Table of Contents

Table of Contents	i
List of Tables	iii
List of Maps	iii
List of Figures	iii
BRIEF PROFILE OF TAGAYTAY CITY	1
1. Historical Background	1
2. Physical Features and Environmental Condition	1
3. Demography	2
4. Social Sector	2
5. Economic	3
6. Infrastructure	4
EXECUTIVE SUMMARY	5
1. DEVELOPMENT FRAMEWORK	5
2. SPATIAL DEVELOPMENT STRATEGY	5
3. SECTORAL PLANS	6
4. DEVELOPMENT ADMINISTRATION	8
5. CAPITAL INVESTMENT PROGRAM	
CHAPTER 1	10
1. INTRODUCTION	10
2. THE EXTERNAL ENVIRONMENT	10
3. THE INTERNAL ENVIRONMENT	12
3.1 Development Trends and Emerging Issues	12
3.2 Development Constraints	16
3.3 Development Potentials	16
4. DEVELOPMENT DIRECTION	18
4.1 The Plan Vision and Mission	18
4.2 Major Sectoral Objectives	18
CHAPTER 2	21
1. INTRODUCTION	21
2. DEMAND AND SUPPLY ANALYSIS	21
2.1 Demand Supply Management Strategy	21
3. SPATIAL DEVELOPMENT STRATEGY	23

3.1 Guidelines	23
3.2 General Objectives	
3.3 Plan Features	23
4. LAND ALLOCATION	34
CHAPTER 3	35
1. INTRODUCTION	35
2. PHYSICAL INFRASTRUCTURE PLAN	35
3. SOCIO-ECONOMIC PLAN	
4. ENVIRONMENTAL MANAGEMENT PLAN	46
CHAPTER 4	
1. INTRODUCTION	51
2. LOCAL SPECIAL BODIES	54
3. POLICY RECOMMENDATIONS	
CHAPTER 5	58
1. INTRODUCTION	58
2. CITY EXPENDITURE GROWTH AND ALLOCATION PATTERNS	58

List of Tables

Table 1. Build-Up Density Area	
Table 2. Supply Areas for Development per barangay	22
Table 3. Radial Roads	
Table 4. Population Exposed to Landslide Hazards	29
Table 5. Building Footprints Exposed to Landslide Hazards	
Table 6. Road Lengths Exposed to Landslide Hazards	31
Table 7. Summary Decision Areas in Climate and Disaster Risk Assessment (CDRA)	33
Table 8. Comparison of Existing and Proposed Land Uses	34
Table 9. Domestic Water Demand Projection	
Table 10. Devolved Functions	53
Table 11. Office Organized under R.A. No. 7160	
Table 12. Coordinating Mechanisms	56
Table 13. Five Year Local Expenditures	58
Table 14. Revenue Shares, By Major Categories, Tagaytay City: 2020	59
Table 15. Non-Tax Revenue Projection	65

List of Maps

Map 1. Existing Land Use Map of Tagaytay City	66
Map 2. Road Circulation Network Map of Tagaytay City	
Map 3. Proposed Land Use Map of Tagaytay City	
Map 4. Map of Agricultural Areas Subjected to Reclassification	69
Map 5. Structure Plan Map of Tagaytay City	70

List of Figures

Figure 1. Organizational Chart of the City Government of Tagaytay	52
Figure 2. CIP Process as Part of The Development Planning-Investment Programming-	
Budgeting and Implementation Cycle	71
Figure 3. Conceptual Approach in Infrastructure and Transportation Planning	72
Figure 4. City Planning and Development System	73

BRIEF PROFILE OF TAGAYTAY CITY

1. Historical Background

The name Tagaytay comes from the words "TAGA" meaning to cut and "ITAY" meaning father. The son's exhortation and shouts became the subject of conversation among the countryside, leading to the city becoming known as the southern city of Tagaytay. During the Philippine Revolution of 1896, Tagaytay served as a refuge and hideaway for revolutionaries from nearby provinces. The city's central location, forests, and undulating topography provided a safe haven for revolutionary activities. The 11th Airborne Division of Lieutenants General William Krugers 8th Army airdropped military supplies and personnel on the Tagaytay ridge before the Liberation of Manila from the Japanese on February 3, 1945. Tagaytay became a chartered city on June 21, 1938, with past mayors including Arsenio Natividad, Mariano Bondoc, Melchor Benitez, Miguel Taña, Isaac Tolentino, Hilarion Maglabe, Benjamin Erni, Francis Tolentino, and Abraham N. Tolentino. Today, Tagaytay is a priority area for tourism development and a tourist center in the CALABARZON.

