeguard bikers from accidents and other road-related incidents;

WHEREAS, this Ordinance aims to protect the rights to property and ensure the safety of the cycling public traversing in Quezon City.

NOW, THEREFORE,

BE IT ORDAINED BY THE CITY COUNCIL OF QUEZON CITY IN REGULAR SESSION ASSEMBLED:

SECTION 1. TITLE. - This Ordinance shall be known as the "QC Safe Cycling and Active Transport Ordinance of 2020."

SECTION 2. DECLARATION OF POLICY. - The use of active transport, during and after the COVID-19 outbreak, promotes the general welfare of the City and in realizing the right of people to a balanced and healthful ecology in accordance with the rhythm and harmony of nature, the City hereby adopts the following policies relative to the transportation system in our country, it is hereby declared the policy of the City Government that:

- The City seeks to significantly reduce carbon emissions by providing sustainable and environment-friendly mobility options by supporting active transport in its transport plan;
- Urban road space is a scarce commodity whose beneficial use must be allocated for the greatest good and greatest number, judiciously, fairly, and in a participatory manner, wherein the movement of people is the paramount priority;
- c. City transport shall be guided by fairness and equity in funding utilities and infrastructure, as well as in maintaining them individuals or entities engaged in activities imposing societal costs, such as congestion, pollution, and accident risks, will fairly compensate society;

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- d. The City shall promote a shift towards safe, cost-effective, efficient, non-congestive, non-polluting, active transport in a seamless and inclusive transportation system which includes prioritizing non-motorized and non-pollutive transport;
- The City shall increase mobility options of the general public and promote the use of sustainable modes of transportation such as walking, cycling, and public transportation;
- f. The City shall properly plan and establish facilities and infrastructures that will support this shift in the transportation system; and
- g. The City shall measure and report on the performance of these measures, the share and usage of the modes, the conditions of the infrastructure, and their social, environmental and economic impacts.

SECTION 3. SCOPE AND COVERAGE. - This Ordinance shall apply to government offices, schools and academic institutions, hospitals and medical facilities, business establishments, particularly malls, supermarkets, groceries, banks, restaurants, major transport terminals and other similar establishments to promote safe cycling and active transport in Quezon City, whilst ensuring the safety and convenience of cyclists and active transport users.

SECTION 4. DEFINITION OF TERMS. -

- a.) Active Transport relates to physical transport means. It includes travel by foot, bicycle and other manual and electronicassisted modes of transportation such as e-bikes and e-kick scooters. Active transport also includes the use of public transport as it involves some walking or cycling to pick-up and from drop-off points.
- b.) Bicycle A bicycle is a vehicle with at least two wheels that is propelled solely by the muscular energy of the person riding on that vehicle, in particular by means of pedals or hand-cranks.
- c.) Bicycle Parking Areas are designated spaces exclusive for the parking of bicycles, scooters, e-bikes, e-kick scooters and other active transport modes. They are designed with metal railings in which the riding public can safely park and lock their bicycles, scooters or their electronic-assisted bikes or scooters.
- d.) Commuter refers to a person that needs to travel from one place to another, often using a combination of public transportation modes to get to his/her destination.

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- e.) Cycling Lanes refers to a portion of the road, street, or path for the exclusive use of bicycle and active transport use, where private motorized transport are not allowed.
- f.) Cyclist refers to a person riding a bicycle, regardless of bicycle type.
- g.) E-Bike electric assisted bicycles with working pedals.
- E-Kick Scooter are electronic powered stand-up scooters, designed with a large deck in the center on which the rider stands.
- i.) Motorist refers to the driver of an automobile.
- j.) Motorized Transport shall mean any vehicle propelled by any power other than muscular power using the public highways, but excepting road rollers, trolley cars, street-sweepers, sprinklers, lawn mowers, bulldozers, graders, fork-lifts, amphibian trucks, and cranes if not used on public highways, vehicles which run only on rails or tracks, and tractors, trailers and traction engines of all kinds used exclusively for agricultural purposes. Pedestrian refers to a person going on foot from one point to another.
- k.) Rider a person who rides or travels by scooter, e-bike, e-scooter or other active transport.
- Walking Paths refer to pathways which can be used by pedestrians.

SECTION 5. CREATION OF THE DPOS - BICYCLE AND ACTIVE TRANSPORT SECTION. - The Quezon City Bicycle and Active Transport Section (BATS) is hereby created under the Department of Public Order and Safety (DPOS) - Green Transport Office (GTO).

The BATS shall be the main office responsible for the efficient and effective implementation of the promotion and development of safe cycling and active transport in the city. It shall, among others, ensure the availability of the appropriate infrastructure in key transport routes within the jurisdiction of the City for the promotion of safe cycling and active transport, as well as provide the necessary regulatory functions to ensure the safety of cyclists and users of active transport.

The BATS shall be headed by a Senior Transportation Regulation Officer.

The section head must possess adequate knowledge, training and experience in the field of urban or transport planning or engineering. The full staffing complement of the BATS shall be as follows:

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POSITION	NO. OF EMPLOYEES	SALARY	EDUCATION	EXPERIENCE	TRAINING	ELIGIBILITY
Senior Transportation Regulation Officer	T.	18	Bachelor's degree relevant to the job	2 years relevant experience	8 hours relevant training	Career Service (Professional) Second Level Eligibility
Transportation Regulation Officer II	1	15	Bachelor's degree relevant to the job	1 year relevant experience	4 hours relevant training	Career Service (Professional) Second Level Eligibility
(Data Controller IV) Senior Administrative Assistant	1	13	Completion of 2 years studies in college or high school graduate with relevant vocational/trade course	3 Years of relevant Experience	16 hours relevant training	Career Service (Sub Professional) First Level Eligibility
Transportation Regulation Officer I	1	11	Bachelor's degree relevant to the job	None required	None required	Career Service (Professional) Second Level Eligibility
(Data Controller I) Administrative Aide VI	1	6	Completion of 2 years studies in college or high school graduate with relevant vocational/trade course	None required	None required	Career Service (Sub Professional) First Level Eligibility
Traffic Aide II	30	5	High School Graduate	None required	None required	None required (MC 10 s 2013 Cat.III)

In the event that the creation of the BATS is not yet feasible, the City Mayor shall convene a QC Bicycle and Active Transport Task Force which shall be led by the Department of Public Order and Safety, assisted by the City Planning and Development Department, Parks Development and Administration Department, City Engineering Department and City Architect Department. The Task Force shall perform the functions stated herein and shall ensure the implementation of this Ordinance.

SECTION 6. POWERS AND FUNCTIONS OF THE BICYCLE AND ACTIVE TRANSPORT SECTION.

a) Prepare infrastructure plans for safe cycling and active transport, particularly a cycling lane network and walking paths, public bike parking spaces, as well as necessary signages based on this Ordinance; 6



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- Prepare the necessary guidelines that will ensure the safe use of cycling lanes for cyclists and riders of other electronic assisted modalities of transportation;
- c) Develop and implement projects, programs, and activities to: (1) support active transport, particularly biking and walking; (2) inform the public regarding active transport projects, programs and activities; (3) ensure that law enforcement agencies strictly enforce traffic laws and limit electronic assisted transport in cycling lanes to e-kick scooters and e-bikes; (4) oversee that law enforcement agencies safeguard unobstructed cycling lanes and walking paths, particularly by sidewalk vendors or vehicles; and (5) conduct information campaigns that shall encourage switching from cars to bikes or other active transport modalities;
- d) Develop a legislative agenda of supporting policies, resolutions or ordinances regarding active transport and monitor and assess the policy framework, at least annually for possible improvement or enhancement;
- e) Develop incentivization schemes that will promote the use of bicycles and other active transport modes, including the use of safety gear especially in the private and business sectors;
- f) Monitor and inspect the operation of the cycling lane network, including all the 30 Kph streets, 10Kph streets, No-Vehicle streets, and safe intersections and make recommendations through the policy framework to improve or further develop active transportation;
- g) Ensure the provisions of safe and strategic parking facilities and road signages for bicycles and active transport modes;
- Develop learning modules and provide the necessary seminars and trainings on road safety and other relevant matters on a regular basis that would ensure safety among cyclists and riders of active transport;
- Encourage the use of safety gear, especially helmets and safety lights, among others;
- jj Maintain and keep a recording of all cyclists and riders of active transport within sixty (60) days from approval of this Ordinance. As such the GTO-BATS shall formulate a system of procedure pertinent to bicycle and electronic assisted modes of transportation;

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- Enforce the implementation of this Ordinance through the issuance of electronic or physical citation violation receipts;
- Ensure necessary sidewalk developments are safe and unobstructed for the use of pedestrians, through integration in the appropriate infrastructure development plans of the city government;
- Provide a platform for the participation of Non-Government Organizations (NGOs), Peoples Organizations (POs) and Civil Society Organizations (CSOs);
- n) Coordinate with the necessary City Government and National Government office to ensure that air quality is maintained especially along the City's cycling lanes. Coordinate with the QCDRRMO on the inclusion of bike lanes in the QC Contingency Plan and the Disaster and Risk Reduction Management Plans as emergency pathways during calamities and disasters, while ensuring the safety of cyclists and active transport users; and
- Regular conduct of research including a walkability and bikeability study in the city.

SECTION 7. CYCLIST AND ACTIVE TRANSPORT USERS DATABASE. - The GTO - BATS shall initiate the establishment of a database that shall maintain all pertinent information on cyclists and active transport users for purposes of continuous improvement of the safe cycling and active transport program of the City. The said program shall follow the following general strategies:

- The cyclist and active transport database shall be web based, real time and shall maintain security of all personal data in the system.
- 2. The process of data gathering shall be voluntary.
- 3. Data generation shall be done through gathering from the following:
 - Reports from Bike dealers within the jurisdiction of Quezon City; and
 - b. Crowdsourcing through the development of a mobile app specific for cyclists and active transport users. The said mobile app shall be filled up online by cyclists and active transport users. Information to be gathered shall include the following:

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- i. Personal Information
 - 1. Name
 - 2. Birthday
 - 3. Address
 - 4. Photo
- ii. Cycling and Active Transport Information
 - Bicycle and Active Transport Mode Information
 - a. Brand, Model, Serial Number, other information
 - b. Bike Photo
 - 2. Cycling and Active Transport History
 - a. Regular Route
 - b. Total kms traveled
 - c. Violations, if any
 - 3. Live traffic advisory
 - 4. Live weather advisory
- c. All recorded cyclists and active transport users in the database shall be encouraged to verify the information provided through personal appearance in the GTO-BATS office.

SECTION 8. IDENTIFYING AND ESTABLISHING A CYCLING LANE NETWORK AND WALKING PATHS. - The Quezon City GTO-BATS shall identify the commonly used routes for cyclists and riders of active transport vis-à-vis city-wide traffic conditions, creating a comprehensive plan with appropriate traffic engineering solutions and the necessary infrastructure which prioritizes the safety of cyclists and riders. The following shall be the objectives of the plan:

a) To provide cyclists and riders of active transport with access to the entire city, particularly vital establishments, such as, but not limited to: (i) public hospitals; (ii) public markets and commercial spaces; (iii) public transport terminals; (iv) educational institutions (v) government centers and offices; (vi) public open spaces, and (vii) in consideration of connectivity to other LOUs;

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- The cycling lane network shall be consistent with road safety standards;
- To provide direct access for bicycles and other active transport by favoring the shortest and most direct routes to public services, vital establishments and other public open spaces;
- Transportation plans and policies shall prioritize moving the largest volume of people possible to maximize the use and value of street space to be measured by the flow of people, rather than by the volume of vehicles;
- The safety and welfare of people using active transport shall be given the highest priority ensuring that cyclists, riders of active transport and pedestrians are not placed at risk from motorized vehicles;
- f) To ensure that people of all ages and abilities are able to safely use active transport to access services in the City; and
- g) Strictly and effectively complement the existing initiatives of clearing roads of illegal obstruction.

SECTION 9. COMPLEMENTARY TRAFFIC ENGINEERING AND INFRASTRUCTURE SOLUTIONS. - Road Infrastructure to support active transport shall prioritize the provision of barriers especially in main thoroughfares, these shall likewise conform to the following:

Local roads to be converted or redesigned for cycling lanes and walking paths shall be identified as Street Types 1, 2, or 3, described as follows:

1. TYPE 1: Thirty-Kilometer Per Hour Street with Protected Cycling Lane and Walking Paths

On Type 1 streets, dedicated cycling lanes and walking paths are separated by object (e.g. curb, planter, flex delineators) from vehicle traffic.

Recommended road types for Type 1 streets include existing four- or six-lane roads.

Roads designated as Type 1 Streets will adopt a vehicular and motorcycle speed limit of thirty kilometers per haur (30kph) to ensure safety for all users.

Type 1 streets will incorporate traffic calming design interventions (e.g. medians, pinchpoints, speed humps) to ensure compliance with the speed limit.

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2. TYPE 2: Fifteen-Kilometer Per Hour Street with Cycling Lane and Walking Paths

On Type 2 streets, cyclists and pedestrians are prioritized, but cycling lanes and walking paths are not separated by object from motorized vehicle traffic. Cycling lanes and walking paths can be designated with the use of paint or other markings.

Recommended road types for Type 2 streets include existing one, two or four-lane roads.

Type 2 streets will adopt a vehicular and motorcycle speed limit of fifteen kilometers per hour (15kph) to ensure the safety of all users.

Type 2 streets will incorporate traffic calming design interventions (e.g. medians, pinchpoints, speed humps) to ensure compliance with the speed limit.

3. TYPE 3: Street with No Vehicular Traffics

On Type 3 streets, motorized transport through traffic is not permitted. These streets serve to provide a safe environment for active transport and exercise for all ages.

Cycling lanes, walking paths, and play areas can be designated with the use of paint or other markings.

Type 3 streets can be considered on any roadway. Selection should consider the number of people who will need to use this public space.

Residents of the street or emergency vehicles will be allowed access, but will adopt a vehicular and motorcycle speed limit of ten kilometers per hour (10kph) to ensure the safety of all users.

Businesses will be allowed to operate along Type 3 streets but parking and loading and unloading of passengers along the street will be disallowed. Loading and unloading of goods will occur at non-peak hours.

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CRITERIA	TYPE I	TYPE 2	TYPE 3
Separation	Physical separation by object	Designated lane and pathway with paint or other markings	Designated lane, pathway, and play area with paint or other markings
Road Type	Four or six lane	One, two, or four lane	ANY
Maximum Speed Limit	30 kph	10 kph	Access limited to residents of the street, off-peak business loading/unloading, emergency vehicles only
Traffic Calming	YES	YES	YES

4. Safe Intersections

All intersections, particularly intersections with high traffic levels, shall be evaluated to ensure that cyclists and riders of active transport are able to safely cross and change directions at-grade without requiring the use of a footbridge or any other crossing infrastructure that divert away from street level. Traffic signals must be timed to allow active transport a safe and reasonable crossing time where they are preferably separated from traffic conflicts with motorized transport.

At-grade pedestrian crossings are highly preferred over footbridges because of both safety and accessibility considerations. If a footbridge, or other such crossing infrastructure, is required at an intersection, instead of an atgrade crossing, a technical analysis, with consultation with a PWD and Senior Citizen Stakeholder Organization showing why a footbridge is the superior option needs to be submitted.

Any crossing infrastructure that diverts active transport away from the street level must be designed such that it enables independent use of a wheelchair. Any crossing infrastructure that diverts active transport away from the street level must be treated as accessibility infrastructure for people on wheelchairs and must be compliant with all existing laws and design standards regulating the design of such infrastructure.

SECTION 10. CYCLING LANE AND WALKING PATH DESIGNS. - Attached to this Ordinance is Annex "A", providing the recommended cycling lane and walking path designs appropriate for implementation.

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SECTION 11. PRINCIPLES FOR CYCLING LANES AND MARKINGS OR SIGNAGES. - The following principles will guide the implementation of cycling and active transport in existing and future road infrastructure:

- Universal Access to Destinations All destinations served by the public road system shall be accessible to cyclists;
- Equal Rights of Use People's right to use that portion of a street designed for travel is not diminished by less weight, less size, or less average speed associated with their travel mode;
- c. Integration of Modes Traveling by different modes of cycling and active transport shall not be segregated by law or facility design unless there is compelling, objective, scientifically valid evidence of operational advantages of segregation that outweigh the disadvantages;
- Uniformity and Simplicity Use of transportation facilities must be simple and intuitive based on uniformity with the other facilities;
- e. Accessible Surfaces Roadway surfaces should be as clear as possible of hazards for narrow tires such as bicycle wheels, drainage grills must be placed horizontal or perpendicular to road direction to avoid bicycle wheels from falling through its bars;
- f. Crossable Roadways Crossing distances at non-signalized access locations must not exceed the distance that can be covered at slow cycling or walking speed before traffic can arrive from beyond sight distance, and traffic signal timing should provide adequate clearance intervals for safe crossing by pedestrians and slow vehicles;
- g. Appropriate Space for Use Overtaking activities should take place at distances appropriate for the difference in speed, maneuverability of modes, and vulnerability of users.

SECTION 12. RIGHTS AND DUTIES OF CYCLISTS AND RIDERS OF ACTIVE TRANSPORT. - All cyclists and riders of active transport can use public roads or streets except on EDSA or where signs prohibiting bicycles and active transport have been posted.

SECTION 13. RESPONSIBILITIES OF CYCLING LANE USERS. - All users of the city cycling lanes shall have the following responsibilities:

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ponsibilities:

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- It is the responsibility of the cyclist and riders of active transport to undertake all necessary trainings and seminars to equip him/her of the necessary knowledge, skills and attitude required to operate their bike, scooter, skateboard, e-kick scooter or e-bike in public roads.
- 2. It is the responsibility of cyclists and riders of active transport to ensure the road worthiness of their bikes, scooters, skateboards, e-scooters and e-bikes. This includes the responsibility to ensure operational breaking systems, lights and visible reflectors. Only bikes with lights and reflectors shall be allowed to be utilized at night or when there is zero visibility.
- All cyclists and riders of active transport must wear helmets as minimum safety gear when riding.
- All cyclists and riders of active transport shall not carry anything on the bicycle unless it is in a basket, bag, on a rack, or trailer designed for that purpose.
- It is the responsibility of cyclists and riders of active transport to make the appropriate hand signals in every turn which shall be given not less than 100 feet from turn and while stopping or waiting to turn.
- Every cyclist or rider of active transport shall remain inside such lane, exercising due care when passing a vehicle in full stop or vehicle proceeding in the same direction.
- Every cyclist or rider of active transport shall ensure compliance to speed limit provisions.
- It shall likewise be the responsibility of the cyclist or rider of active transport to comply with the following prohibitions:
 - a. In no instance shall the bike, scooter, skateboard or e-bike or e-kick scooter carry more than it was designed to carry except when another regular seat or trailer towed by the bicycle is present.
 - All cyclists or ride's of active transport shall not cling to another vehicle while in the designated cycling lanes.
 - All cyclists or riders of active transport shall not ride a bicycle on a sidewalk or crosswalk.



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> d. No cyclist or rider of active transport shall operate their bicycle or active transport at a speed greater than 30 Kph.

SECTION 14. END OF TRIP FACILITIES. - End-of-trip facilities shall be made part of the bike infrastructure agenda for all city government offices and facilities. These include safe bike parking, shower facilities, and hydration areas for cyclists and riders of alternative transport. The GTO-BATS shall likewise encourage private commercial establishments and private businesses to adopt end of trip facilities in their infrastructure agenda.

1. BICYCLE and ACTIVE TRANSPORT PARKING -

- a. National and City Government Facilities The QC GTO-BATS shall ensure the provision of free, secure and adequate bicycle and active transport parking in all QC government facilities to ensure the security of the bicycles, scooters, skateboards, e-kick scooters and e-bikes. It shall likewise initiate coordination with all other national government offices operating in Quezon City, for the phased construction of the said bike and active transport parking facilities. The construction of parking facilities in government offices and facilities shall conform to the following principles:
 - Should be located in close proximity to the buildings' entrances and in highly visible well-lighted areas to minimize theft and vandalism;
 - ii. If parking facilities are not visible from the street or main building entrance, a sign must be posted at the main building entrance indicating the location of the parking. Where parking facilities are not clearly visible to approaching cyclists and riders of active transport, signs shall be posted to direct them to the parking facility;
 - Racks and iron hooks to be installed shall be securely anchored to the lot surface so they cannot be easily removed and shall be of sufficient strength to resist vandalism and theft;
 - iv. Parking facilities shall not impede pedestrian or vehicular circulation, and should be harmonious with their environment both in color and design. Parking facilities should be incorporated whenever possible into building design or street furniture;

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- v. Outdoor parking facilities shall be surfaced in the same manner as the car or vehicle parking area and shall be equally level. Lighting and other security design features shall be provided in these parking facilities equivalent to those provided for car parking spaces. A safe parking location is one in which activity around the bicycles is easily observable;
- vi. Parking facilities should be designed to accommodate the various transport modalities covered by this Ordinance. It shall accommodate all bicycle, scooter, skateboard, e-kick scooter or e-bike shapes and sizes and facilitate easy locking and should allow for the free movement of all parked active transport modalities;
- vii. Bicycle and Active Transport Parking facilities within car parking areas shall be separated by a physical barrier and clearly marked to protect bicycles and active transport from damage by cars or vehicles, such as curbs, wheel stops, poles or other similar features. Bicycle parking spaces are to be clearly marked as such and shall be separated from car parking by some form of physical barrier designed to protect bikes from being hit by a car or vehicle; and
- viii. Bicycle and active transport parking shall be available to the public but shall give preference to City Government employees especially in QC managed offices. The GTO-BATS shall ensure that separate Bicycle and Active Transport Parking facilities shall be provided to the transacting public.
- b. MRT and LRT The GTO-BATS shall initiate coordination with the Manila Metro Rail Transit (MRT) and the Manila Light Rail Transit (LRT) to ensure the provision of parking facilities in their terminals within the jurisdiction of Quezon City. The parking facilities in these terminals shall conform to the following principles:
 - i. The MRT / LRT terminals shall have bicycle parking facilities located adjacent to the main entrance of the stations within the jurisdiction of Quezon City. Each station should have a parking/rack for at least ten (10) bicycles and active transport modes. The actual space to be allocated for bicycle parking facilities in the said stations shall consider the number of commuters/cyclists needing parking/racks;





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- The location of these parking areas shall be located in close proximity to the stations' entrances, in highly visible well-lighted areas to minimize theft and vandalism, and included in the frequent patrol checks of the designated security guards;
- iii. Racks and iron hook to be installed shall be securely anchored to the lot surface so they cannot be easily removed and shall be of sufficient strength to resist vandalism and theft.
- c. In consonance with the Quezon City Government Ordinance No. SP-2369, Series of 2014, major business establishments particularly, malls supermarkets, groceries, banks, restaurants, and other similar establishments operating within the jurisdiction of Quezon City shall ensure the provision of parking facilities in their commercial areas.

In particular, these parking facilities shall conform to the following general requirements:

- i. Bicycle and active transport parking shall be required in commercial establishments with a gross interior of 50 sqm and above. For commercial establishments with less than 50 sqm of gross interior space, a bicycle rack or parking facility may not be required. However, the establishment shall allow a bicycle or active transport user to lock or park his bike or active transport immediately adjacent to the entrance of the facility.
- The location of the parking areas shall be located in close proximity to the establishment's entrances, in highly visible well-lighted areas to minimize theft and vandalism.
- iii. Racks and iron hook to be installed shall be securely anchored to the lot surface so they cannot be easily removed and shall be of sufficient strength to resist vandalism and theft.
- iv. In determining the size of the required parking space, the following shall apply:
 - a. At least 1 bike/active transport rack for every commercial or public establishment with a gross interior space of 50 sqm to 150 sqm.







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- b. At least 2 bike/active transport racks for every commercial or public establishment with a gross interior space of 151 sqm to 500 sqm.
- c. A bike/active transport parking area measuring at least 2.5 m by 5 m or equivalent to one (1) vehicle parking slot, with installed racks for every commercial or public establishment with a gross interior space of 501 sqm to 5,000 sqm.
- d. A bike/active transport parking area measuring at least 5 m by 5 m or equivalent to two (2) vehicle parking slots, with installed racks for every commercial or public establishment with a gross interior space of 5,001 sqm to 10,000 sqm.
- e. A bike/active transport parking area measuring at least 5 m by 7.5 m or equivalent to three (3) vehicle parking slots, with installed racks for every commercial or public establishment with a gross interior space of 5,001 sqm to 10,000 sqm.
- Minimum rack number should increase after a usage evaluation on its first year or when there is an obvious lack of space, whichever comes first.
- vi. All new commercial establishments shall ensure immediate compliance to the required provision of bicycle and active transport parking facilities.
- vii. All existing commercial establishments shall be required to implement in a phased manner within a two year period from the approval of this Ordinance.
- CHANGING ROOM and SHOWER FACILITIES The GTO-BATS shall ensure the provision of sufficient changing rooms and shower facilities in Quezon City government managed offices to encourage employees, regardless of tenure status, to ride longer distances to work, university or other destinations. These facilities may likewise be utilized by those employees engaged in other physical fitness activities.
 - a. Changing rooms and shower facilities should be conveniently located close to bicycle parking facilities or entrances of major city government managed buildings.

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- Separate, individual shower facilities for males, females and all gender are preferred.
- c. The changing rooms and shower facilities shall have nonslip surfaces, hooks and/or benches to keep belongings off the floor. It shall be provided with adequate lighting and ventilation and shall be included in regular cleaning and maintenance programs of the city government. Changing rooms and shower facilities shall be lockable and shall be accessible only to employees of the City Government.
- HYDRATION FACILITIES The GTO-BATS shall make available, potable water for cyclists and riders of active transport to ensure their proper hydration.
 - a. Water dispensers, faucets or drinking fountains shall be located in close proximity to the entrances of the city government buildings and shall be located in highly visible and well-lighted areas to minimize theft and vandalism. Their location must be reasonably distanced from any potential source of contamination such as trash bins or emissions from vehicle traffic;
 - Existing water dispensers and drinking fountains in the offices of the City Government shall likewise be made available for employees who are cyclists and riders of active transport;
 - Water dispensers and drinking fountains for cycling shall be kept clean and included in regular cleaning and maintenance programs;
 - d. A sign must be posted at the main building entrance indicating the location of the hydration facilities;
 - e. The GTO-BATS shall ensure the installation of hydration facilities in key public areas for the use of all cyclists and riders of active transport.
- 4. GREEN REST/BIKE REPAIR STATIONS The GTO-BATS shall make available the development of green rest/repair stations for users of the cyclists and active transport users. The said green rest areas shall ensure that the following principles are followed:

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- a. Shall be of adequate space to accommodate two bicycles and two cyclists, and shall be of sufficient distance so as not to obstruct the cycling lanes, pedestrian lanes, and roads.
- b. Common tools such as bike pumps, hex keys, and wrenches shall be installed in a manner that shall prevent theft and vandalism, while ensuring convenience in the use of cyclists and active transport users.
- c. It shall be landscaped and designed to provide shade using local plant species. Regular maintenance and upkeep shall be ensured by the appropriate office of the city government.
- d. Green rest/bike repair stations shall be strategically located along bike lanes, in public areas for close monitoring of the city government authorities.

SECTION 15. PROTECTION OF CYCLISTS AND RIDERS OF ACTIVE TRANSPORT. - The City recognizes that the most important factor in preventing injury to cyclists and riders of active transport is designing and constructing safe infrastructure. Transport infrastructure must be designed in a way that prioritizes the safe and convenient travel of pedestrians, cyclists and riders of active transport of all uges and physical abilities. Existing infrastructure in Quezon City shall be re-designed to maximize safety and convenience of pedestrians, cyclists, riders of active transport and commuters of all ages and physical abilities.

Infrastructure that creates inconvenience and danger for pedestrians, cyclists and riders of active transport such as pedestrian cages and sidewalk pedestrian fences, shall not be created and where they are already created, shall be removed or re-designed and rebuilt in a way that prioritizes convenience and safety of pedestrians, cyclists, riders of active transport and commuters.

SECTION 16. PROHIBITED ACTS AND PENALTIES. - The following acts shall be considered as violations of this ordinance. Any persons who violates the enumerated prohibited acts herein shall be penalized accordingly:

- a. Prohibition on Motorists
 - i. Motorists use of or obstruction of cycling lanes or walking paths





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- First Offense a fine of One Thousand Pesos (Php1,000.00);
- Second Offense a fine of Three Thousand Pesos (Php3,000.00);
- 3. Third Offense a fine of Five Thousand Pesos (Php5,000.00) and thirty (30) hours of community service.

b. Prohibitions on Cyclists and Active Transport Users

- Improper use of, or speeding (above 30 kph) in cycling lanes
 - First Offense a fine of Three Hundred Pesos (Php300.00) or 1 day of community service
 - Second and succeeding offenses a fine of Three Hundred Pesos (Php300.00) or 1 day of community service, and attendance to the half-day seminar on safe cycling
- ii. Improper use of walking paths
 - 1. First Offense a fine of Three Hundred Pesos (Php300.00) or 1 day of community service
 - Second and succeeding offenses a fine of Three Hundred Pesos (Php300,00) or 1 day of community service, and attendance to the half-day seminar on safe cycling
- iii. Improper use of bicycle parking lots/racks
 - 1. First Offense a fine of Three Hundred Pesos (Php300.00) or 1 day of community service
 - Second and succeeding offenses a fine of Three Hundred Pesos (Php300.00) or 1 day of community service, and attendance to the half-day seminar on safe cycling



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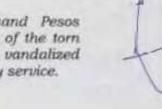
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- iv. Use of for hire pedicabs, and other active transport in cycling lanes
 - 1. First Offense a fine of Three Hundred Pesos (Php300.00) or 1 day of community service
 - Second and succeeding offenses a fine of Three Hundred Pesos (Php300.00) or 1 day of community service, and attendance to the half-day seminar on safe cycling

c. General Prohibitions

- Any persons who shall interfere, hinder or oppose any official or member of the BATS or any other duly deputized person in the performance of their duties in the implementation of this Ordinance.
 - First Offense a fine of Three Hundred Pesos (Php300.00) or 1 day of community service
 - Second and succeeding offenses a fine of Three Hundred Pesos (Php300.00) or 1 day of community service, and attendance to the half-day seminar on safe cycling
- ii. Any person who shall tear down, mutilate, deface, alter or vandalize any infrastructure such as end of trip facilities, road signages, barriers, and other infrastructure necessary for ensuring safe cycling shall be penalized with a minimum of Five Thousand (Php5,000.00) or the actual price required for the replacement of the damaged public property, whichever is higher.
 - First Offense a fine of One Thousand Pesos (Php1,000,00);
 - Second Offense a fine of Three Thousand Pesos (Php3,000.00);
 - Third Offense a fine of Five Thousand Pesos (Php5,000.00) plus the replacement value of the torn down, mutilated, defaced, altered or vandalized property and thirty (30) hours of community service.



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SECTION 17. IMPLEMENTING RULES AND REGULATIONS. - The Office of the City Mayor, through the Department of Public Order and Safety, with the assistance of the City Planning and Development Department, Parks Development and Administration Department, City Engineering Department, and City Architect Department shall formulate the necessary Implementing Rules and Regulations within fifteen (15) days from the approval of this Ordinance.

SECTION 18. BUDGETARY SUPPORT. - Funding for the implementation of this Ordinance shall initially be sourced from the unprogrammed budget of the City and shall be included in the annual appropriations of the DPOS.

An initial funding of Twenty-Four Million Seven Hundred Five Thousand Nine Hundred Fifty Pesos and Seventy-Five Centavos (Php24,705,950.75) shall be provided.

Succeeding funding for the GTO-BATS and its activities in relation to this Ordinance shall be included in the City Budget Ordinance and to be implemented by the BATS.

SECTION 19. REPEALING CLAUSE. - All ordinances, resolutions and local executive orders which are inconsistent with or contrary to any of the provisions of this Ordinance are hereby repealed or modified accordingly.

SECTION 20. SEPARABILITY CLAUSE. - In the event or for any reason/s, any part/s, sections/s or provision/s of this Ordinance shall be held or declared be unconstitutional or invalid, the remaining part/s thereof which are not affected thereby, shall continue to be effective and in full force.

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SECTION 21. EFFECTIVITY, - This Ordinance shall take effect immediately upon its approval and signing as may be imposed by the Local Government of Quezon City.

ENACTED: November 9, 2020.

GIANG. SOTTO City Vice Mayor Presiding Officer

ATTESTED:

Atty. JOHN THOMAS S. ALFEROS III City Government Dept. Head III

APPROVED:

DEC 0 9 2020

MA. JOSEFINA G. BELMONTE City Mayor

CERTIFICATION

This is to certify that this Ordinance was APPROVED by the City Council on Second Reading on November 9, 2020 and was PASSED on Third/Final Reading on November 16, 2020.

Atty. JOHN THOMAS S. ALFEROS III City Government Dept. Head III



Republic of the Philippines OUEZON CITY COUNCIL

Quezon City 18th City Council

PR2012-93

85th Regular Session

RESOLUTION NO.	$_{SP-}$ 57	763	, <i>S</i> -2013

A RESOLUTION ADOPTING THE QUEZON CITY TOURISM DEVELOPMENT PLAN (QCTDP) FOR THE QUEZON CITY GOVERNMENT.

Introduced by Councilors JESUS MANUEL C. SUNTAY, RODERICK M. PAULATE, DOROTHY A. DELARMENTE, ANTHONY PETER D. CRISOLOGO, RICARDO BELMONTE JR., JOSEPH P. JUICO, ALEXIS R. HERRERA, PRECIOUS HIPOLITO CASTELO, ALFRELYO T. VARGAS III, JULIENNE ALYSON RAE V. MEDALLA, EDEN "CANDY" A. MEDINA, GODOFREDO T. LIBAN II, JULIAN ML. COSETENG, ALLAN BENEDICT S. REYES, JAIME F. BORRES, JOSE MARIO DON S. DE LEON, GIAN CARLO G. SOTTO, EUFEMIO C. LAGUMBAY, JESSICA CASTELO DAZA, RAQUEL S. MALANGEN, VINCENT DG. BELMONTE, IVY LIM-LAGMAN and RANULFO Z. LUDOVICA.

WHEREAS, the Quezon City Tourism Development Plan was presented to Mayor Herbert M. Bautista, members of the Executive Department, and the Quezon City Council during the third LEDAC meeting held on August 16, 2011;

WHEREAS, through Executive Order No. 29, Series of 2010 entitled "Creating the Technical Working Group to Craft the City Tourism Development Plan, Defining its Composition and Appropriating Funds Thereof", the plan was developed in coordination with the Office of Vice Mayor Ma. Josefina G. Belmonte and captured the ideas and vision of previous QC leaders to build Quezon City as a premiere urban destination for sustainable tourism in the Philippines;

WHEREAS, tourism is currently the largest and fastest growing industry in the world and has been utilized by counties and local governments as one of the foundations of their economies:

WHEREAS, the conception of the QC Tourism Development Plan (QCTDP) was guided by Manuel L. Quezon's vision for the City to become "the showplace of the nation" while giving full consideration to existing statistical data and the comments of various tourism-related groups and institutions that revealed the need to expand and further develop the said industry;

85th Regular Session 63, S-2013 Res. No. SP- 5763, S-2013 Page -2- PR2012-93

NOW, THEREFORE,

BE IT RESOLVED BY THE CITY COUNCIL OF QUEZON CITY IN REGULAR SESSION ASSEMBLED, to adopt, as it does hereby adopt the Quezon City Tourism Development Plan (QCTDP) for the Quezon City Government.

ADOPTED: June 24, 2013

JOSEPH P JUICO President Pre-Tempore Acting Presiding Officer

ATTESTED:

Atty. JOHN THOMAS SALFEROS III
City Gov't. Asst. Dept Head III

CERTIFICATION

This is to certify that this Resolution was APPROVED by the City Council on Second Reading on June 24, 2013 and was CONFIRMED under Suspended Rules on the same date.

Atty. JOHN THOMAS S. ALFEROS III
City Gov't Asst. Dept Head III

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OUEZON CITY COUNCIL

Quezon City 20th City Council

PO20CC-101

15th Regular Session

ORDINANCE NO. SP. 2549 , S-2016

AN ORDINANCE ESTABLISHING A MANDATORY SEISMIC RETROFITTING PROGRAM FOR QUEZON CITY OWNED AND BARANGAY-OWNED BUILDINGS, PARTICULARLY THOSE BUILT BEFORE THE 1990 EARTHQUAKE, ADOPTING ENGINEERING AND ENVIRONMENTAL/GREEN BUILDING FINDINGS OF LOCAL CONDITIONS, APPROPRIATING FUNDS THEREOF, AND FOR OTHER PURPOSES.

Introduced by Councilor GIAN CARLO G. SOTTO.

Co-Introduced by Councilors Anthony Peter D. Crisologo, Lena Marie P. Juico, Elizabeth A. Delarmente, Victor V. Ferrer, Jr., Oliviere T. Belmonte, Alexis R. Herrera, Precious Hipolito Castelo, Godofredo L. Liban III, Ramon P. Medalla. Ranulfo Z. Ludovica, Estrella C. Valmocina, Allan Benedict S. Reyes, Kate Abigael G. Coseteng, Franz S. Pumaren, Eufemio C. Lagumbay, Marvin C. Rillo, Raquel S. Malañgen, Irene R. Belmonte, Ivy Xenia L. Lagman, Marra C. Suntay, Jose A. Visaya, Kurl Edgar C. Castelo, Julienne Alyson Rae V. Medalla, Godofredo T. Liban II, Andres Jose G. Yllana, Jr., Allan Butch T. Francisco, Marivic Co-Pilar, Melencio "Bobby" T. Castelo, Jr., Rogelio "Roger" P. Juan, Diorella Maria G. Sotto, Donato C. Matias, Eric 2. Medina and Ricardo B. Corpuz.

WHEREAS, based on the finding of the Metro Manila Earthquake Impact Reduction Study jointly undertaken by the Philippine Institute of Volcanology and Seismology (PHILVOCS), the Japan International Cooperation Agency (JICA) and the Metro Manila Development Authority (MMDA) it was acknowledged that Metro Manila will experience moderate to severe earthquake in the foreseeable future, increased effort to reduce earthquake hazards should be encouraged and supported;

WHEREAS, this Ordinance shall empower the City Engineering Department to assess the earthquake hazards and identify the city-owned and barangay-owned buildings that are potentially hazardous to life in the event of an earthquake;

AN RESEARCH

Ord. No. SP-2549, S-2016 Page -2- PO20CC-101

WHEREAS, among the potentially hazardous buildings surveyed and identified are wood frame, multi-unit buildings constructed before 1972 and the 1990 earthquake having a soft, weak or open front wall lines (soft-story conditions) which are particularly vulnerable to severe damage in case of a major earthquake thus endangering the lives of the residents;

WHEREAS, it is the declared policy of the Quezon City government to ensure the safety and well-being of its residents against potential risks and hazards in the event of a major natural and man-made disasters.