2. Physical Features and Environmental Condition

The City of Tagaytay lies within 120° 56' latitude and 14° 16' longitude and overlooks Manila Bay on the north, Taal Volcano and Taal Lake on the south and Laguna de Bay on the east. Tagaytay City has a total land area of 6,500 hectares or 65 square kilometers; politically subdivided into 34 barangays and composed of 213 zones/puroks.

It is approximately 56 kilometers South of Metro Manila. It is linked by the National Highway to the Metropolitan Manila Area and to the Provinces of Batangas and Laguna. It is also connected by roads to the adjoining Municipalities of Amadeo, Mendez, Indang, Silang and Alfonso in Cavite towards the Northwest, to the Cities of Calamba and Sta. Rosa in Laguna in the Northeast and to the Town of Talisay in Batangas on the South.

Tagaytay City has mixed topography, with hills and mountains in the southern and eastern regions, and ridge areas with slopes ranging from 10.1 to over 25%. The urban center and builtup areas are situated in level areas. The slope classification in EIDS is crucial for determining land suitability for urban development and cultivation.

Tagaytay City has two types of rocks: volcanic and clastic. Volcanic rocks consist of andesite and basalt lava flows, while clastic rocks consist of interbedded shale and sandstone. Volcanic rocks cover 1.97 percent of the city's land, while clastic rocks cover the rest.

Soil types and characteristics in Tagaytay City are classified into sandy loam and loam series. The central and western portions are covered by sandy loam, which is 12-50 centimeters deep, dark brown, and granular with volcanic sand. The subsoil is dark brown to very dark brown, with varying textures. The eastern portion is covered by loam, a 15-35-centimeter-thick layer with brown to dark brown soil. This soil is moderately friable and suitable for upland crops like rice, corn, sugarcane, coconuts, citrus, coffee, pineapple, avocado, and vegetables.

Tagaytay City has a cool, invigorating climate with an average temperature of 22.7°C. It is misty and cooler during December, January, and February. The city has two seasons: dry from November to April and wet from the rest of the year. The average relative humidity is 78%, making it cooler than the Metropolitan Manila area. The city experiences annual rainfall of 2,546mm, with the highest peak occurring in August and the lowest in February. The mean monthly temperature ranges from 23.3°C to 34.4°C, with April and May being the hottest months. Evaporation and evapotranspiration vary, with evaporation varying from 3.5mm to 11.3mm. High evapotranspiration can be stressful on plant growth, leading to drought in areas planted to crops during these months. City of Tagaytay faces ground shaking impacts of Intensity VII and above, affecting all barangays. High probability of property, infrastructure, agriculture, commercial interruption, and loss of life. Building structures according to National Building Code is crucial to avoid these impacts.

3. Demography

As per 2020 PSA report, the city's total population is 85,330 with a Population Growth Rate (PGR) of 3.57%. Its night time population is the same with its daytime population since the city does not have any university or industrial park that encourages a different situation. Since Tagaytay is a major tourist destination, population doubles on weekends and holidays due to influx of tourists and visitors. Household population of the City is 83, 779 in 2020.

4. Social Sector

The quality of life of residents is measured by their well-being and the level of social services provided. The city has established its own Primary Hospital (Ospital ng Tagaytay) in 1997 to provide basic health care services to underprivileged patients. To improve services, the city government constructed additional buildings and expanded the hospital. A 40-bed primary hospital is located along Crisanto de Los Reyes Avenue and consists of five major departments. A four-storey 49-bed hospital building is planned to be operational, eventually becoming a 1st Level Secondary Hospital. A tertiary hospital, the Tagaytay Medical Center, caters to local residents, adjoining towns, and tourists. The city has one City Health Center, 34 barangay health centers, two hospitals, nine dental clinics, nine medical clinics, and ten drugstores to meet the health and medical needs of the people.

Tagaytay City faces social problems such as unemployment, malnutrition, inadequate housing, and drug addiction. The City Social Welfare and Development Office (CSWDO) provides social welfare assistance, including family life education, counseling, day care services, supplemental feeding, and emergency shelter assistance. The CSWDO has a family clinic in every day care center. Government agencies, private organizations, and civic and religious organizations support the CSWDO. Programs include Self-Employment Assistance, Family and Community Welfare, Women's Welfare, Child and Youth Welfare, Emergency Assistance Program, Program for Disabled Persons and the Elderly, Lingap sa Barangay, and Day Care Services.