NOW, THEREFORE,

BE IT ORDAINED BY THE CITY COUNCIL OF QUEZON CITY IN REGULAR SESSION ASSEMBLED:

SECTION 1. TITLE – this Ordinance shall be referred to as "MANDATORY SEISMIC RETROFIT PROGRAM FOR EARTHQUAKE IMPACT VULNERABLE FOR CITY AND BARANGAY-BUILDINGS OF 2016".

SECTION 2. PURPOSE.

- A. To promote and develop state-of-the-art userfriendly engineering resources and applications to mitigate the effects of natural and other hazards on the built environment.
- B. To perform a study called a Quezon City Action Plan for Seismic Safety to study city and barangay-owned buildings in Quezon City that are vulnerable to collapse or severe damage in case of moderate or major earthquake.
- C. To develop earthquake safety policy recommendations founded on clear technical bases and focused on wood frame structures and were build prior to the 1990 earthquake.
- D. To ensure that Quezon City and Barangay Buildings be resilient from the disastrous effects of a major earthquake as well as to protect the health, safety, and welfare of Quezon City

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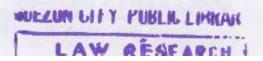
residents by reducing the possible collapse or major structural damage, loss of housing stock, or risk of fire caused by an earthquake to the most vulnerable wood frame city-owned buildings. This Ordinance require retrofits that will greatly increase building safety, occupiable within 24 hours of a moderate earthquake, using standards that limit retrofit costs.

- E. List of Barangays in Quezon City traversed by the Valley Fault System.
 - a. Bagong Silangan
 - b. Bagumbayan
 - c. Batasan Hills
 - d. Blue Ridge B
 - e. Libis
 - f. Matandang Balara
 - a. Pansol
 - h. White Plains
 - i. Ugong Norte
 - j. Loyola Heights
 - k. Pasong Putik Proper
 - L. Payatas

SECTION 3. SCOPE – This Ordinance shall apply to existing buildings of Quezon City Government and Barangay that have not been seismically strengthened to meet standards of the National Building Code.

SECTION 4. DEFINITIONS – For purposes of this Ordinance, these definitions under the National Building Code shall apply, viz:

- a. Seismic Retrofitting shall mean either structural strengthening or providing the means necessary to modify the seismic response that would otherwise be expected by an existing building during an earthquake, to significantly reduce hazards to life and safety while also providing for the substantial safe ingress and egress of the building occupants immediately after an earthquake.
- b. Risk Categories are defined as follows:



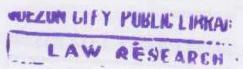


Ord. No. SP- 2549, S-2016 Page -4- PO20CC-101

- Essential Buildings any building housing a hospital or other medical facilities having a surgery or emergency treatment area, fire or police station, city government disaster operation and communication centers.
- ii. High Risk Buildings any non-essential having an occupied load of 100 or more persons.
- iii. Medium Risk Building any non-essential building having an occupied load of less than one hundred and not included within the definition of low risk building below.
- iv. Low Risk Building any non-essential building not open to the public used as warehouse/storage building.
- v. Adoption Date shall refer to the date of the approval of this Ordinance and its Implementing Rules and Regulations.
- vi. Seismic Strengthening shall refer to all engineering/environmental work necessary to comply with the requirements of this Ordinance.

SECTION 5. REQUIREMENT FOR AN ENGINEERING REPORT.

A. Within one (1) year after the adoption of this Ordinance, the city and barangay-owned buildings subject of this Ordinance shall be required to have an engineering report to the City Engineer which evaluates the existence, nature, and severity of any structural deficiencies in their building capacities for earthquake resistance which could result in damage or collapse or cause potential injury of loss of lives. The engineering report shall include the following information:



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- Time Frame the engineering report shall be submitted within twenty four (24) months after the adoption of this Ordinance.
- Authorized Preparers Engineering Report shall be prepared by a Civil or Structural Engineer who is familiar with seismic analysis and design.
- Purpose the purpose of each engineering report shall be to investigate in a thorough and unambiguous fashion, a building structural systems that resist earthquake forces, and to evaluate their adequacy to resist the seismic forces.
- Engineering Standards the minimum engineering standards to be used in the preparation of engineering reports or drawings shall be those contained in the National/Quezon City Building Code.
- 5. Format the written engineering report shall include all portions of the building and any measures necessary to correct deficiencies to no less that the minimum engineering standards.
- B. The City Engineering Official Shall review the engineering report for each identified building to ensure conformance with this Ordinance. The City Engineer may, at its option, consult the services of a civil or structural engineer to assist in the evaluation of the submitted report at the sole cost of the city government and Barangay concerned. If the City Engineer, in consultation with civil/structural consultants, determines that the building needs to be seismically strengthened with this ordinance despite the conclusion of the engineering report, the City Engineer may require the submission of construction drawing/report and repair any deficiency in accordance with / the requirements of this Ordinance.



C. The Building Administrator of Seismic Prone Buildings (SPB) shall notify all concerned with written notifications that an engineering report has been completed and has been submitted to the Office of the City Engineer. Such notification must be made within ninety days of submission of engineering report to the city government.

SECTION 6. REPAIR OF DEFICIENCIES REQUIRED.

- A. All Public Buildings requiring Seismic Strengthening as determined by the engineering report or the building official pursuant to Section 5 of this Ordinance shall complete work required by approved construction drawing within the following time frame that is applicable:
 - Essential Building and High Risk Buildings work must be completed and receive final approval from City Engineer within four years after the adoption of this Ordinance.
 - Medium and Low Risk Building-work must be completed and receive final approval from the City Engineer within six years after the approval of this Ordinance.
- B. If after review of the engineering report, a building is determined to pose immediate threat to public health or safety, the building may require repairs to be made in a timely manner than set forth in the preceding section.
- C. If it is determined that the cost to seismically strengthen is not financially reasonable, the City Engineer may recommend demolition. Such documentation/application shall be made to the City Engineer for review and must follow all procedural requirements for demolition under the existing Quezon City Building Code. Approved demolition work must be completed within the time frame enumerated in the preceding sub-section. The City Engineer may modify or extend the time frame for demolition based upon the specific circumstances of the demolition work.

LAW RESEARCH

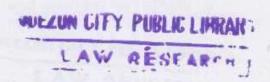
SECTION 7. APPLICATION FOR BUILDING PERMIT OF SEISMIC PRONE BUILDINGS - The building administrator of a Seismic Prone Building shall apply for a building permit to make alteration, modification or renovation, he must submit an engineering report as part of the permit application. The report must include an evaluation on whether the proposed work is in any portion of the building needing a seismic strengthening. If the building official determines that the proposed work does not include an area where seismic strengthening is required, the administrator/structural building engineer shall construction drawing as integral part of the permit application. The City Engineer will determine which part of the seismic strengthening work must be part of the proposed project.

SECTION 8. CONSTRUCTION DRAWINGS REQUIRED.

A. All city-owned building needing seismic strengthening as determined by the engineering report's outlined in the preceding section are required to submit a complete set of construction drawings to the Office of the City Engineer not later that two (2) years after the adoption date of this Ordinance. Required drawings must be professionally prepared and stamped and signed by the structural engineer. Construction drawings must be complete and include all improvements to be made to comply with the mandates of this Ordinance.

B. CONSTRUCTION DRAWINGS SHALL INCLUDE:

- Dimensioned floor and roof plans showing existing walls and the size and spacing of floor and roof framing members and sheating materials.
- 2. All existing crosswalls and their materials of construction. The location of the crosswalls and their openings shall be fully dimensioned or drawn to scale on the plans.





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- Dimension walls elevations showing openings, thickness, heights, the type of vencer, its thickness and its bonding, and/or ties to the structural masonry.
- The extent and type of existing wall anchorage to floors and roof when use in the design;
- 5. The extent and type of any parapet corrections which were previously performed, if any:
- 6. Repair details, if any of cracked or damaged unreinforced masonry walls.

SECTION 9. In the implementation of this Ordinance, the City Mayor is hereby authorized to disburse LDRRMF pursuant to NDRRMC-DBM-DILG Joint MC 2013-1 (05 March 2013).

SECTION 10. Any violation of the provisions of this Ordinance shall be considered a public nursance and the City Engineer may order the Seismically prone city and barangay-owned building to be vacated.

SECTION 11. IMPLEMENTING RULES AND REGULATION – The City Engineer, the Environmental Protection and Waste Management Department (EPWMD), the General Services Department, in coordination with the Philippine Institute of Volcanology and Seismology (PHILVOCS), shall, within ninety (90) days after approval of this Ordinance shall establish the necessary Implementing Rules and Regulations.

SECTION 12. SEPARABILITY CLAUSE – If any provision/ section, sub-section, or any portion of this Ordinance is held invalid or unconstitutional, other section/s shall remain valid.

SECTION 13. REPEALING CLAUSE - All laws, decrees, issuances executive order, ordinance that are deemed inconsistent or contrary to this Ordinances are hereby considered as repealed and amended accordingly.





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SECTION 14. EFFECTIVITY – This Ordinance shall take effect upon its approval.

ENACTED: November 21, 2016.

RODERICK M. PAULATE President Pro-Tempore Acting Presiding Officer

ATTESTED:

Atty. JOHN THOMAS S. ALFEROS III City Gov't. Asst. Dept. Head III

APPROVED: 0 6 JAN 2017

HERBERT M. BAUTISTA City Mayor

CERTIFICATION

This is to certify that this Ordinance was APPROVED by the City Council on Second Reading on November 21, 2016 and was PASSED on Third/Final Reading on December 5, 2016.

LAW RESEARCE

Atty, JOHN THOMAS S. ALFEROS III City Gov't. Asst. Dept. Head III



Republic of the Philippines QUEZON CITY COUNCIL Quezon City 17th City Council

PO2008-96

48th Regular Session

ORDINANCE NO. SP. 1917s-2009 1

AN ORDINANCE REQUIRING THE DESIGN, CONSTRUCTION OR RETROFITTING OF BUILDINGS, OTHER STRUCTURES AND MOVABLE PROPERTIES TO MEET MINIMUM STANDARDS OF A GREEN INFRASTRUCTURE, PROVIDING INCENTIVES THEREFOR AND FOR OTHER PURPOSES.

Introduced by Councilors BERNADETTE HERRERA-DY. FRANCISCO A. CALALAY, JR., DOROTHY A. DELARMENTE, VICTOR V. FERRER, JR. JOSEPH P. JUICO, RICARDO T. BELMONTE, JR., WINSTON "Winnie" T. CASTELO, RAMON P. MEDALLA, ALLAN BUTCH T. FRANCISCO, VOLTAIRE GODOFREDO L. LIBAN III, EDEN "Candy" A. MEDINA, AIKO S. MELENDEZ, JORGE B. BANAL, JR., FRANZ S. PUMAREN, WENCEROM BENEDICT C. LAGUMBAY, DANTE M. DE GUZMAN, DIORELLA MARIA G. SOTTO, JAIME F. BORRES, ANTONIO E. INTON, JR., JESUS MANUEL C. SUNTAY, JANET M. MALAYA, EDCEL B. LAGMAN, JR., VINCENT DG. BELMONTE, BAYANI V. HIPOL, CONCEPCION S. MALANGEN and ALEXIS GRACE R. MATIAS.

WHEREAS, the continuing development of real estates and land development projects must be mindful of the basic principles of conservation, environmental protection and planning patterns that consider the natural environment;

WHEREAS, the institutionalization of eco-friendly systems and technologies supports government efforts to reduce greenhouse gases and other hazardous emissions from buildings and other structures;

WHEREAS, the implementation of a green infrastructure policy emphasizes the need to promote and protect the interrelation of the natural ecosystem and development as these are key factors that contribute to sustainable development, empowerment of the people and urban development.

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NOW, THEREFORE,

BE IT ORDAINED BY THE CITY COUNCIL OF QUEZON CITY IN REGULAR SESSION ASSEMBLED:

ARTICLE I GENERAL PROVISIONS

SECTION 1. SHORT TITLE. - This Ordinance shall be known and referred to as the "Green Building Ordinance of 2009".

SECTION 2. DECLARATION OF POLICY. – It is the declared policy of the Quezon City Government to:

- 2.1 Establish and maintain building standard that require the planning, design, construction, operation and maintenance, including the retrofitting of building projects that strictly adhere to energy efficiency, cost effectiveness and mitigate impacts on environmental degradation;
- 2.2 Emphasize that land conservation, urban planning and development should include green infrastructure as a key planning framework in order to arrest the adverse impact of rapid growth on our environment and ecosystems;
- Require the planning and integration of green spaces and installation of available and cost efficient technologies prior to any infrastructure development;
- 2.4 Require the installation, use, operation and maintenance of cost efficient technologies that use renewable energy or biofuels, compressed natural gas, liquefied petroleum gas or bio-ethanol blended gasoline, in the operation of motorized vehicles, whether public or private;
- 2.5 Create and maintain a network of green spaces and integrate them in the whole gamut of infrastructure projects and developments, being mindful of the strategic connection between structures, parks, riparian areas and other green spaces in order to maintain a healthy biodiversity;

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- 2.6 Increase the demand for environmentally preferable building materials, finishes, and furnishings;
- 2.7 Emphasize that the impact of greenhouse gas emissions does not recognize jurisdictions or boundaries, hence, must be the concern not only of government but of private, business and other stakeholders or sectors;
- 2.8 Provide measures for the protection of ground water on all vertical structures;
- 2.9 Provide incentives for land users, developers and planners who incorporate, implement, install and actually use environment friendly technologies that promote a strong biodiversity, improve the state of health of the population and abate the continuing destruction of our ecosystem, ground water and air quality.

SECTION 3. DEFINITIONS. - Unless otherwise defined under this Ordinance, the following terms shall mean and be construed as:

- 3.1 Building any structure built for the support, shelter or enclosure of persons, animals, chattels or property of any kind.
- 3.2 Carbon Credits are emission allowances allocated or auctioned under a cap-and-trade program, or it can be utilized to offset emissions. Such offsetting and mitigating activities are authorized under the Kyoto Protocol. Under the Protocol, the amount of emissions reduced is evidence by a Certified Emission Reduction (CER).
- 3.3 Direct Injection Retrofit Technology a technological alteration to an existing engine, replacing the carburetor with an in-cylinder fuel injector, providing for significant reduction in tailpipe smoke emissions, increasing fuel efficiency and economy.
- 3.4 Dwelling Unit one or more habitable rooms which are occupied or which are intended or designated to be occupied by one family with facilities for living, sleeping, cooking and eating.

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- 3.5 Effluent is a general term denoting any wastewater, partially or completely treated, or in its natural state, flowing out of a manufacturing plant, industrial plant or treatment plant.
- 3.6 Green Building an integrated whole-building approach to the planning design, construction, operation and maintenance of buildings and their surrounding landscape that help mitigate the environmental, economic and social impacts of buildings on the following:
 - 3.6.1 Site conservation and sustainable planning;
 - 3.6.2 Water conservation and efficiency;
 - 3.6.3 Energy efficiency and renewable energy;
 - 3.6.4 Conservation of materials and resources, and;
 - 3.6.5 Indoor environmental quality and human health.
- 3.7 Sewage Treatment Plant (STP) process of removing contaminants from wastewater and household sewage, both runoff (effluents) and domestic. It includes physical, chemical and biological processes to remove physical, chemical and biological contaminants.
- 3.8 Wastewater Treatment Facility Any plant or facility owned or maintained by any department, agency or authority of the state, or by any sewer company, private corporation, association, person or group of persons, or by any industry or institution, except domiciles or residential units, which subjects wastewater to a process for removing or altering the objectionable constituents of wastewater for the purpose of meeting the requirements of Clean Water Act of 2004 (Republic Act No. 9275) to make it less offensive or dangerous.

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ARTICLE II GREEN INFRASTRUCTURE

SECTION 4. APPLICATION — All vertical structures, whether or not used for commercial, industrial, institutional or residential use are hereby mandated to apply and implement the policies provided under this Ordinance, including the provision for mechanisms that shall reduce greenhouse gas emissions, including wastewater treatment. Implementors of this Ordinance shall benefit from the Green Building Tax Credit provided for under Article IV, Section 14 hereof.

A system of inspection, evaluation and certification shall be devised and implemented by the Environmental Protection and Waste Management Department, City Planning and Development Office and the Building Official for this purpose.

SECTION 5. PRELIMINARY CERTIFICATION – In the case of proposed and new structures, an applicant must:

- 5.1 Apply with the Building Official, City Planning and Development Office and the Environmental Protection and Waste Management Department for preliminary certification if the applicant will be the owner or contract purchaser of the facility at the time of construction, in writing on a form prepared and provided for and shall contain:
 - 5.1.1 A statement that the applicant plans to construct a facility that meets the requirements under this Section;
 - 5.1.2 A detailed description of the proposed facility and its operation and information showing that the facility will operate as represented in the application;
 - 5.1.3 The estimated start and finish date of the construction of the facility; and
 - 5.1.4 Any other information determined by the Building Official, CPDO and the EPWMD to be necessary prior to issuance of an initial certificate.



- 5.2 The Building Official, City Planning and Development Office and the Environmental Protection and Waste Management Department may allow an applicant to file the preliminary application after the start of the construction of the facility if the Building Official finds that filing the application before the start of construction is inappropriate because special circumstances render filing earlier unreasonable.
- 5.3 If the Building Official, City Planning and Development Office and the Environmental Protection and Waste Management Department determine that the proposed construction is technically feasible and should operate in accordance with the representations made by the applicant, and is in accordance with the provisions under Section 9 and any applicable rules or standards adopted by the Building Official, City Planning and Development Office and the Environmental Protection and Waste Management Department, the Building Official together with the City Planning Development Office and the Environmental Protection and Waste Management Department shall issue. addressed to the City Treasurer and the City Assessor, a certification recommending approval for the issuance of the Preliminary Credit Certificate for the proposed construction. The Preliminary Credit Certificate shall state the following:
 - 5.3.1 The first taxable year for which the credit may be applied;
 - 5.3.2The expiration date of the tax credit. Such expiration date may be extended at the discretion of the City Treasurer in order to avoid unwarranted hardship; and
 - 5.3.3 The maximum amount of the total credit allowed and the maximum amount of credit allowed in any single taxable year.

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5.4 If the Building Official, City Planning and Development Office and the Environmental Protection and Waste Management Department determine that the construction does not comply with the provisions under Section 9 and applicable rules and standards, the Building Official shall issue an order denying certification.

SECTION 6. CHANGES BETWEEN PRELIMINARY CERTIFICATION AND FINAL CERTIFICATION.

- 6.1 To change a project that has already received preliminary certification, the applicant shall file a written request to the Building Official, City Planning and Development Office and the Environmental Protection and Waste Management Department which states:
 - 6.1.1 A detailed description of the changes;
 - 6.1.2 The reasons for the changes; and
 - 6.1.3 The effects that the changes will have on the amount of tax credit stated by the preliminary certification.
- 6.2 The Building Official, City Planning and Development Office and the Environmental Protection and Waste Management Department must determine and decide if the changed project complies with the requirements under Section 9:
 - 6.2.1 If the changed project complies with the requirements under Section 9, then the Building Official, City Planning and Development Office and the Environmental Protection and Waste Management Department shall issue an amended preliminary certification.
 - 6.2.2 If the changed project does not comply with the requirements under Section 9 then the Building Official, City Planning and Development Office and the Environmental Protection and Waste Management Department shall issue orders that revoke the preliminary certification.