The city has expanded its school system to cater to the growing school-going population, with sixteen public elementary schools and 14 private elementary schools in various barangays. Four public high schools have been established, including Tagaytay City National High School, Tagaytay City Science National High School, Francisco Perez Tolentino National High School, and Tagaytay City Integrated School. Facilities have been improved, including multi-storey buildings, science laboratories, play grounds, libraries, and covered gymnasiums. Enrollees come from neighboring municipalities and nearby provinces. The city also has three colleges: City College of Tagaytay, Olivarez College, and STI College, and one graduate school, Divine Word Seminary.

The city government has established 26 official settlements to provide shelter and reduce squatting problems. The program has benefited at least 1,570 families, with 26 official settlements in various locations.

The Philippine National Police (PNP) and the Tagaytay Office of Public Safety (TOPS) are responsible for maintaining peace and order in the city. The PNP has four officers, 109 non-officers, and six 62 non-uniformed personnel, supported by 448 Barangay Police Security Officers (BPSO) and 47 Bantay Lungsod (BL) under TOPS. The city has seven Police Community Precincts (PCPs) strategically located in the city, equipped with mobile patrol cars and communication equipment. CCTV cameras are installed in road intersections to monitor traffic and potential

lawless activities. In 2021, there were 15 cases of crime incidents for adults and 12 for children. To improve public safety, the city aims to meet the standard police-to-population ratio of 1:500, requiring 361 more police. The Bureau of Fire Protection (BFP) is responsible for protecting residents from fires, with a total of 29 personnel. In 2021, three fire incidents were recorded, including residential, structural, and vehicular fires. The city has also created an Emergency Preparedness Learning Venue for Kids, focusing on teaching children about firefighter duties and emergency procedures. The Bureau of Jail Management and Penology is responsible for ensuring the safekeeping and development of inmates in district, city, and municipal jails. Its programs include inmate custody, security, welfare, decongestion, and good governance. Disaster preparedness is also a priority, as mandated by the Philippine Disaster Risk Reduction Management Act of 2010.

5. Economic

Agriculture has been the traditional economic base of Tagaytay City, and it will continue to be a significant sector in the city's economic development. The city's rugged topography, with only 2,304 hectares of land suitable for cultivation, has led to the shift of agricultural lands to high-income crops. The city's adaptability to various cultivations encourages the development of coffee farms, with a total number of households with vegetable gardens of 18,912. Agricultural production occupies 1,081.784 hectares, with coffee being the largest crop, followed by pineapple, banana, and upland vegetables. The City Agriculture Office provides technical assistance to farmers in these production areas, such as rain shelters and green houses.

In 2021, the city registered 315 constructions, including 227 residential, 81 commercial, five special, and two institutional constructions. Manila Electric Company (MERALCO) provides power supply, with 98.43% of households having access to electricity. The Tagaytay City Water District (TCWD) was established in 1975 and takes over the waterworks system from the City Government. It has 29 pumping facilities, 17 production wells, and 12 booster transfer stations in various areas. A Public-Private Partnership was formed between TCWD and Prime Water Infrastructure to improve service delivery. The contractual venture will be effective for 25 years, with TCWD in charge of overall operation and Prime Water infusing capitalization for infrastructure development, improvement, expansion, rehabilitation, and maintenance. The scheme aims to provide 24/7 water availability to every household in the city.

Tagaytay City has a diverse range of financial institutions, including 30 banks, 20 pawnshops/money shops, 11 cooperatives, and eight lending investors. The city also has a variety of wholesale and retail trade, including supermarkets, general merchandise, lumber and hardware, and various pharmacies/drugstores. The existing slaughterhouse is located at Barangay Kaybagal South, across from the Mahogany Public Market. The city has two public markets: the Tagaytay City Market, established in the early 1950s, and the Mahogany Market, established in 1994. The city's top industry is tourism, and traffic congestion is a significant issue on the Aguinaldo Highway and Sta. Rosa-Tagaytay Road. The National Economic and Development Authority (NEDA) Region IV-A has identified a critical level of road capacity in Tagaytay City, with moderate to heavy traffic expected during weekends and holiday seasons. To improve traffic safety and efficiency, the city government is implementing various management schemes, including more bypass roads and parking spaces for commercial establishments. Major modes of transport in Tagaytay include buses, jeeps, tricycles, and cars, providing mobility services within the city.

Tagaytay is a major tourist destination in the CALABARZON area, known for its natural beauty and good climate. It offers a variety of recreational and business facilities, including golf courses, sports facilities, picnic grounds, horseback riding areas, a mini-zoo, a casino, and a leisure park. The city also features numerous restaurants, some of which are located at the ridge area, offering a unique dining experience while viewing the world's smallest volcano, Taal Volcano. World-class accommodation facilities include the Development Academy of the Philippines and Picnic Grove, as well as conference rooms and dining rooms for 1,012 people and 1,960 people respectively. Other establishments include Anya Resort, Escala, The Lake Hotel, Days Hotel, Taal Vista Hotel, Discovery Suites, Hotel Dominique, Exclusive Estancia Resort Hotel, Residence Inn, The Boutique, The Windy Ridge Hotel, New Orleans Hotel, and Tagaytay Haven Hotel.

6. Infrastructure

The city is upgrading its physical infrastructure to cope with increasing development activities. A new arterial highway is being constructed, and land use policies must be applied to prevent urbanization. The by-pass road, which connects the Tagaytay-Batangas Arterial Highway and the Tagaytay-Manila via Silang Road, is being completed. The Spatial Development Strategy includes an arterial highway towards the east, connecting to the Tagaytay-Sta. Rosa Road and avoiding the passage through the Tagaytay-Sta. Rosa Road and Isaac Tolentino Avenue. The city's circulation system is categorized into national highways, arterial collector, and service road classifications, with arterial roads given top priority for development and maintenance.

The city faces major drainage outfalls due to rugged terrain, including intermittent creeks falling in Manila Bay, Taal Lake, and Laguna de Bay. The northern portion of Tagaytay-Nasugbu Road leads to Manila Bay, while the northern portion of Isaac Tolentino Avenue drains to Laguna de Bay. The southern portion of Tagaytay-Nasugbu Road and Isaac Tolentino Avenue drains to Tall Lake. Rainwater and storm drains are collected by existing road drainage and canals, with some naturally draining to low-lying open areas. Some city and barangay roads have drainage canals, but most have no proper drainage due to steep slopes on both sides of the road.

Currently, 98.43% of the total household have access to electricity (MERALCO).

Tagaytay City is strategically located at the boundaries of Cavite, Batnagas, and Laguna Provinces. It is accessible by land through eight national entrances and exits, and serves as a national thoroughfare connecting Laguna and Batangas. Other arterial roads also provide access to towns and cities in the region, including Mega Manila. Public transport in Tagaytay includes buses, jeeps, vans, and tricycles, providing mobility and transportation services to residents. The city has established a City Central Terminal, which offers amenities like refreshment parlors, sari-sari stores, and souvenir shops. The city has 16 National Government agencies, mostly located in Barangay Kaybagal South, including the Philippine Postal Corporation, Land Registration Authority, Philippine National Police, Bureau of Internal Revenue, and the Philippine Institute of Volcanology and Seismology.

The City of Tagaytay faces challenges in managing its solid waste, which generates an average of 30 tons of garbage daily and 27 tons of waste per day. The City Environment and Natural Resources Office (CENRO) oversees garbage collection, while private haulers handle disposal. The City Government has implemented measures to reduce the impact of improper solid waste disposal, including a massive campaign on waste reduction, re-use, and recycling. Households are instructed on proper waste management, and businesses are encouraged to segregate waste and minimize waste. Remaining waste is disposed of in a sanitary landfill outside the city. Barangays are encouraged to establish Material Recovery Facilities or Ecology Centers. Ordinances have been passed to achieve waste reduction and regulate the use of plastic bags and plastic residual waste. The city lacks a central sewerage system, requiring natural drainage and a multi-chamber septic vault for business establishments.

EXECUTIVE SUMMARY

1. DEVELOPMENT FRAMEWORK

Tagaytay has tremendously evolved and experienced a fundamental shift from agro-based to service-oriented community. Developments at the national and regional levels have caused an urbanization trend that is led by a host of real estate developers, not by residents of the City. The most dominant forms of development are exclusive weekend residential (subdivisions, condominiums), tourism-oriented industries (hotels, malls, restaurants, events place, room for rents, etc) and recreational facilities (amusement parks, golf course, etc).

Concerns have been raised on the economic and physical dislocation of the host population and the adverse impact on the environment, on the scarce water resources, the once rich agricultural sector, and on the burden placed upon the limited infrastructure systems of the City.

The City wants to slow-down growth to more manageable levels. Its primary strength lies on its pristine environment, which has to be safeguarded in order to achieve sustained growth. The City will capitalize on its environment to propel it to growth but adequate measures have to be instituted to prevent the decline of this valuable asset.

Thus, the community has adopted the vision of a **"Resort, Retirement Haven and Character City"** having a sustainable ecological-tourism base amply supported by physical and social infrastructure systems.