SECTION 7. FINAL CERTIFICATION. Upon completion of the proposed construction or retrofitting project:

and

- 7.1 No final certification shall be issued by the Building Official, City Planning and Development Office and the Environmental Protection and Waste Management Department under this Section unless the facility was constructed under a preliminary certificate of approval issued under Section 5.
- 7.2 An applicant may apply with the Building Official, City Planning and Development Office and the Environmental Protection and Waste Management Department for final certification of a facility:
- 7.3 If the Building Official, City Planning and Development Office and the Environmental Protection and Waste Management Department issued a preliminary certification for the facility under Section 5; and
- 7.4 After completion of construction of the proposed facility.

An application for final certification shall be made in writing on a form prepared by the Departments and shall contain: (1) A statement that the conditions of the preliminary certification have been complied with; (2) An eligibility certificate from a licensed project architect or engineer licensed that consists of: certification by the Building Official, City Planning and Development Office and the Environmental Protection and Waste Management Department that the building, with respect to which the credit is claimed, is compliant with the provisions of this Ordinance; (b) A statement of the degree of compliance achieved by the building, to permit determination of the proper credit amount under Section 14; (3) A statement that the facility is in operation; and (4) Any other information determined by the Building Official to be necessary prior to issuance of a final certificate, including inspection of the facility by the Departments of Engineering and Environmental Protection and Waste Management Department and the City Planning and Development Office.

SECTION 8. REVOCATION OF CERTIFICATE. – The Building Official may order the revocation of the final certificate issued under Section 7 of this Ordinance upon the recommendation of the Environmental Protection and Waste Management Department and the City Planning and Development Office, if the Building Official finds that:

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- The certification was obtained by fraud or misrepresentation; or
- 8.2 The holder of the certificate has substantially failed to construct or complete the facility in compliance with the plans, specification, and procedures in such certificate. As soon as the order of revocation under this Section becomes final, the Building Official shall notify the City Treasurer and the City Assessor of such order.

If the certificate is ordered revoked pursuant to item Number 8.1 of this Section, all prior tax credits provided to the holder of the certificate by virtue of such certificate shall be forfeited, and upon notification under this Section, the City Treasurer shall immediately proceed to collect those taxes not paid by the certificate holder as a result of the tax credits provided to the holder under this Ordinance.

If the certificate is ordered revoked pursuant to item Number 8.2 of this Section, the certificate holder shall be denied any tax credit under this Ordinance in connection with such facility after the date that the order of revocation becomes final. Thereafter, all taxes shall become due and demandable in favor of the government.

SECTION 9. REQUIREMENTS. — The design, construction, operation, maintenance, renovation, and deconstruction of all major facilities or structures, whether private or government-owned, that enter into the pre-design phase after the date of enactment of this Ordinance, and the site of all such facilities or structures, shall conform to, or exceed, the evaluation and rating scheme of the Green Building Rating System, to be devised and implemented by the Departments of Environmental Protection and Waste Management Department, Engineering, Building Official and the City Planning and Development Office for a new building and for major renovations. All existing buildings shall also be certified through the same certification process.

The criteria for evaluation and rating shall cover the following: use of renewable building materials, installation and use of insulation and energy reduction and efficiency mechanisms, solid waste and waste water treatment schemes, incorporation of green architecture, and reduction systems for greenhouse gases and other volatile organic compounds.

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The process of certification shall begin from the initial preparation and planning phase and throughout the lifespan of the facility or structure.

SECTION 10. EXEMPTIONS. – The requirements of the provisions of this Ordinance may be waived in favor of properties, facilities or structures, under the following terms and conditions:

- 10.1 The Building Official may exempt any building from compliance with the mandates under Article II of this Ordinance if it is deemed that the cost of compliance sufficiently exceeds the building's life-cycle cost savings.
- 10.2 Any building under the mandate of Article II that is given exemption by the Building Official must comply with the Green Building Evaluation and Rating System to the maximum extent possible such that the cost of compliance does not sufficiently exceed the building's life-cycle cost savings.

ARTICLE III SEWAGE TREATMENT PLANT

SECTION 11. INSTALLATION OF SEWAGE TREATMENT PLANT. – All Subdivisions, Government and Privately Owned Buildings or Structures are hereby required to install, maintain and operate a Sewage Treatment Plant and shall be incorporated in the building plans as well as in the construction of buildings or structures within the territorial jurisdiction of Quezon City.

SECTION 12. COMPUTATION FOR EFFLUENT DISCHARGE. -- The following shall be the basis of computation for effluent discharge:

12.1 Basic consideration in the implementation of this Article shall be Effluent Discharge of more than thirty cubic meters (30 cu.m.) per day, in accordance with Section 5, note 4 of the Department of Environment and Natural Resources Administrative Order No 35, Series of 1990.



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12.2 Effluent discharge shall be computed based on the following table:

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Type of Occupancy	Water Consumption	Occupancy	% of Water Discharge
Residential	300 L/person/day	5 pax/household	80%
Hotels/Apartelles/Lodging Houses	200 L/person/day	2 pax/room	80%
Hospitals	165 L/bed/day		80%
Schools	60 L/student/day		80%
Malls	8-12 L/sqm/day		80%
Office Buildings	100 L/person/day	41 pax/7 sqm	80%
IT Buildings	100 L/person/day	1 pax/5 sqm	80%
Industrial Buildings	Automatic STP compliance		

12.3 At least forty percent (40%) of the total floor area shall be allocated for effluent discharge.

SECTION 13. GUIDELINES OF IMPLEMENTATION. – The following shall be the guidelines of implementation for this Article:

13.1 All new buildings or structures with commercial value and with effluent discharge of more than thirty (30) cubic meter per day as computed using the parameters set forth under Sections 11 and 12 of this Ordinance shall be required to install, maintain and operate a Sewage Treatment Plant.

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- 13.2 All new subdivisions with effluent discharge of more than thirty (30) cubic meters per day as computed using the parameters set forth under Sections 11 and 12 of this Ordinance shall be required to install, maintain and operate a Sewage Treatment Plant. Thirty (30) cubic meters equates to twenty (20) residential houses thus, for every twenty (20) residential houses thereof, one (1) STP shall be provided.
- 13.3 All old buildings or structures with commercial value and with effluent discharge of more than thirty (30) cubic meters per day as computed using the parameters set forth under Section 12 shall be required to install, maintain and operate a Sewage Treatment Plant within a period of three (3) years after the approval of this Ordinance.
- 13.4 All old subdivisions with effluent discharge of more than thirty (30) cubic meters per day as computed using the parameters set forth under Section 12 shall be required to install, maintain and operate a Sewage Treatment Plant, however, the water utility companies shall be directed to institute the necessary measures and shall be given three (3) years to comply after the approval of this Ordinance.
- 13.5 All new government owned buildings or structures with effluent discharge of more thirty (30) cubic meters shall be required to install, maintain and operate STP.
- 13.6 All old government owned buildings or structures with effluent discharge of more than thirty (30) cubic meters a day shall be required to install, maintain and operate STP, is given a period of three (3) years to comply with the provisions of this Ordinance.
- 13.7 All other residential houses outside of subdivisions, government and privately owned buildings/structures with commercial value but more than thirty (30) cubic meters effluent discharge shall be required to install, maintain and operate STP, however, the water utility companies is hereby mandated to institute the necessary measures and shall be given three (3) years to comply with this Ordinance.

- 13.8 All new industrial buildings/structures regardless of volume of effluent discharge shall be required to install, maintain and operate a Sewage Treatment Plant.
- 13.9 All old industrial buildings regardless of effluent discharge shall be required to install, maintain and operate a Sewage Treatment Plant.
- 13.10 All markets regardless of effluent discharge shall be required to install, maintain and operate a Sewage Treatment Plant.

ARTICLE IV GREEN VEHICLES

SECTION 14. APPLICATION. - Tricycles for hire and public utility vehicles which are registered, owned and operated by residents or organizations located and based in Quezon City and who hold and own franchises from the Sangguniang Panlungsod or other government franchising agencies, including vehicles owned and operated by the city government, are given a nonextendible period of three (3) years within which to retrofit from consuming or burning fossil fuel or petroleum products to Direct Injection Retrofit Technology or other fuel efficient technologies: Provided, these technologies pass the minimum standards set by the Bureau of Product Standards of the Department of Trade and Industry: Provided, further, that these products must at least meet or surpass the standard 7,800 parts per million hydrocarbon emission level prescribed by the Environmental Management Bureau of the Department of Environment and Natural Resources.

SECTION 15. PREFERRED FUEL. – It is a declared policy of the city government that the preferred fuel of use shall either be Compressed Natural Gas (CNG), Liquefied Petroleum Gas (LPG), bio-ethanol blended gasoline or other forms of biofuels.

SECTION 16. ADMINISTRATIVE AND PENAL PROVISIONS. - The provisions of this Article shall be strictly applicable to all public conveyances, including tricycles for hire and shall suffer the penalty of decommissioning and revocation of their respective franchises. Revoked franchises, however, may be applied for and replaced with newer or other tricycle units who are able to comply with the provisions of this Ordinance.

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The Tricycle Regulatory Unit is hereby directed to implement an orderly and staggered scheme of implementation for compliance by all tricycle franchisees: Provided, that it does not exceed the period prescribed under this Article. The Tricycle Regulatory Unit shall issue a Certificate of Compliance prior to the renewal of its franchise-license and registration with the Land Transportation Office.

In the case of city government owned vehicles, the City General Services Office is hereby directed to install, retrofit and utilize Direct Injection Retrofit Technology. It shall devise and implement an orderly and staggered scheme of implementation. The amount necessary for the implementation hereof shall be proposed and submitted by the City General Services Office to the Local Finance Committee and must be included in the Annual Appropriations Ordinance of the city government within the years prescribed for compliance under this Ordinance. All other vehicles incapable of complying with the provisions of this Ordinance must be decommissioned forthwith and disposed of in accordance with existing laws, rules and regulations on the disposal of movable properties.

ARTICLE IV GREEN BUILDING CREDIT

SECTION 17. GREEN BUILDING TAX CREDIT. – The Green Building Tax Credit is hereby made available to a taxpayer for either the construction of a green building or the rehabilitation or retrofitting of a building, which is not a green building, into a green building, subject to the following terms and conditions:

17.1 A taxpayer may apply for a Green Building Tax Credit provided that the facility subject to the Green Building Tax Credit is within the territorial jurisdiction of Quezon City and the applicant is the actual and lawful owner or contract purchaser of the facility at the time of erection, construction, installation, or acquisition of the proposed facility.

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- 17.2 If a credit is allowed to a building owner pursuant to this Section with respect to the property, and such property or an interest therein is sold, the credit for the period after the sale, which would have been allowable under this Section to the prior owner, shall be allowable to the new owner. Credit for the year of sale shall be allocated between the parties on the basis of the number of days during such year that the property or interest was held by each.
- 17.3 If a credit is allowed to a tenant pursuant to this Section with respect to the property, and if such tenancy is terminated but such property remains in use in the building by a successor tenant, the credit for the period after such termination, which would have been allowable under this Section to the prior tenant, shall be allowable to the successor tenant. Credit for the year of termination shall be allocated between the parties on the basis of the number of days during such year that the property was used by each.
- 17.4 Notwithstanding any other provision of law to the contrary, in the case of allowance of credit under this Section to a successor owner or tenant, as provided under item number 17.1 or 17.2 of this Section, the City Treasurer and the City Assessor is hereby authorized to reveal to the successor owner or tenant any information, with respect to the credit of the prior owner or tenant, which is the basis for the denial in whole or in part of the credit claimed by such successor owner or tenant.

SECTION 18. CREDIT COMPONENTS. – A Tax Credit incentive is hereby established to encourage the construction, retrofitting and maintenance of Green Infrastructures under the following schemes:

18.1 Green Building Tax Credit. A taxpayer is eligible for a Green Building Tax Credit against a tax due: Provided, that they comply with the requirements of Section 6 and: Provided, further, that the building owned or occupied meet the requirements of an eligible building as set forth in Section 9. The amount of the credit shall be determined pursuant to Section 17.

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The credit shall be the sum of the following credit components, whichever are applicable:

18.1.1 Green Whole-Building Credit Component - The green whole-building credit component shall be available to a taxpayer (whether owner or tenant) for either the construction of a green building or the rehabilitation of a building, which is not a green whole building, into a green whole building. The green wholebuilding credit component may not be allowed for any taxable year unless all the requirements under Section 9 are met, and the whole building is certified Protection by the Environmental and Management Department, City **Planning** Development Office and the Building Official: Provided. however, that in no case shall the credit be more than twenty-five percent (25%) of the total amount of Real Property Tax due for the same taxable year, under the provisions of Ordinance No. SP-91, S-1993, as amended.

18.1.2 Green Base Building Credit Component - The green base building credit component shall be available to a taxpayer who is the owner for either the construction of a green building or the rehabilitation of a building, which is not a green base building, into a green base building. The green base building credit component may not be allowed for any taxable year unless all the requirements under Section 9 are met, and the base building is certified by the Environmental Protection and Waste Management Department, City Planning and Development Office and the Building Official: Provided, however, that in no case shall the credit be more than twenty percent (20%) of the total amount of Real Property Tax due for the same taxable year, under the provisions of Ordinance No. SP-91, S-1993, as amended.

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18.1.3 Green Tenant Space Credit Component - The green tenant space credit component shall be available to a taxpayer (whether owner or tenant) for constructing tenant space or rehabilitating tenant space, which is not green tenant space, into green space. The green tenant space credit component may not be allowed for any taxable year unless all the requirements under Section 9 are met, and the tenant space is certified by the Environmental Protection and Waste Management Department, City Planning and Development Office and the Building Official: Provided, however, that in no case shall the credit be more than fifteen percent (15%) of the total amount of Real Property Tax due for the same taxable year, under the provisions of Ordinance No. SP-91, S-1993, as amended.

18.2 For each component eligible to receive credit, such credit component amount shall not exceed the maximum amount specified in the preliminary certificate issued pursuant to Section 5: Provided, that the credit may be availed of only once within the Five (5) years duration within which to avail of the credit provided for under this Ordinance. Provided, finally, that once the Green Building Tax Credit has been availed of, it shall remain in full force and effect until the completion and full occupancy of the facility or structure, unless sooner recommended for revocation by the Building Official.

SECTION 19. RESTRICTIONS. - The Green Building Tax Credit may not be allowed for any taxable year unless all of the following are met:

19.1 The whole building, base building, or tenant space has achieved the desired rating under minimum standards, rules and regulations, to be prescribed by the Environmental Protection and Waste Management Department, the City Planning and Development Office and the Building Official: Provided, however, that rating standards to be used in the grant of the Green Building Tax Credit shall not be limited to the amount of floor space or the square footage of the building;

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19.2 The taxpayer has obtained and filed a preliminary credit certificate issued pursuant to Section 5 of this Ordinance;

19.2.1 The building is actually in service, as shown by a Certificate of Occupancy;

19.2.2 For each component eligible to receive credit in Section 17, once construction is complete and an occupancy certificate is received, such credit component amount shall be allowed only for a non-extendible period of three (3) succeeding taxable years provided that the taxpayer obtains an eligibility certificate that meets all requirements for an eligibility certificate as described in Section 7; and

19.2.3 The taxpayer shall file the eligibility certificate and the preliminary credit component certificate, with the claim for credit. Allowable costs under this Section and for the number of years that the credit is made available shall not exceed, in the aggregate, the amount determined pursuant to Section 17.

SECTION 20. TAX DISCOUNT. – A system of tax discount shall be devised for compliance based on the following criteria:

- 20.1 Use of renewable energy;
- 20.2 Use of energy efficient technology;
- 20.3 Provision of open spaces; and
- 20.4 Use of environment-friendly materials.

SECTION 21. EVALUATION COMMITTEE. – An Evaluation Committee is hereby created to devise a system and guidelines for the grant of tax discount for having complied with the criteria set under Section 19 hereof. The Committee shall be tasked to evaluate and recommend tax discount for consideration of the Sangguniang Panlungsod. The Evaluation Committee shall be composed of the following:

- 21.1 City Treasurer
- 21.2 City Assessor
- 21.3 Head, Environmental Protection and Waste Management Department
 - 21.4 City Building Official
 - 21.5 City Planning and Development Office
- 21.6 United Architects of the Philippines-Quezon City Chapter
- 217 Three (3) Non Government Organizations in the field of environment.

ARTICLE V FINAL PROVISIONS

SECTION 22. CARBON CREDITS. - To access Carbon Credits, within Five (5) years from the approval and implementation of the provisions of this Ordinance, the city government is hereby authorized to negotiate, enter into, undertake, implement or establish, whether singly or under joint venture agreements, with reputable domestic or international organizations, greenhouse reduction projects.

Commercial, industrial and large-scale emitters or consumers shall be allotted carbon credits which they may undertake or offer for sale or acquisition, their unused allowances: Provided, however, that emitters who are about to exceed their quotas, may acquire or buy third-party surplus quotas, in a public document. Provided: further, in case demand for energy grows over time, the total emissions shall stay within the cap.

The emissions cap provided under this Section shall be jointly determined, provided for and implemented by the Environmental Protection and Waste Management Department and the City Planning and Development Office. The emission cap shall provide industries or stakeholders reasonable degree of flexibility and predictability in its planning to accommodate their energy requirements.

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The city government is also authorized to participate and negotiate with countries or international organizations dealing in the International Emissions Trading (IET) of accumulated carbon credits to cover for surpluses or shortfalls in allowances, pursuant to the provisions of the Kyoto Protocol.

SECTION 23. APPLICABILITY OF EXISTING MINIMUM STANDARDS. – The minimum standards provided under Republic Act Nos. 8749 (Clean Air Act of 1999) and 9275 (Clean Water Act of 2004) and other legal issuances, administrative directives or orders, policies, implementing rules and regulations issued by the Environmental Management Bureau, Department of Environment and Natural Resources shall serve as the basis for the implementation of the policies and directives under this Ordinance especially on the treatment, handling, disposal and reduction of waste water and solid waste, whether of domestic, bulk or commercial volume.

SECTION 24. IMPLEMENTING RULES AND REGULATIONS. -The Heads of the Environmental Protection and Waste Management Department, Engineering, the City Planning and Development Officer, the City Treasurer and Assessor or their authorized deputies are given a non-extendible period of Sixty (60) calendar days within which to draft and issue the Rules and Regulations Implementing the provisions of this Ordinance.

SECTION 25. AMENDATORY AND REPEALING CLAUSE. – All other Ordinances, Resolutions, Orders, Rules and Regulations inconsistent with the provisions of this Ordinance are hereby considered amended, rescinded or repealed accordingly.

SECTION 26. SEPARABILITY CLAUSE. – If, for any reason or reasons, any provision of this Ordinance is declared invalid or unconstitutional by a court of competent jurisdiction, the remaining parts thereof not affected thereby shall continue to be in full force and effect.

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SECTION 27. EFFECTIVITY CLAUSE. This Ordinance shall take effect Fifteen (15) days following its complete publication in a newspaper of general circulation.

ENACTED: February 2, 2009.

HERBERT M. BAUTISTA Vice Mayor Presiding Officer

ATTESTED:

DOROTHY D. LAGRADA, DPA City Secretary

APPROVED:

FELICIANO R. BELMONTE, JR.
City Mayor

CERTIFICATION

This is to certify that this Ordinance was APPROVED by the City Council on Second Reading on January 26, 2009, and was reverted back for Second Reading on February 2, 2009 and was finally PASSED on Third/Final Reading on the same date.