2. SPATIAL DEVELOPMENT STRATEGY

The Spatial Development Strategy attains the Resort, Retirement Haven and Character City vision by imbuing the City with a healthy mixture of the urban and rural environments. The Resort City part of the vision is attained through the provision of adequate area for tourism-related development within the Primary Urban Zone (PUZ) and Secondary Urban Zone (SUZ) surrounding the built-up areas. Development control mechanisms are also provided which shall ensure the attainment of this concept. The Retirement Haven City part, on the other hand, is attained by developing a dominant residential zone revolving around the current government center and by opening up lands at the north-eastern and western parts of the city. The desire to further enhance the City's position as a major player in the tourism circuit is also emphasized. This shall be done through the provision of adequate opportunities for tourism development where they are most feasible in the City.

The Strategy adopts a flexible approach towards land use planning and growth management. It is designed to arrest urban sprawl by instituting flexible zones of activity where complementary functions are allowed with an emphasis on performance criteria and standards. The urban area is consolidated resulting to the economical provision of community services.

The new urban form is a modified grid pattern with the built-up areas in several interior barangays of the city. A major feature of which is the on-going construction of two (2) major thoroughfares being supervised/implemented by the Department of Public Works and Highways (DPWH) under the Build-Build-Build Program of President Duterte's Administration - 1) located near the city boundary from Aguinaldo Highway traversing north-eastern boundary of the city

particularly Tagaytay-Amadeo Road (now Crisanto de los Reyes Avenue), Tagaytay-Mendez-Indang Road, Tagaytay-Asisan-Anuling Road- exiting Barangay Zambal leading to municipality of Alfonzo and Nasugbu, Batangas; 2) Tagaytay-Ulat-Santa Rosa via Kaykulot Road and Isaac Tolentino Road (formerly Tagaytay-Calamba Road) leading to Tagaytay-Casile Road in Calubang, Laguna in the northern part and Tagaytay-Highlands in the southern part of the city. This pattern seeks to direct urbanization pressures away from central business district of the city.

Currently, built-up areas are concentrated along the major thoroughfares (Tagaytay-Aguinaldo Highway, Tagaytay-Nasugbu, Tagaytay Calamba Road (now Isaac O. Tolentino Road) and Tagaytay-Sta. Rosa Road). Densities at these locations shall be kept at a manageable levels. A City Center is defined by the Primary Urban Zone which would host the highest level of City functions. Four (4) other Secondary Urban Zones are established at the major crossroads. A low-density Tourism Zone is also defined by the Tagaytay-Nasugbu-Isaac O. Tolentino Road and portion of the New By-Pass Road on the north-western part of the city. Agricultural Zone defined the City's northern periphery while woodlands characterize the southern side. Eco-tourism areas are located in the north-eastern sector.

The General Development Zone shall host the residential requirements of the City and absorb some of the demands of the outside market. This area is predominantly low to medium density and is punctuated by High Density Housing Zones which are strategically located at the eastern, central and western parts of the City. A Special Institutional Zone is defined at the northeast allowing for the setting-up of institutional activities under an agricultural setting.

3. SECTORAL PLANS

The Sectoral Plans provide the supportive requirements of the City's Vision, Major Objectives, and Spatial Development Strategy. Particular plans are drawn up for Physical Infrastructure, Socio-Economy, and Environmental Management.

3.1 Physical Infrastructure

The upgrading of the City's entire physical infrastructure system shall be undertaken in order to cope with the increasing development activities. The Physical Infrastructure Plan is closely tied-up to the City's Spatial Development Strategy. One of the highlights here is the construction of the two arterial highways previously mentioned. The highways' implementation has to be complemented by the judicious application of land use policies. Otherwise, the City may be engulfed by urbanization, as developable lands become accessible from North and South. Such also would be the case for other roads eyed for improvement.

Current water supply has been found sufficient to meet the plan's demand. Hence, measures to sustain, utilize and explore potential water resources and further expand the TCWD's supply capacity are highly recommended. Participation of the private sector in this endeavor is also encouraged. With the ongoing implementation of the Joint Venture between Tagaytay City Water District (TWCD) and Prime Water Infrastructure Corporation supply of water in the entire city will be improved and sustained.

In terms of solid waste management, strict compliance with the provisions of Republic Act No. 9003 also known as the "Ecological Solid Waste Management Act of 2000" have been observed and carried out. The level of compliance is measured through the following undertakings:

phasing -out the open-dumpsite located at Tagaytay-Talisay Zigzag Road; Establishment of Material Recovery Facilities (MRFs) in the barangay/community level ; Reactivation of functional City Solid Waste Management Board; formulation of Solid Waste Management Plan (2016-2025) in accordance with the existing environmental laws and guidelines of the Department of Environment and Natural Resources (DENR), National Solid Waste Management Commission (NSWMC) and concerned government agencies.