DOROTHY D. LAGRADA, DPA

City Secretary

PM

Ond/ResMBF2009



Republic of the Philippines QUEZON CITY COUNCIL

Onexon City 20th City Council

PO20CC-428

80th Regular Session

AN ORDINANCE DECLARING QUEZON CITY AS THE HEALTH AND WELLNESS TOURISM CAPITAL OF THE PHILIPPINES.

Introduced by Councilor KATE ABIGAEL G. COSETENG. Co-Introduced by Councilors Diorella Maria G. Sotto, Elizabeth A. Delarmente, Victor V. Ferrer, Jr., Oliviere T. Belmonte, Alexis R. Herrera, Voltaire Godofredo L. Liban III, Ramon P. Medalla, Ranulfo Z. Ludovica, Estrella C. Valmocina, Allan Benedict S. Reyes, Gian Carlo G. Sotto, Franz S. Pumaren, Eufemio C. Lagumbay, Marvin C. Rillo, Raquel S. Malañgen, Irene R. Belmonte, Ivy Xenia L. Lagman, Marra C. Suntay, Hero Clarence M. Bautista, Jose A. Visaya, Karl Edgar C. Castelo, Julienne Alyson Rae V. Medalla, Godofredo T. Liban II, Allan Butch T. Francisco, Marivic Co-Pilar, Melencio "Bobby" T. Castelo, Jr., Rogelio "Roger" P. Juan, Donato C. Matias, Eric Z. Medina, Alfredo S. Roxas and Noe Lorenzo B. Dela Fuente III.

WHEREAS, Quezon City houses major private and public hospitals such as the National Kidney and Transplant Institute, St. Luke's Medical Center, Lung Center of the Philippines and Philippine Heart Center;

WHEREAS, these hospitals are cited as center for excellence in their respective specialty, and provide efficient service to patients and other stakeholders;

WHEREAS, one of the important agenda in Quezon City is focused towards development in health services; γ





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WHEREAS, the hospitals within the city provides reasonable costs for the efficiently delivered high-quality health care;

WHEREAS, the Philippine Heart Center in Quezon City is a pioneer in our country for successful transplantation. It was established through Presidential Decree No. 673 issued by President Ferdinand E. Marcos in 1975, its original name was the Philippine Heart Center for Asia and was changed to its current form in 1975. It was inaugurated on February 14, 1975. Cardiovascular specialist including Christian Barnard, Denton Cooley, Donald Effler and Charles Bailey practiced there. The first Director of the PHC was Aurelio P. Aventura (1974-1986) a cardiovascular surgeon who performed many pioneering operations in the Philippines including the first successful renal transplantation in 1970;

WHEREAS, the Lung Center of the Philippines, established through Presidential Decree No. 1823 on January 16, 1981 aimed towards providing the Filipino people a state-of-the-art specialized care for lung and other chest diseases;

WHEREAS, the National Kidney and Transplant Institute is a tertiary referral hospital established on January 16, 1981. The National Kidney and Transplant Institute or NKTI, is a tertiary medical specialty center for renal health services. Existing for nearly three (3) decades of operations, it has catered for general patient care but most importantly to the prevention of treatment of renal disease. The various achievements can readily attest to its valuable medical contribution not only in the Philippines but in Asia as well;. It is known to have done the following: double transplant-kidney and pancreas (first in Asia, March 1988); Kidney-Liver transplant (first in Asia, September-1990); and Bone Marrow Transplant (first in the Philippines, August 1990).

NOW, THEREFORE,

BE IT ORDAINED BY THE CITY COUNCIL OF QUEZON CITY IN REGULAR SESSION ASSEMBLED:

SECTION 1. TITLE – This ordinance shall be known as the "Quezon City Health and Wellness Tourism Ordinance".





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SECTION 2. OBJECTIVES – The Quezon City Government, in partnership with the Tourism and Medical stakeholders shall develop Quezon City as Medical Tourism Destination through programs and policies that are consistent with Quezon City Tourism Development Plan (QCTDP) and shall undertake efforts to promote and popularize Quezon City as Medical Tourism Destination in the country.

Medical Tourism in Quezon City shall be strengthened through a strong affiliation between the City Government and the Medical and Tourism stakeholders. The City Government shall promote medical hospitals facilities offering high quality medical and professionals services with hospitable workforce and up-to-date facilities at a competitive cost.

SECTION 3. TECHNICAL WORKING GROUP – A Technical Working Group (TWG) is hereby created composed of one (1) official or duly authorized representative from the following:

- 1. Office of the City Mayor
- 2. Office of the City Vice-Mayor
- 3. Chairperson, City Council Committee on Tourism
- 4. City Health Department
- 5. Department of Health
- 6. Department of Tourism
- 7. Quezon City Tourism Department
- 8. Quezon City Business Permit and Licensing Office
- 9. Quezon City Budget Office
- 10. Environmental Protection and Waste Management Department
- 11. Novaliches District Hospital
- 12. Quezon City General Hospital
- 13. City Assessor's Office
- 14. Quezon City Department of the Interior and Local Government
- 15. Philippine Health Insurance Corporation (PhilHealth)/x





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- 16. Quezon City Chamber of Commerce and Industry
- 17. Medical Association
- 18. Quezon City Hospital Association
- 19. Quezon City Investment Promotion
- 20. Philippine Information Agency
- 21. Travel Agencies
- 22. Accommodation Establishments
- 23. St. Luke's Medical Center
- 24. Capitol Medical Center
- 25. National Kidney and Transplant Institute
- 26. Philippine Heart Center
- 27. Lung Center of the Philippines

The City Mayor may invite representatives from National Government Agencies, private sector and such other persons or agencies as may be deemed necessary, to introduce comments and recommendations.

SECTION 4. SECRETARIAT – The Quezon City Health Department and the Quezon City Tourism Department shall function as the Secretariat to facilitate and ensure the performance of the duties of the TWG, which include documentation, preparation of reports and such other assistance as may be required to discharge its functions.

SECTION 5. MEETINGS — The TWG shall conduct regular meetings as scheduled by the City Mayor or as may be required by the Quezon City Tourism Department and Quezon City Health Department.

SECTION 6. DEVELOPMENT PLAN – The TWG shall formulate and adopt a Development Plan which shall be consistent with the QCTDP and subject to confirmation by the City Council through a resolution which includes but not limited to program on tax holiday and incentive for medical facilities and amenities improvement and acquisition of modern medical and wellness equipment.



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The Development Plan shall include promotion and marketing plans; formulation of rules and regulations governing medical facilities; organization of association of medical professional individuals and institutions; capability building of medical employees, professionals and stakeholders; putting up of central information center; physical development of medical facilities' areas such as installation of markers, directional signages, close-circuit television (CCTV) cameras, lamp post/lights, wifi connection, etc.

SECTION 7. SOLID WASTE MANAGEMENT – The City Government, through the Environmental Protection and Waste Management Department and QC Health Department shall provide guidelines for an efficient and effective waste management system applicable to the medical establishments/institutions, including the strict implementation and promotion of waste segregation, recycling, re-use, and zero-waste programs.

SECTION 8. IMPLEMENTATION – The Quezon City Tourism Department and the Quezon City Health Department are primarily mandated to monitor the implementation of this Ordinance. They shall maintain close coordination with the stakeholders.

SECTION 9. BRANDING AND PROMOTION – The City Government, through the Quezon City Tourism Department, shall reinforce the identity of the Medical Tourism area and promote the same through appropriate branding mechanisms as provided in the Quezon City Tourism Development Plan.

The Quezon City Tourism Department and the Quezon City Health Department shall collaborate with the Communications Coordination Center in adopting ways to popularize and promote medical tourism resources of the city through various platforms including the internet.

SECTION 10. APPROPRIATIONS – Necessary funds are hereby appropriated from the Tourism Development Special Account and other available funds of the City Government for the implementation of this Ordinance.

SECTION 11. REPEALING CLAUSE – All other ordinances, resolutions, orders, circular and regulations or parts thereof, which are inconsistent with the provisions of this Ordinance, are hereby repealed, amended, or modified accordingly.



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SECTION 12. SEPARABILITY CLAUSE – If for any reason, any part or provision of this Ordinance shall be held to be unconstitutional or invalid, other parts or provisions hereof which are not affected thereby, shall continue to be in full force and effect.

SECTION 13. EFFECTIVITY - This Ordinance shall take effect immediately upon its approval.

ENACTED: December 3, 2018.

RODERICK M. PAULATE President Pro-Tempore Acting Presiding Officer

ATTESTED:

Atty JOHN THOMAS S. ALREROS III
Gity Secretary

APPROVED: __

Jan 2019

HERBERT M. BAUTISTA City Mayor

CERTIFICATION

This is to certify that this Ordinance was APPROVED by the City Council on Second Reading on December 3, 2018 and was PASSED on Third/Final Reading under Suspended Rules on the same date.

Atty JOHN THOMAS S. ALFEROS III City Secretary



Republic of the Philippines OUEZON CITY COUNCIL

Quezon City 19th City Council

PO19CC-414

52nd Regular Session

ORDINANCE NO. SP- 2399 , S-2015

AN ORDINANCE PROVIDING INCENTIVES FOR THE PLANTING AND MAINTENANCE OF VEGETATION ON BUILDING WALLS AND ROOFTOPS, THEREBY REPEALING CITY ORDINANCE NO. SP-1940, S-2009.

Introduced by Councilors JULIENNE ALYSON RAE V. MEDALLA and FRANZ S. PUMAREN. Co-Introduced by Councilors Anthony Peter D. Crisologo, Ricardo T. Belmonte, Jr., Dorothy A. Delarmente, Lena Marie P. Juico, Alexis R. Herrera, Precious Hipolito Castelo, Voltaire Godofredo L. Liban III, Roderick M. Paulate, Ranulfo Z. Ludovica, Ramon P. Medalla. Estrella C. Valmocina, Allan Benedict S. Peyes, Gian Carlo G. Sotto, Eufemio C. Lagumbay, Jaime F. Borres, Jesus Manuel C. Suntay, Marvin C. Rillo, Raquel S. Malañgen, Jessica Castelo Daza, Bayani V. Hipol, Jose A. Visaya, Godofredo T. Liban II, Allan Butch T. Francisco. Karl Edgar C. Castelo, Candy A. Medina, Diorella Maria G. Sotto, Marivic Co-Pilar, Rogelio "Roger" P. Juan, Melencio "Bobby" T. Castelo, Jr., Donato C. Matias and Ricardo B. Corpuz.

WHEREAS, it is the policy of the City to promote the preservation, protection, and revival of the ecosystem through the prevention, control, and abatement of pollution along with the development of the City;

WHEREAS, it is likewise the duty of the City Government to prevent and fight global warming so as to protect the populace against its detrimental effects;

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WHEREAS, spaces such as the facades and rooftops of buildings can also be used to further the advocacy of "greening" the City;

WHEREAS, there are various green wall methods that could be adopted to suit one's needs: from cable and wire-net systems to modular "living walls";

WHEREAS, creating a roof garden is also simple and very beneficial for the whole urban landscape;

WHEREAS, installing green walls along with green rooftops is a key strategy in achieving the benefits of having environment-friendly buildings: reduced urban heat and noise, improved exterior air quality, improved energy efficiency, increased aesthetic variation, among others.

NOW, THEREFORE,

BE IT ORDAINED BY THE CITY COUNCIL OF QUEZON CITY IN REGULAR SESSION ASSEMBLED:

SECTION 1. DEFINITION OF TERMS – For the purpose of this ordinance, the following terms are defined:

- a) Green Roof refers to buildings that have rooftops that are dedicated to plants and trees.
- b) Intensive Soil Layer refers to a roof with about 12 inches height of soil suitable for planting and maintaining a wide variety of plants and trees.
- c) Extensive Soil Layer refers to a roof with about 3 inches height of soil suitable for planting and maintaining a wide variety of plants and trees.
- d) Plants and Trees refer to live flowering and nonflowering plants, as well as live fruits and nonfruit bearing plants.

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- e) Building refers to residential, commercial, or industrial establishments.
- f) Wall Area the area of the wall measured on the exterior face of the building – minus windows, doors, and other similar constructions – from the top of the floor to the bottom of the roof.
- g) Green Wall also known as a 'vertical garden,' shall refer to all forms of vegetated wall surfaces, such as green facades (green wall system where climbing plants or cascading groundcovers are trained to cover specially designed supporting structures, such as a modular trellis panel and cable and wire-rope net system) and living walls (a system composed of pre-vegetated panels, vertical modules, or planted blankets that are fixed vertically to a structural wall or frame)."

SECTION 2. Incentives for Green Roofs Or Green Walls For Buildings - All buildings that devote their roof area for plants and trees, either with an extensive or intensive soil layer, or devote their wall area for green walls shall be entitled to a discount on their real property tax based on the following scheme:

- 25% of the roof or wall area shall be equivalent to 5% discount;
- 50% of the roof or wall area shall be equivalent to 10% discount;
- 75% of the roof or wall area shall be equivalent to 15% discount;
- 100% of the roof or wall area shall be equivalent to 20% discount.

This exemption shall be available for five (5) years starting from the initial assessment.

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SECTION 3. Maintenance – The owners of the building shall make sure that the vegetation is maintained and watered regularly.

SECTION 4. Certification and Pictures as Proofs of Maintenance – The grantee of the discount and/or the real property tax exemption in this ordinance must submit the following as proof to the City Assessor's Department:

- For green roofs four (4) pieces 5R pictures/photographs of the area devoted to plants and trees. One shot from the north angle, one shot from the east angle, one shot from the west angle, and one shot from the south angle.
- For green walls three (3) pieces 5R pictures/photographs of the area devoted to the green wall. One shot from the left side, one shot from the front side, and one shot from the right side.
- For both a certification from the Barangay Council concerned of the construction and proper maintenance of the green roof or wall.

In all the angles and sides, the latest broadsheet newspaper (the date must be seen) must be placed on the plants or wall to indicate that the said picture/photograph is the latest. These 5R pictures/photographs, along with the certification from the barangay, must be submitted during the payment of the annual tax on real properties."

SECTION 5. PROHIBITIONS

a) No plants or trees growing taller than six (6) feet shall be planted on the rooftops.

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- b) No plants must be allowed to cover or obstruct doors, fire exits, windows, and other openings of the building and neither should it cause nuisance to neighboring residents/communities.
- c) Planting of illegal plants, in addition to other penalties from national laws, shall cause the revocation of the building and occupancy permit.

SECTION 6. IMPLEMENTING AGENCIES – The City Assessor's Department, the Environmental Protection and Waste Management Department, the City Planning and Development Office, the Engineering Department, and the City Treasurer's Office are mandated to craft the Implementing Rules and Regulations of this ordinance within sixty (60) days after its enactment.

SECTION 7. SEPARABILITY CLAUSE - If any part or section of this ordinance is declared unconstitutional for any reason whatsoever, such declaration shall not in any way affect the other parts or sections of this ordinance.

SECTION 8. REPEALING CLAUSE - Ordinance No. SP-1940, S-2009 is hereby repealed. Provided, that those who have already availed of the discount from the said ordinance shall be retained until the end of their 10-year period.

All other ordinances, resolutions, executive orders, rules, regulations, and other administrative issuances, or the provisions thereof, which are contrary to, or inconsistent herewith, are hereby repealed or modified accordingly. χ

N

52nd Regular Session

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SECTION 9. EFFECTIVITY - This ordinance shall take effect after fifteen (15) days following its publication in any newspaper of general circulation.

ENACTED: February 23, 2015.

MA. JOSEFINA G. BELMONTE Vice Mayor Presiding Officer

ATTESTED:

Atty. JOHN THOMAS SALFEROS III
City Gov't. Asst. Dept. Head III

APPROVED: 2 9 APR 2015

HERBERT M. BAUTISTA City Mayor

CERTIFICATION

This is to certify that this Ordinance was Reverted Back by the City Council on Second Reading on February 23, 2015 and was APPROVED on Second Reading on the same date and was PASSED on Third/Final Reading on March 2, 2015.

Atty. JOHN THOMAS S. ALFEROS III

City Gov't. Asst. Dept. Head III

Annex 5

LIST OF AVAILABLE FACILITIES

LIST OF AVAILABLE FACILITIES IN HIGHLY FLOOD PRONE AREAS OF QUEZON CITY

Data Source: City Engineering Department, 2022

Table A. 1 A Count of evacuation centers in highly flood prone areas. Flood level 2 (0.5m-1.5m); 3(1.5-3m), 4(more than 3m)

Evacuation Center Location	Flo	Flood Leve	
District-Barangay-Evacuation Center Name	L2	L3	L4
District I			
East Kamias			
East Kamias Multipurpose Hall		1	
Katipunan		'	
Katipunan Barangay Hall			1
San Antonio Elementary School			1
Lourdes			'
	1		
D. Tuazon Elementary Covered Court Manresa			
	1		
Manresa Covered Court	1		
Mariblo			
Dagupan Chapel			1
Mariblo Day Care Center			1
Masambong			
Gazebo Open Space		1	
Tennis Court			1
N.S. Amoranto			
N.S. Amoranto Basketball Court	1		
N.S. Amoranto Tennis Court	1		
Nayong Kanluran			
Barangay Nayong Kanluran Covered Basketball Court		1	
Paltok			
Paltok Covered Basketball Court		1	
Project 6			
Ernesto Rondon High School	1		
Ramon Magsaysay	<u> </u>		
Bago Bantay Elementary School Covered Court		1	
Sienna			
Sienna Barangay Hall	1		
St. Peter	- '		
Ground 0 Multipurpose Hall	1		
St. Peter Barangay Hall	1		
Sta. Cruz			4
Phoenix Building Gen Lim St		4	1
Sta. Cruz Barangay Hall		1	
Sta. Cruz Multipurpose Hall			1
Sta. Teresita			
Sta. Teresita Covered Basketball Court	1		
Sta.Cruz			
Basketball Court(OpenSpace)		1	
Basketball Covered Court			1
Day Care Center			1
Senior Citizen Park		1	
Sto Domingo			
Angelicum Gymnasium	<u></u> L	1	
Sto. Domingo (Matalahib)			
Senior Citizen Building Sto. Domingo		1	
Talayan			
		_	t
Barangay Multipurpose Hall and Training Center		1	

Table A.1 A Count of evacuation centers in highly flood prone areas. Flood level 2 (0.5m-1.5m); 3(1.5-3m), 4(more than 3m)

Evacuation Center Location	Flood Le		vel
District-Barangay-Evacuation Center Name	L2	L3	L4
Vasra			
Mines Elem School		1	
Vasra Open Area		1	
District II			
Bagong Silangan			
Bagong Silangan Elementary School	1		
Bagong Silangan High School	1		
Calameong SB Park Court			1
Batasan Hills			
Mormons Church	1		
Holy Spirit			
Kaligtasan Half Court		1	
Payatas			
Siloam Covered Court	1		
District III			
Amihan			
Banuyo Yakal Basketball Court	1		
Bagumbayan			
Bagumbayan Elementary School Covered Court	1		
Bagumbayan Senior Hall	1		
Blue Ridge B			
Blue Ridge B Covered Basketball Court	1		
Claro (Quirino 3-B)			
Agcans Court	1		
Akle Park		1	
Barangay Quirino 3-B Barangay Hall	1		
Loyola Heights			
Loyola Heights Park	1		
Matandang Balara			
Villa Beatriz Park Barangay Hall		1	
Milagrosa			
Project 4 Covered Court	1		
San Roque			
Juan Sumulong High School	1		
Ugong Norte			
Corinthian Garden Football Field	1		
West Kamias			
K-H Street	1		

District IV			
Bagong Lipunan ng Crame			
Bagong Lipunan ng Crame Barangay Hall		1	
Central			
Mabuhay Multipurpose	1		
Damayang Lagi			
Damayang Lagi Barangay Hall		1	
Trinity University of Asia High School	1		
Dona Imelda			
Betty Go Belmonte Elem. School			1
Doña Imelda			
Dona Imelda Barangay (Malangen) Hall			1
Doña Imelda Multi-Purpose Hall			1

SK Building Barangay Doña Imelda			1
Kalusugan			
19th Street Broadway Compound	1		
Kamuning			
Bernardo Covered Court		1	
Old Capitol Site			
Old Capitol Site Barangay Hall	1		
Roxas			
Umbell Court			1
San Vicente			
San Vicente Multi-Purpose Hall	1		
Santol			
Carlos Albert Highschool		1	
Santol Barangay Hall		1	
Sikatuna Village			
Quadrant 4 Evacuation Area	1		
Tatalon			
Lighthouse Baptist Church		1	
District V			
Bagbag			
San Pedro Covered Court		1	
Fairview			
Obispado De Novaliches		1	
North Fairview			
Milenyo Basketball Covered Court			1
Novaliches Proper			
Dona Rosario Elem School	1		
San Bartolome			
Greenheights Subdivision Covered Court	1		
District VI			
Apolonio Samson			
Parkway Village			1
Baesa			
Banana Island Open Basketball Court	1		
SK Multipurpose Hall	1		
New Era			
New Era Barangay Hall	1		
Tandang Sora			
Santuario de San Vicente de Paul	1		
Unang Sigaw			
Bonifacio Memorial Elementary School	1		
Unang Sigaw Barangay Hall		1	
Grand Total	37	26	17

Table A.2 A count of health centers in highly flood prone areas. Flood level L2 (0.5m-1.5m); L3(1.5-3m), L4(more than 3m)

Health Center Location	Flood Level				
Health Center Type	Regul	ar HC	Sub-Health Station		
Number of story>	1-story	2-story	2-story		
District 1					
Manresa					
Sitio Manresa Sub-Health Station			L2		

Masambong			
Masambong Health Center		L3	
San Antonio			
San Antonio Health Center	L4		
Sta. Teresita			
Mercedes De Joya Health Center		L2	
District 3			
Bagumbayan			
Project 4 Health Center		L2	
Libis			
Libis Health Center		L2	
Matandang Balara			
Old Balara Sentrong Sigla Health Center	L2		
West Kamias			
West Kamias Sub-Health Station			L4
District 4			
Tatalon			
Tatalon Health Center	L2		
District 5			
Capri			
Capri Sentrong Sigla Health Center		L2	
Tumana			
San Bartolome Barangay Health Center	L2		
District 6			
Pasong Tamo			
M. H. Pedro Health Center	L2		

 $\label{thm:condition} \begin{tabular}{l} Table A.3 A Count of hospitals in highly flood prone areas. Flood level L2 (0.5m-1.5m); L3(1.5-3m), L4(more than 3m) \\ \end{tabular}$

Hospital Location	Floo	od Le	vel
District-Barangay-Evacuation Center Name	2	3	4
District I			
Sienna			
Marianne's Doctors Hospital		1	
West Triangle			
Providence Hospital			1
District III			
Milagrosa			
Villarosa General Hospital		1	
District IV			
Central			
East Avenue Medical Center	1		
Philippine Heart Center	1		
Damayang Lagi			
Sunrise Hill Therapeutic	1		
Doña Imelda			
U. E. R. M. Memorial Medical Center			1
Doña Josefa			
Children's Medical Center Phil.	1		
Immaculate Concepcion			
Clinic of the Holy Spirit	1		
Kalusugan			
Delos Santos Medical Center			1

Table A.3 A Count of hospitals in highly flood prone areas. Flood level L2 (0.5m-1.5m); L3(1.5-3m), L4(more than 3m)

Hospital Location		Flood Level		
District-Barangay-Evacuation Center Name	2	3	4	
District V				
Fairview				
FEU-NRMF Medical Center	1			
Gulod				
Novaliches General Hospital	1			
Novaliches Proper				
Hope General Hospital Foundation, Inc.	1			
Total	8	2	3	

Table A.4 A Count of multi-purpose halls in highly flood prone areas. Flood level 2 (0.5m-1.5m); 3(1.5-3m),4(more than 3m)

(0.5m-1.5m); 3(1.5-3m),4(more than 3m) Multi-Purpose Hall Location	Flood Level		
District-Barangay-Multi-purpose hall name	L2	L3	L4
1			
Bahay Toro			
Hayaville Multi-Purpose Hall			
1		1	
Manresa			
Barangay Manresa Multi-Purpose Hall			
1		1	
San Antonio			
Crisologo Multi-Purpose Hall			
1			1
St. Peter			
Ground 0 Multipurpose hall			
1	1		
Sta. Cruz			
Sta. Cruz Multipurpose Hall			
2			1
Sta. Teresita			
Barangay Sta. Teresita Multi-Purpose Hall			
2	1		
Talayan			
Barangay Multipurpose Hall and Training Center			
1		1	
2			
Bagong Silangan			
Winnie Castelo Multi-Purpose Hall (Sumama-ka Compound)			
1	1		
3			
East Kamias			
East Kamias Multipurpose Hall			
2		1	
4			
	1		
Doña Imelda			

Table A.4 A Count of multi-purpose halls in highly flood prone areas. Flood level 2 (0.5m-1.5m); 3(1.5-3m),4(more than 3m)

Multi-Purpose Hall Location	Flo	od Le	vel
District-Barangay-Multi-purpose hall name	L2	L3	L4
2			1
San Vicente			
San Vicente Multi-Purpose Hall			
2	1		
Tatalon			
Tatalon Multi-Purpose Hall			
2		1	
5			
Bagbag			
San Pedro 9 Multi-Purpose Hall			
1		1	
San Bartolome			
Goodwill Homes 1 Multi-Purpose Hall			
1			1
Sta. Monica			
Palmera Phase 4 Multi-Purpose Hall			
2		1	
6			
Apolonio Samson			
Parkway Village Multi-Purpose Hall			
1			1
Total	4	7	5

Table A.5 A Count of Barangay Halls in highly flood prone areas. Flood level 2 (0.5m-1.5m); 3(1.5-3m),4(more than 3m)

District-Barangay -Hall Location	No of Stories	Flood Level
1		
Del Monte		
Del Monte Barangay Hall	1	3
Katipunan		
Katipunan Barangay Hall	1	4
Lourdes		
Lourdes Barangay Hall	1	2
Manresa		
Manresa Barangay Hall	2	3
Masambong		
Masambong Barangay Hall	1	3
N. S. Amoranto (Gintong Silahis)		
N. S. Amoranto Barangay Hall	2	2
St. Peter		
St. Peter Barangay Hall	1	2
Sta. Teresita		
Sta. Teresita Barangay Hall	2	2
Talayan		
Talayan Barangay Hall	1	3
Vasra		
Vasra Barangay. Hall	2	3
3		
Amihan		
Amihan Barangay Hall	2	2

Table A.5 A Count of Barangay Halls in highly flood prone areas. Flood level 2 (0.5m-1.5m); 3(1.5-3m),4(more than 3m)

(0.5m-1.5m); 3(1.5-3m),4(more District-Barangay -Hall Location	No of Stories	Flood Level
Loyola Heights		
Loyola Heights Barangay Hall	1	2
Mangga	•	
Mangga Barangay Hall	1	3
Quirino 2-B		3
Quirino 2-B Barangay Hall	2	3
Quirino 3-A	2	3
Quirino 3-A Barangay Hall	2	2
Silangan	2	
Silangan Barangay Hall	2	3
Tagumpay	2	3
Tagumpay Barangay Hall	2	3
Villa Maria Clara	2	3
Villa Maria Clara Barangay Hall	1	2
West Kamias	1	
West Kamias West Kamias Barangay Hall	2	3
4	2	3
Bagong Lipunan ng Crame	2	3
Bagong Lipunan ng Crame Barangay Hall Damayang Lagi	2	3
Damayang Lagi Damayang Lagi Barangay Hall	1	3
		3
Kalusugan	1	3
Kalusugan Barangay Hall Mariana		3
	2	2
Mariana Barangay Hall Obrero	2	
Obrero Barangay Hall	2	4
Old Capitol Site	2	4
Old Capitol Site Barangay Hall	2	2
San Martin de Porres	2	
Kaunlaran Barangay Hall	1	3
San Vicente		3
San Vicente Barangay Hall	1	2
Santol	•	
Santol Barangay Hall	1	3
Tatalon	'	J J
Tatalon Barangay Hall	1	2
5	1	
Capri		
Capri Barangay Hall	1	2
Fairview	1	
Fairview Barangay Hall	1	2
Sta. Monica	1	_
Sta. Monica Barangay Hall	1	2
Number of Halls Listed	1	32
INUITIDE OF FIGURE		JZ

Table A.6 A Count of Fire Stations in highly flood prone areas. Flood level 2 (0.5m-1.5m); 3(1.5-3m),4(more than 3m)

Fire Station Location	Flood Level		
District-Barangay-Fire Station Name	L2	L3	L4
1			
Masambong			
Masambong Fire Sub Station			1
N.S Amoranto			
La Loma Fire Sub Station	1		
San Antonio			
Frisco Sub Station			1

Table A.7 A Count of Police Stations in highly flood prone areas. Flood level 2 (0.5m-1.5m); 3(1.5-3m),4(more than 3m)

Police Station Location	Flo	Flood Level	
District-Barangay-Police Station Name	L2	L3	L4
1			
Bungad			
Police Community Precinct 3 (Baler PS-3)		1	
Manresa			
Police Community Precinct 2 (La Loma PS-PCP 2)		1	
Masambong			
Baler Police Station 2 (PS 2)			1
N. S. Amoranto			
(Gintong Silahis)			
La Loma Police Station 1 (PS 1)	1		
Sta. Teresita			
Police Community Precinct 3 (La Loma PS-PCP 3)	1		
2			
Bagong Silangan			
Police Community Precinct 2 (Batasan Hills PS-2)		1	
3			
Matandang Balara			
Police Community Precinct 6 (Batasan Hills (PS-PCP 6)		1	
Total	2	4	1

Table A.8 Bridges located in various flood locations (RCP 8.5 100-year rain flood scenario

Bridge Location	Flood Level		
District-Barangay-Bridge name	2	3	4
1			
Bahay Toro			
Culiat Br. 2 (WB)			1
Dario Br. 1 (NB)			1
Del Monte Bridge	1		
Pasong Tamo Br. 3 (NB)			1
Pasong Tamo Bridge II		1	
Pasong Tamo III		1	

Table A.8 Bridges located in various flood locations (RCP 8.5 100-year rain flood scenario

scenario			
Bridge Location	Flood Level		
District-Barangay-Bridge name	2	3	4
Katipunan			
Culiat Br. 1 (SB)	1		
Phil-Am			
Tangue Bridge	1		
Project 6			
Culiat Br. 4 (NB)		1	
Sta. Cruz			
Quezon Ave. Bridge			1
Talayan			
Benigno Aquino Bridge			1
2			
Batasan Hills			
Batasan - San Mateo Bridge			1
3			
Bagumbayan			
Libis Br. (NB)		1	
E. Rodriguez			
K-H Bridge			1
Quirino 3-A			-
Anonas Bridge	1		
Silangan	'		
Kalayaan - KJ Bridge	1		
4	'		
Doña Imelda			
Lambingan Bridge			1
Mariablo Bridge			1
San Juan Br. (NB)			1
, ,			
Kamuning		1	
Lagarian Br. 1		1	1
T. Gener Br.			1
Kristong Hari			
J. Jimenez Bridge			1
Mariana			
Emitanio Bridge 2			1
Obrero			
Bagbag Br. (SB)		1	
Pinyahan			
Culiat Br. 2 (EB)	1		
Tatalon			
Matuabla Bridge			1
5			
Fairview			
Regalado Bridge		1	
Greater Lagro			
Ilang-Ilang Br. (NB)		1	
Ilang-Ilang Br. (SB)		1	
North Fairview			
Regalado Br.(Mio Br.)		1	
Novaliches Proper			
Tullahan Bridge I (Manila Bound Lane)	Ì	Ì	1
Sta. Lucia			
B. Aquino (Dario) Bridge			1
. , , ,	1	1	<u> </u>

Table A.8 Bridges located in various flood locations (RCP 8.5 100-year rain flood scenario

Bridge Location	Flood Level		
District-Barangay-Bridge name	2	3	4
6			
Apolonio Samson			
Dario Br. 1 (SB)			1
Culiat			
Culiat Br. 1 (NB)		1	
Pasong Tamo Br. 2 (NB)	1		
Pasong Tamo Bridge I		1	
Pasong Tamo			
Pasong Tamo Br. 1			1
Talipapa			
Tullahan Br. 3 (NB)		1	
Tullahan Bridge III		1	
Tandang Sora	,		
Bagbag Br. (NB)			1
Grand Total	7	14	19

Table A.9 A Count of Sewage Treatment Plants (STPs) in highly flood prone areas. Flood level 2 (0.5m-1.5m); 3(1.5-3m),4(more than 3m)

STP Location	Flo	od Le	vel
District-Barangay-STP Name	L2 L3 I		L4
1			
Bahay Toro			
Bahay Toro STP			
#34 Fema Rd.			1
Congressional STP			
Congressional Avenue cor. Hereford Street			1
Damayan			
Del Monte STP			
Caragay St.			1
Paltok			
Paltok STP			
East Riverside			1
Phil-Am			
Philam STP			
West Ave., Philam Village, Brgy. Philam, Q.C.	1		
Project 6			
Road 5 STP			
Road 5, Project 6, Quezon City	1		
San Antonio			
San Antonio STP			
San Jose, Roosevelt			1
Sta. Cruz			
Heroes Hills STP			
Brgy. Sta. Cruz, Q.C.		1	
Sto. Cristo			
Pag-asa STP			
Road 3, Pag-asa BLISS, Q.C.	1		
Sto. Domingo (Matalahib)			
Talayan STP			

Table A.9 A Count of Sewage Treatment Plants (STPs) in highly flood prone areas. Flood level 2 (0.5m-1.5m); 3(1.5-3m),4(more than 3m)