3.2 Socio-Economy

The three (3) main anchors of growth of the city are Tourism, Institutions, and Agriculture. These are in turn underpinned by the social setting: the people, their values and culture serve as the platform of development. In order to ensure sustainable growth, the city has to be viewed holistically and the components of development treated in an integrated manner.

Tourism development shall be of the high-intensity, high-value kind. There shall be a complementation of facilities offering a diverse and complete array of activities. Eco-tourism facilities such as People's Park in the Sky and Tagaytay Picnic Grove complemented by the famous Sky Ranch, a leisure park located in a 5-hectare project of SM Prime Holdings, Inc., neatly settled beside the famed Taal Vista Hotel, is set to be the one of the definitive Tagaytay experiences for families and group of friends.

For the past two decades, Socio-economic development of the city has greatly boomed specifically investments on real estate and tourism. Such development includes residential subdivisions, hotels, residential condominiums, malls, restaurants located within the tourism strip and primary urban core zones. Some tourism-related businesses/industries like Events Place, Health & Wellness facilities, have been allowed in Agricultural Zone provided that its operation would not adversely affect the existing condition of other land uses in the area; provided further that they are granted an exemption from the provisions of land use and zoning ordinance by the Local Zoning Board.

Investments such as urban-type development in the Primary Urban Zone and Secondary Urban Zone are highly encouraged to further boost the city's economy. Further, complementary facilities such as viewing decks, hotels, restaurants, etc. shall be the main feature along the Tourism Strip Zone. On the other hand, the production capacity of the City's agricultural areas shall be enhanced in order to maintain the healthy urban-rural setting.

The current development of the city is expected to generate revenue for the city government and at the same time create more job opportunities for local residents.

The bottom line is that economic progress shall ensure environmental enhancement and be directly beneficial to the host community.

3.3 Environment

It is the City's inherent environmental characteristics, which has fueled it to its present state of growth. Environmental management measures are provided for the City's Terrestrial, Natural Scenic Environment, Water Resource and Urban and Rural Environments. The protection and management of all these is the key towards sustaining the City's growth and development.

The City's environmentally-critical areas shall be protected and opportunities for the establishment of nature sanctuaries shall be explored. Further, the City's water resources have to be conserved and used properly to safeguard future generations. There shall also be a healthy interaction between the City's urban and rural areas in order to provide for equitable access to both built and natural environment.

4. DEVELOPMENT ADMINISTRATION

In order to properly administer the City's growth, the linkages between the following areas of concern have to be enhanced and strengthened:

A stronger linkage among the comprehensive development plan, the land use plan and investment programs must be institutionalized in order to maximize benefits to Tagaytay residents. On one hand, the comprehensive development plan must serve as the basis for the development of a land use plan. In turn, the land use plan provides the framework for the formulation of the zoning ordinance. The land use plan and the zoning ordinance would then be the main bases for the preparation of development regulations that would guide private sector investments and activities.

At the same time, the comprehensive development plan should likewise be the main source of project ideas and multi-year investment programs. In turn, the investment program becomes the basis for the preparation of an annual budget. Given a budget, projects could then be implemented and project outcomes would have a pump-priming effect on local investments. Plans and programs at the city level must be vertically linked to plans and programs at higher levels (provincial, regional and national).

It is further recommended that a City Land Use Committee (CLUC) be fully and immediately activated for Tagaytay. The CLUC shall periodically update the land use and zoning plans of the City, monitor their implementation, as well as ensure their consistency with sectoral land use plans and the provincial physical framework plan.

In line with this recommendation, the CPDO should serve as the secretariat of the CLUC and must consequently absorb the functions of zoning administration which is currently lodged with the Office of the Mayor.

5. CAPITAL INVESTMENT PROGRAM

5.1 The Draft Tagaytay City CIP

The Capital Investment Program (CIP) acts as the long-term *financial blueprint* for the realization of Tagaytay City's *developmental goals*, including its desired **spatial structure**.

A total of *Sixty three (63) projects*, which the city government plans to implement from 2020-2029 were identified. The projects are estimated to cost *P3,926 Billion* at 2019 Prices.

Bulk of the required capital investment funds consist of support projects for housing, land acquisition and development and the environment. Twenty (20) projects costing P1,209.7 Billion were identified for the sector.

The economic sector identified nine (9) priority projects costing P109.02 million. The infrastructure sector and physical development came up with sixteen (16) priority project and program needs costing P1.0468 Billion.

The projects will be implemented from 2020-2029 to boost the city's economy.

CHAPTER 1 DEVELOPMENT FRAMEWORK

1. INTRODUCTION

This chapter provides the framework for the City's development within the plan period. Initially, the City will be situated in terms of the larger national and regional environment. Current and foreseen developments at these levels that may have affected and are likely to further affect the City's growth shall be identified. Key concerns (both positive and negative) regarding the impact to the City's development will be assessed and matched with its carrying capacity. After this matching, a development direction shall be set in the form of a vision and general objectives.