District-Barangay-STP Name	STP Location	Flo	od Le	vel
Vasra Image: Company of the company of th	District-Barangay-STP Name	L2	L3	L4
Fisheries STP 1 1 3 1 1 3 1 1 3 1 3 1 3 1 3 1 3 4 <	P. Florentino St.			1
Visayas Ave., Brgy. Vasra, Ditiman, Q.C. 1 3 Amihan Palosapis STP Palosapis STP Palosapis St., Brgy. Amihan, Proj. 3, Q.C. 1 Bagumbuhay A. Luna STP A. Luna cor. E. Evangelista St., Proj. 4, Q.C. 1 Milagrosa Belarmino STP Mascardo St., Brgy. Milagrosa, Q.C. 1 4 4 Dofia Imelda Kapitigan STP Kapitigan STP Kapitigan STP Kapitigan St. 1 Tatalon 1 Tatalon STP 1 Eulogio Rodriguez Blvd. cor. Gregorio Araneta Ave. 1 5 1 Reservoir 1 La Mesa TP 2 1 La Mesa Dam Compound, Novaliches 1 6 4 Apolonio Samson 1 Samson STP 1 Lorraine St. 1 Baesa 1 Baesa Saesa STP 1 St. Paul St. 1 Legal STP 1 Legal STP <td>Vasra</td> <td></td> <td></td> <td></td>	Vasra			
3 Amihan <	Fisheries STP			
Amihan Palosapis STP Palosapis STP, Brgy, Amihan, Proj. 3, Q.C. 1 Bagumbuhay A. Luna STP A. Luna cor. E. Evangelista St., Proj. 4, Q.C. 1 Milagrosa Belarmino STP Mascardo St., Brgy, Milagrosa, Q.C. 1 A UDofia Imelda Kapiligan STP Kapiligan St. 1 1 Tatalon Tatalon Tatalon STP Eulogio Rodriguez Blvd. cor. Gregorio Araneta Ave. 1 1 Seservoir La Mesa TP 2 La Mesa TP 2 La Mesa Dam Compound, Novaliches 1 1 6 Apolonio Samson Samson STP Lorraine St. 1 1 Sangandaan Grant STP St. Paul St. 1 1 Sangandaan Grant STP Legal cor. Premium Street, GSIS 1 1 Tandang Sora STP Homeland Subd, Bagbag, Tandang Sora Avenue 1 1 Tandang Sora STP Real Village	Visayas Ave., Brgy. Vasra, Diliman, Q.C.		1	
Palosapis STP 1 Palosapis St., Brgv. Amihan, Proj. 3, Q.C. 1 Bagumbuhay 1 A. Luna STP 1 M. Luna cor. E. Evangelista St., Proj. 4, Q.C. 1 Milagrosa 8 Belarmino STP 1 Mascardo St., Brgv. Milagrosa, Q.C. 1 4 1 Doña Imelda 1 Kapiligan STP 1 Kapiligan St. 1 Tatalon 1 Tatalon STP 1 Eulogio Rodriguez Blvd. cor. Gregorio Araneta Ave. 1 5 1 Reservoir 1 La Mesa TP 2 1 La Mesa Dam Compound, Novaliches 1 6 1 Apolonio Samson 1 Samson STP 1 Lorraine St. 1 Baesa 1 Baesa Baesa STP 1 St. Paul St. 1 Sangandaan 1 Grant StP 1 Legal STP	3			
Palosapis St., Brgy. Amihan, Proj. 3, Q.C. 1 Bagumbuhay	Amihan			
Bagumbuhay	Palosapis STP			
A. Luna STP A. Luna cor. E. Evangelista St., Proj. 4, Q.C. Milagrosa Belarmino STP Mascardo St., Brgy. Milagrosa, Q.C. 1 Doña Imelda Kapiligan STP Kapiligan St. 1 Tatalon Tatalon STP Eulogio Rodriguez Blvd. cor. Gregorio Araneta Ave. 1 5 Reservoir La Mesa TP 2 La Mesa Dam Compound, Novaliches 1 6 Apolonio Samson Samson STP Lorraine St. 1 Baesa Baesa STP St. Paul St. 1 Sangandaan Grant STP Grant St. 1 Legal STP Legal cor. Premium Street, GSIS Tandang Sora Bagbag STP Homeland Subd, Bagbag, Tandang Sora Avenue Tandang Sora STP Real Village 1 I Milagrosa I Apolonio Samson I Sanganda Sora STP I Sandang Sora STP I Sand	Palosapis St., Brgy. Amihan, Proj. 3, Q.C.	1		
A. Luna cor. E. Evangelista St., Proj. 4, Q.C. 1 Milagrosa 8 Belarmino STP 1 Mascardo St., Brgy. Milagrosa, Q.C. 1 4	Bagumbuhay			
Milagrosa 1 Belarmino STP 1 Mascardo St., Brgy. Milagrosa, Q.C. 1 4	A. Luna STP			
Belarmino STP Mascardo St., Brgy. Milagrosa, Q.C. 4 Doña Imelda Kapiligan STP Kapiligan St. Tatalon Tatalon STP Eulogio Rodriguez Blvd. cor. Gregorio Araneta Ave. 5 Reservoir La Mesa TP 2 La Mesa Dam Compound, Novaliches 6 Apolonio Samson Samson STP Lorraine St. Baesa Baesa STP St. Paul St. 1 Sangandaan Grant STP Grant STP Legal STP Legal STP Legal Cor. Premium Street, GSIS Tandang Sora Bagbag STP Homeland Subd, Bagbag, Tandang Sora Avenue 1 Tandang Sora STP Real Village 1 1 1 1 1 1 1 1 1 1 1 1 1	A. Luna cor. E. Evangelista St., Proj. 4, Q.C.		1	
Mascardo St., Brgy. Milagrosa, Q.C. 1 4 Doña Imelda Kapiligan STP Image: Common of the property of the propert	Milagrosa			
A Doña Imelda Kapiligan STP Kapiligan St. 1 Tatalon Tatalon STP Eulogio Rodriguez Blvd. cor. Gregorio Araneta Ave. 1 5 Reservoir La Mesa TP 2 La Mesa Dam Compound, Novaliches 6 Apolonio Samson Samson STP Lorraine St. 1 Baesa Baesa STP St. Paul St. 1 Sangandaan Grant STP Grant STP Grant St. 1 Legal STP Legal cor. Premium Street, GSIS 1 Tandang Sora Bagbag STP Homeland Subd, Bagbag, Tandang Sora Avenue 1 Tandang Sora STP Real Village 1 Tandang Sora STP Real Village 1 Tandang Sora STP	Belarmino STP			
Doña Imelda Kapitigan STP Kapitigan St. 1 Tatalon	Mascardo St., Brgy. Milagrosa, Q.C.	1		
Kapitigan STP 1 Tatalon 1 Tatalon STP 1 Eulogio Rodriguez Blvd. cor. Gregorio Araneta Ave. 1 5 5 Reservoir 1 La Mesa TP 2 2 La Mesa Dam Compound, Novaliches 1 6 4 Apolonio Samson 2 Samson STP 1 Lorraine St. 1 Baesa 1 Baesa STP 1 St. Paul St. 1 Sangandaan 1 Grant STP 1 Grant St. 1 Legal STP 1 Legal Cor. Premium Street, GSIS 1 Tandang Sora 1 Bagbag STP 1 Homeland Subd, Bagbag, Tandang Sora Avenue 1 Tandang Sora STP 1 Real Village 1				
Kapitigan St. 1 Tatalon	Doña Imelda			
TatalonImage: Comparison of the compariso	Kapiligan STP			
Tatalon STP Eulogio Rodriguez Blvd. cor. Gregorio Araneta Ave. 1 5 Reservoir La Mesa TP 2 La Mesa Dam Compound, Novaliches 6 Apolonio Samson Samson STP Lorraine St. 1 Baesa Baesa STP St. Paul St. 1 Sangandaan Grant STP Grant STP Grant St. 1 Legal STP Legal cor. Premium Street, GSIS 1 Tandang Sora Bagbag STP Homeland Subd, Bagbag, Tandang Sora Avenue 1 Tandang Sora STP Real Village 1 I 1	Kapiligan St.		1	
Eulogio Rodriguez Blvd. cor. Gregorio Araneta Ave. 5 Reservoir La Mesa TP 2 La Mesa Dam Compound, Novaliches 6 Apolonio Samson Samson STP Lorraine St. 1 Baesa Baesa STP St. Paul St. 1 Sangandaan Grant STP Grant STP Grant St. 1 Legal STP Legal cor. Premium Street, GSIS 1 Tandang Sora Bagbag STP Homeland Subd, Bagbag, Tandang Sora Avenue 1 Tandang Sora STP Real Village 1 I Sangandage 1 I Sandang Sora STP Real Village 1 I Sandang Sora STP	Tatalon			
Seservoir La Mesa TP 2 La Mesa Dam Compound, Novaliches 1 6 Apolonio Samson Samson STP 1 Lorraine St. 1 Baesa 1 Baesa STP 1 St. Paul St. 1 Sangandaan 1 Grant STP 1 Grant St. 1 Legal STP 1 Legal cor. Premium Street, GSIS 1 Tandang Sora 1 Bagbag STP 1 Homeland Subd, Bagbag, Tandang Sora Avenue 1 Tandang Sora STP 1 Real Village 1	Tatalon STP			
Seservoir La Mesa TP 2 La Mesa Dam Compound, Novaliches 1 6 Apolonio Samson Samson STP 1 Lorraine St. 1 Baesa 1 Baesa STP 1 St. Paul St. 1 Sangandaan 1 Grant STP 1 Grant St. 1 Legal STP 1 Legal cor. Premium Street, GSIS 1 Tandang Sora 1 Bagbag STP 1 Homeland Subd, Bagbag, Tandang Sora Avenue 1 Tandang Sora STP 1 Real Village 1	Eulogio Rodriguez Blvd. cor. Gregorio Araneta Ave.		1	
La Mesa TP 2 1 6				
La Mesa Dam Compound, Novaliches 1 6	Reservoir			
6 Apolonio Samson Samson STP I Lorraine St. 1 Baesa I Baesa STP I St. Paul St. 1 Sangandaan I Grant STP I Grant St. 1 Legal STP I Legal cor. Premium Street, GSIS 1 Tandang Sora I Bagbag STP I Homeland Subd, Bagbag, Tandang Sora Avenue 1 Tandang Sora STP I Real Village 1	La Mesa TP 2			
Apolonio Samson Samson STP Lorraine St. 1 Baesa Baesa STP St. Paul St. 1 Sangandaan Grant STP Grant St. 1 Legal STP Legal Cor. Premium Street, GSIS 1 Tandang Sora Bagbag STP Homeland Subd, Bagbag, Tandang Sora Avenue 1 Tandang Sora STP Real Village 1	La Mesa Dam Compound, Novaliches		1	
Samson STP Lorraine St. 1 Baesa Baesa STP St. Paul St. 1 Sangandaan Grant STP Grant STP Grant St. 1 Legal STP Legal STP Legal cor. Premium Street, GSIS 1 Tandang Sora Bagbag STP Homeland Subd, Bagbag, Tandang Sora Avenue 1 Tandang Sora STP Real Village 1	6			
Samson STP Lorraine St. 1 Baesa Baesa STP St. Paul St. 1 Sangandaan Grant STP Grant STP Grant St. 1 Legal STP Legal STP Legal cor. Premium Street, GSIS 1 Tandang Sora Bagbag STP Homeland Subd, Bagbag, Tandang Sora Avenue 1 Tandang Sora STP Real Village 1	Apolonio Samson			
Baesa STP St. Paul St. Sangandaan Grant STP Grant St. Legal STP Legal cor. Premium Street, GSIS Tandang Sora Bagbag STP Homeland Subd, Bagbag, Tandang Sora Avenue Tandang Sora STP Real Village 1				
Baesa STP St. Paul St. Sangandaan Grant STP Grant St. Legal STP Legal STP Legal cor. Premium Street, GSIS 1 Tandang Sora Bagbag STP Homeland Subd, Bagbag, Tandang Sora Avenue Tandang Sora STP Real Village 1	Lorraine St.			1
Baesa STP St. Paul St. Sangandaan Grant STP Grant St. Legal STP Legal STP Legal cor. Premium Street, GSIS 1 Tandang Sora Bagbag STP Homeland Subd, Bagbag, Tandang Sora Avenue Tandang Sora STP Real Village 1	Baesa			
SangandaanGrant STPGrant St.1Legal STP1Legal cor. Premium Street, GSIS1Tandang Sora1Bagbag STP1Homeland Subd, Bagbag, Tandang Sora Avenue1Tandang Sora STP1Real Village1				
Grant STP Grant St. 1 Legal STP Legal cor. Premium Street, GSIS 1 Tandang Sora Bagbag STP Homeland Subd, Bagbag, Tandang Sora Avenue 1 Tandang Sora STP Real Village 1	St. Paul St.			1
Grant STP Grant St. 1 Legal STP Legal cor. Premium Street, GSIS 1 Tandang Sora Bagbag STP Homeland Subd, Bagbag, Tandang Sora Avenue 1 Tandang Sora STP Real Village 1	Sangandaan			
Legal STP Legal cor. Premium Street, GSIS Tandang Sora Bagbag STP Homeland Subd, Bagbag, Tandang Sora Avenue Tandang Sora STP Real Village 1				
Legal cor. Premium Street, GSIS 1 Tandang Sora Bagbag STP Homeland Subd, Bagbag, Tandang Sora Avenue 1 Tandang Sora STP Real Village 1	Grant St.		1	
Legal cor. Premium Street, GSIS 1 Tandang Sora Bagbag STP Homeland Subd, Bagbag, Tandang Sora Avenue 1 Tandang Sora STP Real Village 1				
Tandang SoraBagbag STPHomeland Subd, Bagbag, Tandang Sora Avenue1Tandang Sora STP1Real Village1	<u> </u>			1
Bagbag STP Homeland Subd, Bagbag, Tandang Sora Avenue 1 Tandang Sora STP Real Village 1	<u> </u>			
Homeland Subd, Bagbag, Tandang Sora Avenue 1 Tandang Sora STP 1 Real Village 1				
Tandang Sora STP Real Village 1	<u> </u>		1	
Real Village 1			-	
			1	
10tat 5 9 9	Total	5	9	9

Table A.10 A count of Pumping Station Facilities in highly flood prone areas. Flood level 2 (0.5m-1.5m); 3(1.5-3m),4(more than 3m)

STP Location	Flood Level		vel
District-Barangay-STP Name	L2	L3	L4
1			
Maharlika			
D. Tuazon Pump Station and Reservoir	1		
3			
Pansol			
Balara Water Pumping Station			1
UP Water Pumping Station	1		
Count	2		1

Table A.11 A count of Materials Recovery Facilities in highly flood prone areas. Flood level 2 (0.5m-1.5m); 3(1.5-3m), $4(more\ than\ 3m)$

Material Recovery Facility Location	Flo	od Le	vel
District-Barangay-MRF Name	L2	L3	L4
1			
Manresa			
Manresa MRF		1	
Masambong			
Masambong MRF		1	
N. S. Amoranto (Gintong Silahis)			
N.S. Amoranto MRF	1		
Paltok			
Nayong Kaunlaran MRF	1		
Sta. Cruz			
Sta. Cruz MRF	1		
Talayan			
Talayan MRF		1	
Vasra			
Vasra MRF		1	
3			
Bagumbayan			
Bagumbayan MRF	1		
Bagumbuhay			
Mangga MRF	1		
E. Rodriguez			
E. Rodriguez MRF			1
Pinagkaisahan MRF		1	
Loyola Heights			
Loyola Heights MRF	1		
Milagrosa			
Villa Maria Clara MRF		1	
Silangan			
Silangan MRF		1	
4			
Doña Imelda			
Dona Imelda MRF			1
Kristong Hari			
Kristong Hari MRF		1	

Table A.11 A count of Materials Recovery Facilities in highly flood prone areas. Flood level 2 (0.5m-1.5m); 3(1.5-3m), $4(more\ than\ 3m)$

Material Recovery Facility Location	Flood Leve		vel
District-Barangay-MRF Name	L2	L3	L4
Pinagkaisahan			
Kamuning MRF			1
5			
Fairview			
Fairview MRF	1		
Nagkaisang Nayon			
San Agustin MRF	1		
6			
Apolonio Samson			
Sto. Domingo MRF		1	
Baesa			
Baesa MRF			1
Culiat			
Culiat MRF	1		
Grand Total	9	9	4

Table A.12 A count of Schools in highly flood prone areas. Flood level 2 (0.5m-1.5m); 3(1.5-3m),4(more than 3m)

School Location	Flo	od Le	vel
District-Barangay-School Name	L2	L3	L4
1			
Bahay Toro			
Agnus Dei college		1	
C.R.I.B. Ideal School	1		
Colegio De San Lorenzo		1	
Elyseum Christian School		1	
John Dewey School for Children, Inc.		1	
Living Hope Academy of QC (Formerly Golden Sun Acad)	1		
NIño Learning Center Inc.			1
Rogerian Children's Lrng., Cntr.	1		
St. Anne De Beaupre School		1	
Balingasa			
Balingasa Elem. School	1		
Del Monte			
Dalupan Elem. School	1		
Katipunan			
San Antonio Elem. School			1
Masambong			
Masambong Elem. School			1
Masambong High School			1
Perpetual Help Learning Academy of Q.C (Formerly Perp)		1	
Sergio Osmeña, Sr. High School			1
N. S. Amoranto (Gintong Silahis)			
E. Rodriguez, Jr. High School	1		
Project 6			
Ernesto Rondon High School	1		
Sienna			
CBC-Child Learning Center	1		

Table A.12 A count of Schools in highly flood prone areas. Flood level 2 (0.5m-1.5m); $3(1.5-3m),4(more\ than\ 3m)$

3(1.5-3m),4(more than 3m) School Location	Flo	od Lev	/ol
District-Barangay-School Name	L2	L3	L4
Sta. Cruz	LZ	LO	L-4
Philippine Maritime Institute			1
Sto. Domingo (Matalahib)			- 1
Angelicum College	1		
Mont. Michel - (Formly Ecole De Mont. Michel)	1		1
			1
Talayan Dhila dalahi a Cabasal			4
Philadelphia School			1
Vasra		4	
Mines Elem. School		1	
Veterans Village	_		
Esteban Abada Elem. School	1		
West Triangle			
Miriam Academy for Computer Sciences	1		
Philippine Womens University-(Formly JASMS)	1		
Tanglaw University Center	1		
2			
Bagong Silangan			
Bagong Silangan Elem. School	1		
Bagong Silangan High School	1		
Our Lady of Mercy School of QC.	1		
Victoria Preparatory School, Inc.		1	
Holy Spirit			
Holy Spirit National High School (Commonwealth High School - Holy	1		
Spirit Annex)			
The Children's Ark Preparatory School, Inc.	1		
3			
Bagumbayan			
Bagumbayan Elem. School	1		
Bannister Academy Corp.	1		
International Center for I.T. Education	1		
Bagumbuhay			
World Citi Medical College	1		
Blue Ridge A			
Blue Ridge Christian Academy	1		
Duyan-duyan	<u> </u>		
St. Bridget School	1		
E. Rodriguez	'		
Carlos P. Garcia High School		1	
Eulogio Rodriguez, Sr. Elem. School		1	
Loyola Heights		1	
Mater Christi Child Dev. Ctr.	1		
	1		
Santa Rafaela Maria School Q.C., Inc. (Formerly Sacred Heart	1		
Kindergarten Sch.)			
Milagrosa Divisity Malayu Flore School			
Pura V. Kalaw Elem. School	1		
San Roque			
Juan Sumulong High School	1		
4			
Bagong Lipunan ng Crame			
Ponciano A. Bernardo High School		1	
Damayang Lagi			
Most Holy Rosary of Pompie Pre-School		1	

Table A.12 A count of Schools in highly flood prone areas. Flood level 2 (0.5m-1.5m); $3(1.5-3m),4(more\ than\ 3m)$

School Location	3(1.5-3m),4(more than 3m) School Location	Flo	ad La	vol.
Progressive Little Saints Lrng Ctr. Inc 1 1 1 1 1 1 1 1 1		_		
Don Manuel Quezon City S.D.A. Elementary School 1		L2		L4
Quezon City S.D.A. Elementary School 1 St. Anselm Preschool 1 Doña Imelda 1 Betty Go Belmonte Elem. School 1 Central Colleges of the Philippines 1 Central Colleges of the Philippines (High School ANNEX) 1 Immaculate Heart of Mary College 1 University of the East Ramon Magsaysay (UERM) 1 Kalusugan 1 Delos Santos Medical Colleges 1 St. Joseph College of QC 1 Kamuning 1 Marcelo H. del Pilar Elem. School 1 Tomas Morato Elem. School 1 Santol 1 Carlos Albert High School 1 Tatalon 1 King Solomon Christian School International 1 Marist School of Quezon City, Inc. 1 Norwich Brent Cedric School, Inc. 1 Inversity of the Philippines 1 U.P. Campus 1 University of the Philippines 1 U.P. Village 1 Holy Family School			- 1	
St. Anselm Preschool 1 Dofa Imelda 1 Betty Go Belmonte Elem. School 1 Central Colleges of the Philippines 1 Central Colleges of the Philippines (High School ANNEX) 1 Immaculate Heart of Mary College 1 University of the East Ramon Magsaysay (UERM) 1 Kalusugan 1 Delos Santos Medical Colleges 1 St. Joseph College of QC 1 Kamuning 1 Marcelo H. del Pilar Elem. School 1 Tomas Morato Elem. School 1 Santol 1 Carlos Albert High School 1 Tatalon 1 King Solomon Christian School International 1 Marist School of Quezon City, Inc. 1 Norwich Brent Cedric School, Inc. 1 The Great Lighthouse Found., Inc. (Formerly. Lighthouse Academy) 1 U.P. Vallage 1 Holy Child Academy- Kingspoint 1 Dagbag 1 Holy Child Academy- Kingspoint 1 Capri 1		1		
Dofia Imelda Betty 60 Betmonte Elem. School 1				
Betty Go Belmonte Elem. School 1 1 1 1 1 1 1 1 1		1		
Central Colleges of the Philippines (High School ANNEX)				
Central Colleges of the Philippines (High School ANNEX) 1 Immaculate Heart of Mary College 1 University of the East Ramon Magsaysay (UERM) 1 Kalusugan 1 Delos Santos Medical Colleges 1 St. Joseph College of QC 1 Kamuning 1 Marcelo H. del Pilar Elem. School 1 Tomas Morato Elem. School 1 Santol 1 Carlos Albert High School 1 Tatalon 1 King Solomon Christian School International 1 Marist School of Quezon City, Inc. 1 Norwich Brent Cedric School, Inc. 1 The Great Lighthouse Found., Inc. (Formerly. Lighthouse Academy) 1 U. P. Campus 1 U. P. Campus 1 U. P. Village 1 Holy Family School 1 5 1 Bagbag 1 Holy Child Academy- Kingspoint 1 Capri 1 Nagkaisang Nayon Elem. School 1 North Fairview Elem. Scho		_		
Immaculate Heart of Mary College	<u> </u>			1
University of the East Ramon Magsaysay (UERM)				
Kalusugan 1 Delos Santos Medical Colleges 1 St. Joseph College of QC 1 Kamuning 1 Marcelo H. del Pitar Elem. School 1 Tomas Morato Elem. School 1 Santol 1 Carlos Albert High School 1 Tatalon 1 King Solomon Christian School International 1 Marist School of Quezon City, Inc. 1 Norwich Brent Cedric School, Inc. 1 Norwich Brent Cedric School, Inc. 1 The Great Lighthouse Found., Inc. (Formerly. Lighthouse Academy) 1 U.P. Campus 1 University of the Philippines 1 U.P. Village 1 Holy Family School 1 5 8 Bagbag 1 Holy Child Academy- Kingspoint 1 Capri 1 Nagkaisang Nayon Elem. School 1 Fairview 1 Fairview Elem. School - West Fairview Annex 1 Morth Fairview Elem. School 1 </td <td></td> <td></td> <td></td> <td></td>				
Delos Santos Medical Colleges 1 1		1		
St. Joseph College of QC I				
Kamuning 1 Marcelo H. del Pitar Elem. School 1 Santol 1 Carlos Albert High School 1 Tatalon 1 King Solomon Christian School International 1 Marist School of Quezon City, Inc. 1 Norwich Brent Cedric School, Inc. 1 The Great Lighthouse Found., Inc. (Formerly. Lighthouse Academy) 1 U.P. Campus 1 University of the Philippines 1 U.P. Village 1 Holy Family School 1 Bagbag 1 Holy Child Academy- Kingspoint 1 Capri 1 Nagkaisang Nayon Elem. School 1 Rairview Elem. School - West Fairview Annex 1 Fairview Elem. School - West Fairview Annex 1 Mother of Perpetual Help School 1 North Fairview Elem. School 1 North Fairview High School 1 Sistrs. of Mt. Carmel Catholic Sch (Formerly Flos Carmel K) 1 West Fairview Integrated High School 1 Uagor High School	-			1
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Tomas Morato Elem. School	Kamuning			
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Kaligayahan			1	
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Metro Manila College, Inc. Nagkaisang Nayon St. Mariam Thresia School, Inc. North Fairview	Kaligayahan			
Nagkaisang Nayon1St. Mariam Thresia School, Inc.1North Fairview	Little Merry Hearts Mont. Ctr.	1		
St. Mariam Thresia School, Inc. 1 North Fairview	Metro Manila College, Inc.	1		
North Fairview				
	St. Mariam Thresia School, Inc.	1		
First Mile Christian School (Frmrly FMChild Dev. Ctr.)	North Fairview			
· · · · · · · · · · · · · · · · · · ·	First Mile Christian School (Frmrly FMChild Dev. Ctr.)	1		

Table A.12 A count of Schools in highly flood prone areas. Flood level 2 (0.5m-1.5m); 3(1.5-3m),4(more than 3m)

School Location	Flo	od Le	vel
District-Barangay-School Name	L2	L3	L4
The Rock Learning School of QC., Inc.			1
Novaliches Proper			<u> </u>
Doña Rosario Elem. School	1		
Novaliches High School - Doña Rosario Annex	1		
Our Lord's Grace Christn Acad.(Formerly P. Samonte Mem. Sch, Inc.)	1		
Sto. Niño de Nova. School	1		
Pasong Putik Proper	-		
Maligaya High School	1		
San Agustin	<u>'</u>		
St. Peregrine Kiddie School of Novaliches		1	
San Bartolome		-	
		-1	
Goodwill Academy, Inc.	4	1	
Jerusalem Christian Academy	1		
Little Anak Learning School, Inc	1		
Odelco Elem. School			1
San Bartolome Elem. School	1		
Sta. Lucia		_	
Gymnazo Christian Academy		1	
Sta. Monica			
Golden Values School, Inc	1		
6			
Apolonio Samson			
Bresee Nazarene School, Inc.	1		
Grace Christian College	1		
Baesa			
Czecet Christian School, Inc.		1	
St. Agustine International School (formerly AMA Computer College)	1		
Culiat			
Shining Hope Academy	1		
New Era			
New Era Elem. School	1		
Pasong Tamo			
Coronado's School of QC	1		
San Isidro Labrador Catholic Sch of QC, Inc.		1	
St. Nicholas Academy of QC	1		
Torch to the Nations Int'l School, Inc		1	
Sangandaan			
First Line Integrated School, Inc.	İ	1	
J- Priam School			1
Sauyo			
Bagbag Elem. School	1		
Talipapa			
Richland Montessori School	1		
Tandang Sora	<u> </u>		
Divine Grace Child Dev. Center, Inc.		1	
St. Martin Bright Kids School, Inc.	1		
St. Patrick School	1		
Total	65	34	16
Total	00	J-+	10

District-Barangay-Market	No. of Location	Count of stalls	No of Floor	Flood Level
Location				
1				
N. S. Amoranto (Gintong				
Silahis)				
San Jose Public Market	1	23	1	2
3				
E. Rodriguez				
E-Mart Talipapa	1	0	3	2
Nepa Q-Mart (Mega Q	1	0	3	3
Mart)				
4				
Central (East Triangle)				
Kalayaan Plaza	1	0	1	2
Damayang Lagi				
Tarnate Talipapa	1	0		4
Kamuning				
Kamuning Public Market	1	461	1	3
San Martin de Porres				
Kabuhayan Center Market	1	0	3	3
Tatalon				
Tamasdeco Market	1	0	1	3
5				
Novaliches Proper				
Nova Plaza Market	1	0	6	2
Novaliches Market	1	0	2	2
6				
Apolonio Samson				
Riverview I Market	1	0	2	2
Riverview II Market	1	0	2	2
Sangandaan				
Super Palengke	1	0	1	2
Total	13	484		

Table A.14 A count of Day Care centers in highly flood prone areas. Flood level 2 (0.5m-1.5m); 3(1.5-3m),4(more than 3m)

Day Care Location	Flood Leve		vel
District-Barangay-Day care Name	L2	L3	L4
1			
Balingasa			
Daycare Center		1	
Damayan			
Bukal Na Pagasa Daycare Center			1
Del Monte			
Daycare Center			1
Katipunan			
Daycare Center			1
Manresa			
Daycare Center		1	
Mariblo			
Daycare Center			1
Masambong			
Daycare Center			1

Table A.14 A count of Day Care centers in highly flood prone areas. Flood level 2 (0.5m-1.5m); 3(1.5-3m), $4(more\ than\ 3m)$

Day Care Location	Flo	od Le	vel
District-Barangay-Day care Name	L2	L3	L4
N. S. Amoranto (Gintong Silahis)			
Daycare Center	1		
Nayong Kanluran			
Daycare Center	1		
Paltok			
Daycare Center	1	1	
San Antonio		-	
Daycare Center		1	1
San Jose		•	
Barangay 128 Daycare Center	1		
Sta. Cruz	<u>'</u>		
Daycare Center			1
Sta. Teresita			'
	1		
Daycare Center	1		
Sto. Cristo			4
Daycare Center	1		1
Talayan			
Calamba Yakap Daycare Center		1	
Daycare Center			2
Vasra			
Daycare Center		1	
Vasra Daycare and Livelihood Center		1	
2			
Bagong Silangan			
Bakayas Yakap Daycare Center		1	
Bonifacio Daycare Center			1
Daycare Center	2		
Pinasama Daycare Center		1	
Payatas			
Daycare Center			1
3			
Amihan			
Daycare Center	1		
Bagumbayan	<u>'</u>		
Daycare Center	1		1
Bagumbuhay	<u>'</u>		
Daycare Center			1
Claro (Quirino 3-B)			'
Daycare Center		1	
East Kamias		'	
	1	1	
East Kamias Daycare Center	1	1	
Loyola Heights	1		
Daycare Center	1	1	
Mangga	1		
Brgy. Mangga Daycare Center	1	1	
Matandang Balara	1		
Daycare Center	1	1	1
Samadores Daycare Center	1	1	1
Samadores Daycare Center Quirino 2-A	1	-	1
Samadores Daycare Center	1	-	1

Table A.14 A count of Day Care centers in highly flood prone areas. Flood level 2 (0.5m-1.5m); 3(1.5-3m), $4(more\ than\ 3m)$

District-Barangay-Day care Name	Day Care Location	Flo	od Le	vel
Daycare Center				
Daycare Center			1	
Sitangan 1 Daycare Center 1 Tagumpay 1 Villa Maria Clara				
Sitangan 1 Daycare Center 1 Tagumpay 1 Villa Maria Clara	Daycare Center		1	
Daycare Center				
Tagumpay		1		
Daycare Center 1 1				
Villa Maria Clara Daycare Center 1 West Kamias 1 Daycare Center 1 4			1	
Vitla Maria Clara Daycare Center 1 West Kamias 1 Daycare Center 1 4 1 Bagong Lipunan ng Crame 1 Dora Imelda 1 Daycare Center 1 Don Janela 1 Don Manuel 1 Don Manuel 1 Don Manuel 1 Doycare Center 1 Obrero 1 Daycare Center 1 Daycare Center 1 San Vicente 1 Daycare Center 1 Santol 1 Daycare Center 1 Tatalon 1 Daycare Center 1 Tatalon 2 Daycare Center 1 Tatalon 1 Daycare Center 2 Tail Vill Daycare Center 2 Capri 1 Daycare Center 1 Unit VII Daycare Center 1 Toycare Center <td< td=""><td></td><td></td><td></td><td></td></td<>				
West Kamias 1 Daycare Center 1 4 4 Bagong Lipunan ng Crame 1 Daycare Center 1 1 Doña Imelda 1 1 Daycare Center 1 1 Doña Josefa 1 1 Daycare Center 1 1 Obrero 1 1 Daycare Center 1 1 Obrero 1 1 Daycare Center 1 1 Daycare Center 1 1 San Vicente 2 1 Daycare Center 1 1 Tatalon 1 1 Daycare Center 1 1 Tatalon 1 2 Daycare Center 2 5 Capri 1 2 Daycare Center 1 1 Unit VII Daycare Center 1 1 Guidod Daycare Center 1 1 Gu		1		
Daycare Center				
Bagong Lipunan ng Crame			1	
Bagong Lipunan ng Crame 1 2				
Daycare Center				
Doña Imelda			1	1
Daycare Center			<u> </u>	_ '
Doña Josefa 1 Daycare Center 1 Don Manuel 1 Daycare Center 1 Obrero 1 Daycare Center 1 Daycare Center 1 San Vicente 1 Daycare Center 1 Santol 1 Daycare Center 1 Tatalon 1 Daycare Center 1 5 2 Capri 1 Daycare Center 2 Fairview 2 Daycare Center 1 Unit VII Daycare Center 1 Greater Lagro 2 Daycare Center 1 Gulod 2 Daycare Center 1 Villareal Daycare Center 1 Villareal Daycare Center 1 Villareal Daycare Center 1 Nagkaisang Nayon 1 Daycare Center 1 North Fairview 1 Daycare Center			1	1
Daycare Center		-		'
Don Manuel 1 Daycare Center 1 Obrero 1 Daycare Center 1 Old Capitol Site 1 Daycare Center 1 San Vicente 2 Daycare Center 1 Santol 1 Daycare Center 1 Tatalon 1 Daycare Center 1 Daycare Center 2 Fairview 2 Daycare Center 1 Unit VII Daycare Center 1 Gulod 1 Daycare Center 1 Gulod Daycare Center 1 Uillareal Daycare Center 1 Villareal Daycare Center 1 Kaligayahan 2 Daycare Center 1 North Fairview 1 Daycare Center 1 North Fairview 1 Daycare Center 1 North Fairview 1 Daycare Center 1 Nort		1		
Daycare Center		-		
Obrero Daycare Center 1 Old Capitol Site 1 Daycare Center 1 San Vicente 1 Daycare Center 1 Santol 1 Daycare Center 1 Tatalon 1 Daycare Center 1 5 5 Capri 1 Daycare Center 2 Fairview 1 Daycare Center 1 Greater Lagro 1 Daycare Center 1 Gutod 1 Daycare Center 2 Gutod Daycare center 1 Villareal Daycare Center 1 Kaligayahan 2 Daycare Center 2 Nagkaisang Nayon 2 Daycare Center 1 North Fairview 1 Daycare Center 1 North Fairview 1 Daycare Center 1 North Fairview 1 Daycare		1		
Daycare Center 1 Old Capitol Site 1 Daycare Center 1 San Vicente 1 Daycare Center 1 Santol 1 Daycare Center 1 Tatalon 1 Daycare Center 1 5 5 Capri 2 Daycare Center 2 Fairview 2 Daycare Center 1 Unit VII Daycare Center 1 Greater Lagro 2 Daycare Center 1 Gulod 2 Daycare Center 1 Gulod Daycare center 1 Villareal Daycare Center 1 Kaligayahan 2 Daycare Center 2 Nagkaisang Nayon 1 Daycare Center 1 North Fairview 1 Daycare Center 1 North Fairview 1 Daycare Center 1 North Fairview		'		
Old Capitol Site 1 Daycare Center 1 San Vicente 1 Daycare Center 1 Santol 1 Daycare Center 1 Tatalon 1 Daycare Center 1 5 5 Capri 2 Daycare Center 2 Fairview 2 Daycare Center 1 Unit VII Daycare Center 1 Greater Lagro 2 Daycare Center 1 Gulod 2 Daycare Center 1 Villareal Daycare center 1 Villareal Daycare Center 1 Kaligayahan 2 Daycare Center 2 Nagkaisang Nayon 2 Daycare Center 1 North Fairview 1 Daycare Center 1 Novaliches Proper 1 Doña Rosario Daycare Center 1				1
Daycare Center 1 San Vicente 1 Daycare Center 1 Santol 1 Daycare Center 1 Daycare Center 1 Sector 1 Capri 2 Daycare Center 2 Fairview 2 Daycare Center 1 Greater Lagro 1 Daycare Center 1 Gulod 2 Daycare Center 2 Gulod Daycare center 1 Villareal Daycare Center 1 Kaligayahan 2 Daycare Center 2 Nagkaisang Nayon 2 Daycare Center 1 North Fairview 1 Daycare Center 1 Novaliches Proper 1 Doña Rosario Daycare Center 1				ı
San Vicente 1 Daycare Center 1 Santol 1 Daycare Center 1 Tatalon 1 Daycare Center 1 Daycare Center 2 Fairview 1 Daycare Center 1 Unit VII Daycare Center 1 Greater Lagro 2 Daycare Center 1 Gulod 2 Daycare Center 1 Gulod Daycare center 1 Villareal Daycare Center 1 Kaligayahan 2 Daycare Center 1 Kaligayahan 2 Daycare Center 1 Nagkaisang Nayon 2 Daycare Center 1 North Fairview 1 Daycare Center 1 Novaliches Proper 1 Doña Rosario Daycare Center 1	·	1		
Daycare Center 1 Santol 1 Daycare Center 1 Tatalon 1 Daycare Center 1 Capri 2 Daycare Center 2 Fairview 1 Daycare Center 1 Unit VII Daycare Center 1 Greater Lagro 2 Daycare Center 1 Gulod 2 Daycare Center 1 Villareal Daycare center 1 Villareal Daycare Center 1 Kaligayahan 2 Daycare Center 2 Nagkaisang Nayon 2 Daycare Center 1 North Fairview 1 Daycare Center 1 Novaliches Proper 1 Doña Rosario Daycare Center 1		-		
Santol 1 Daycare Center 1 Tatalon 1 Daycare Center 1 5 5 Capri 1 Daycare Center 2 Fairview 1 Daycare Center 1 Unit VII Daycare Center 1 Greater Lagro 2 Daycare Center 1 Gulod 2 Daycare Center 2 Gulod Daycare center 1 Villareal Daycare Center 1 Kaligayahan 2 Daycare Center 2 Nagkaisang Nayon 2 Daycare Center 1 North Fairview 1 Daycare Center 1 Novaliches Proper 1 Doña Rosario Daycare Center 1		1		
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Tatalon 1 2 Daycare Center 2			- 1	
Daycare Center 1 2 Capri 2 Fairview Daycare Center 1 1 Unit VII Daycare Center 1 1 Greater Lagro 2 2 Daycare Center 1 6 Gulod 2 2 Daycare Center 1 1 Villareal Daycare center 1 1 Villareal Daycare Center 1 1 Kaligayahan 2 2 Daycare Center 2 1 Nagkaisang Nayon 2 1 Daycare Center 1 1 North Fairview 2 1 Daycare Center 1 1 Novaliches Proper 0 0 Doña Rosario Daycare Center 1 1			1	
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Capri 2 Daycare Center 2 Eairview 1 Daycare Center 1 Unit VII Daycare Center 1 Greater Lagro 1 Daycare Center 1 Gulod 2 Daycare Center 2 Gulod Daycare center 1 Villareal Daycare Center 1 Kaligayahan 2 Daycare Center 2 Nagkaisang Nayon 2 Daycare Center 1 North Fairview 1 Daycare Center 1 Novaliches Proper 1 Doña Rosario Daycare Center 1	,		1	2
Daycare Center 2 Fairview 1 1 Daycare Center 1 1 Unit VII Daycare Center 1 6 Daycare Center 1 6 Daycare Center 2 2 Gulod Daycare center 1 1 Villareal Daycare Center 1 1 Kaligayahan 2 2 Nagkaisang Nayon 2 2 Nagkaisang Nayon 1 1 North Fairview 1 1 Daycare Center 1 1 Novaliches Proper 1 1 Doña Rosario Daycare Center 1 1				
Fairview 1 1 Daycare Center 1 1 Unit VII Daycare Center 1 1 Greater Lagro 2 2 Daycare Center 1 6 Gulod 2 2 Gulod Daycare Center 1 1 Villareal Daycare Center 1 1 Kaligayahan 2 2 Nagkaisang Nayon 2 2 Nagkaisang Nayon 1 1 North Fairview 2 1 Daycare Center 1 1 Novaliches Proper 1 1 Doña Rosario Daycare Center 1 1	•	_		
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Unit VII Daycare Center 1 Greater Lagro 1 Daycare Center 1 Gulod 2 Daycare Center 2 Gulod Daycare center 1 Villareal Daycare Center 1 Kaligayahan 2 Daycare Center 2 Nagkaisang Nayon 2 Daycare Center 1 North Fairview 1 Daycare Center 1 Novaliches Proper 1 Doña Rosario Daycare Center 1				
Greater Lagro1Daycare Center1Gulod2Daycare Center2Gulod Daycare center1Villareal Daycare Center1Kaligayahan2Daycare Center2Nagkaisang Nayon1Daycare Center1North Fairview1Daycare Center1Novaliches Proper1Doña Rosario Daycare Center1	•		1	1
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Daycare Center 2 2 Gulod Daycare center 1 1 Villareal Daycare Center 1 1 Kaligayahan 2 1 Daycare Center 2 1 Nagkaisang Nayon 1 1 North Fairview 1 1 Daycare Center 1 1 Novaliches Proper 1 1 Doña Rosario Daycare Center 1 1		1		
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Kaligayahan 2 Daycare Center 2 Nagkaisang Nayon 1 Daycare Center 1 North Fairview 2 Daycare Center 1 Novaliches Proper 1 Doña Rosario Daycare Center 1			1	
Daycare Center 2 Nagkaisang Nayon 1 Daycare Center 1 North Fairview 1 Daycare Center 1 Novaliches Proper 1 Doña Rosario Daycare Center 1			1	
Nagkaisang Nayon 1 Daycare Center 1 North Fairview 1 Daycare Center 1 Novaliches Proper 1 Doña Rosario Daycare Center 1				
Daycare Center1North Fairview1Daycare Center1Novaliches Proper1Doña Rosario Daycare Center1		2		
North Fairview Daycare Center Novaliches Proper Doña Rosario Daycare Center 1				
Daycare Center 1 Novaliches Proper Doña Rosario Daycare Center 1		1		
Novaliches Proper Doña Rosario Daycare Center 1				
Doña Rosario Daycare Center 1				1
San Agustin	Doña Rosario Daycare Center	1		
	San Agustin			

Table A.14 A count of Day Care centers in highly flood prone areas. Flood level 2 (0.5m-1.5m); 3(1.5-3m),4(more than 3m)

Day Care Location	Flood Level		
District-Barangay-Day care Name	L2	L3	L4
Daycare Center		1	
San Bartolome			
Daycare Center	1		
Sta. Lucia			
Daycare Center			2
Sais Daycare Center	1		
6			
Apolonio Samson			
Daycare Center			1
Kaingin Bukid II Daycare Center			1
Baesa			
Daycare Center	1		1
Culiat			
Daycare Center	1		
Tandang Sora			
Daycare Center		1	
Yakap Daycare Center	1		
Total	29	31	29



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