Likewise, with the alarming trends and issues on climate change local government units ought to integrate and mainstream climate and disaster risks in the Comprehensive Land Use Plan (CLUP). Hence, in order to ensure a climate and risk-sensitive CLUP and Zoning Ordinance, both documents shall adopt a comprehensive approach in lessening impacts of disasters, including climate change on local development processes.

2. THE EXTERNAL ENVIRONMENT

2.1 Sustainable Development Goals

After the Millennium Development Goals (MDGs), the participating countries of the United Nations (UN) once again affirmed their commitment towards ending all forms of poverty, fighting inequalities, increasing country's productive capacity, increasing social inclusion, curbing climate change, and protecting the environment while ensuring that no one is left behind over the next fifteen years. A new global plan of action was adopted by the UN member states in September 2015 entitled "Transforming Our World: The 2030 Agenda for Sustainable Development." With the aim to stimulate people-centered and planet-sensitive change, Sustainable Development Goals (SDGs) otherwise known as Global Goals is composed of 17 goals and 169 targets and 247 global indicators which are integrated and indivisible, global in nature, universally applicable, taking into account different national realities, capacities and levels of development, and respecting national policies and priorities. The 17 goals are listed below.

- Goal 1: End poverty in all its forms everywhere
- Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture
- Goal 3: Ensure healthy lives and promote well-being for all at all ages
- Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
- Goal 5: Achieve gender equality and empower all women and girls
- Goal 6: Ensure availability and sustainable management of water and sanitation for all
- Goal 7: Ensure access to affordable, reliable, sustainable, and modern energy for all
- Goal 8: Promote sustained, inclusive, and sustainable economic growth, full and productive employment and decent work for all.
- Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
- Goal 10: Reduce inequality within and among countries
- Goal 11: Make cities and human settlements inclusive, safe, resilient, and sustainable
- Goal 12: Ensure sustainable consumption and production patterns
- Goal 13: Take urgent action to combat climate change and its impacts
- Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development.

Goal 15:	Protect, restore, and promote sustainable use of terrestrial ecosystems,
	sustainably manage forests, combat desertification, and halt and reverse land
	degradation and halt biodiversity loss
Goal 16:	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable, and inclusive institutions at all levels

Goal 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development

2.2 The National Perspective

On October 11, 2016, President Rodrigo R. Duterte signed Executive Order No. 5, s. 2016 approving and adopting the 25-year long-term vision entitled AmBisyon Natin 2040 as a guide for development planning. According to EO 5, the Philippine Development Plan 2017-2022 (PDP 2017-2022) and the succeeding PDPs until 2040 shall be anchored on AmBisyon Natin 2040. In its preamble, EO 5 recognizes the need for a "bold vision and effective development planning" based on a "forward-looking approach that goes beyond a single administration". It also emphasized the centrality of people in development planning and their aspirations as requisite for the design of government interventions to achieve development outcomes. AmBisyon Natin 2040 is the result of a long-term visioning process that began under the previous administration in 2015. More than 300 citizens participated in focus group discussions (FGDs) and close to 10,000 responded to the national survey designed to gather information about the kind of life Filipinos want for themselves and their children and what they hope the country would be like in 2040. Technical studies were commissioned to identify strategic options for realizing the vision articulated by citizens. The exercise benefitted from the guidance of an advisory committee composed of select representatives from government, academe, civil society, and the private sector. AmBisyon Natin 2040 represents the collective long-term vision and aspirations of the Filipino people for themselves and for the country in the next 25 years. It is a vision, not a plan. A vision presents a picture of the future, a set of personal life goals as well as ideals for the country; a plan, on the other hand, consists of a set of strategies to achieve the goals. Plans are contingent on various factors and circumstances, just as routes to a given destination can vary depending on weather or road conditions. A vision, like a goal or a destination, remains fixed, at least for the given time horizon. Ambisyon Natin 2040 provides the anchor for the country's development plans until 2040.

Tagaytay continues to maintain its role as one of the country's major tourist destinations. More large-scale projects are expected to take place in the next ten (10) years and beyond.

2.3 The Regional Perspective

The launching of AmBisyon Natin 2040 through a Regional Summit aimed to engage the support of the government, private, academe, civil organizations and youth to fulfill the vision and aspirations of the Filipinos. Multi-sectoral collaboration, stakeholder participation, and support from all levels of the society are deemed crucial in achieving the vision.

The City has reaffirmed its role as a major tourist destination in the region in particular and the country in general.

2.4 Provincial Perspective

To advance the program of government and steer the provincial government towards an attainable and workable economic direction a development blueprint known as the Cavite

Growth Triangle, La Llave de Manila, Cavite Nuevo, and Metro Tagaytay corridors are designated by the Province. The Cavite Growth Triangle growth identified cities and municipalities whose locations, economic/tourism potentials, and shared history are to be harnessed and developed. The importance of these areas is to sustain the province's overall development and to open up to future opportunities and advances.

According to the PDPFP (2021-2030) of Cavite Province, the City of Tagaytay is part of the Metro Tagaytay portion, together with the General Emilio Aguinaldo, Silang, Alfonso, Mendez, Amadeo, Indang, Ternate, and Maragondon. This portion is also placed as the Third Growth Center of the Cavite Growth Triangle, mainly dedicated to agri-ecotourism. The Metro Tagaytay is the Tourism Haven and Food Basket focused-areas of Cavite, which are the sites of the Province's scenic and tourism spots and also the top food producers. Additionally, these areas have abundant lands for agricultural purposes and settlement expansion and preservation of its environmental resources. Infrastructure support, specifically road development, is needed to make these areas more viable to tourism, commerce and social aspects. However, there is a need to invest in additional road infrastructures to make these areas tourism, commercial, and socially viable.

3. THE INTERNAL ENVIRONMENT

3.1 Development Trends and Emerging Issues

3.1.1 Over-All Assessment

The City is rapidly moving towards an urban status. This has led to the erosion of its traditional economic base, as seen in the shift of the population's activities from rural to urban. Agriculture is being relegated to the background as major policy directions at the national and regional levels cause an urbanization in the City. This shift has led to critical development issues that can be summed up in terms of the following:

- Local revenues have risen sharply during the shift; the residents were not fully prepared for the shift hence; local economic participation have been limited;
- Market forces, instead of planned activities, capitalizing on the environmental advantages of the City, have caused the shift to occur in a haphazard manner;
- The shift has been due to urbanities seeking alternative residences and activities in a suburban setting which Tagaytay so offers; in the process, the rural environment is being degraded;
- Lack of preparation to anticipate this shift has caused undue stress on the environment and the infrastructure support systems;
- The shift has caused land scarcity leading to low income of farmers and reduced agricultural productivity;
- The shift is towards a service-oriented economy, tourism and recreation being the anchors of the shift;
- The City has emerged as a weekend-hideaway with a low weekday population and a high weekend population;
- Urbanization is focused on the creation of high-cost enclaves that are prohibitive in cost and inaccessible to the local population;
- Agriculture is fast declining creating the scenario where the City will become an importer of primary agricultural products;
- The shift is expected to continue in a sustained pace.

3.1.2 Specific Trends and Issues

• In-migration Area and Rapid Population Growth

The City has a very strong population pull factor. The 1990 censal data places in-migration of 27.5% to come from the surrounding municipalities of Cavite, 23% from Batangas and Laguna and 4.5% from other regions of the country. The population is projected to increase to 104,641 in year 2028 from a 71,181 in 2015 with a growth rate higher than the regional average and the National Capital Region.

As in the previous demographic trend, barangays with higher population are those which host higher-level urban functions and are located at the major crossroads. The fast growing barangays are those that are directly along the main highway.

• Built-up Density Level

Capitalizing on the natural endowments, the city, for the last two decades, has become a sanctuary not only for the legitimate residents but also for local and foreign tourist and a promising home for retirees as well. This is manifested by the presence of various tourism businesses such as hotels, restaurants, malls; recreational facilities and sports facilities; banking and financial institutions; and several subdivisions, among others.

Based on the existing land use, the city has a total built-up area of 1,754.18 hectares distributed to actual/existing land uses as follows:

Table 1. Build-Up Density Area		
	Area	
Existing Land Use	(Hectare)	
Commercial	232.59	
Institutional	108.13	
Parks & Recreation	26.55	
Residential	1381.53	
Utilities	5.38	
Grand Total	1754.18	

Per 2020 PSA Report, Tagaytay City has a total population of 85,330 with a built-up density of 49 persons per hectare.

• Good Utilization of Land

Despite the fact that about 40% of the total land area of the city is unbuildable – specifically the vast areas on the southern part along the ridge area with slopes ranging from 19% and above classified as Ecological Development Zone (EDZ), the remaining 60% situated on the northern portion that fall under the zone of Primary Urban Zone (PUZ), Secondary Urban Zone (SUZ), Tourism Strip Zone, General Development Zone (GDZ) and Agricultural Development Zone (ADZ) are considered highly- buildable areas. These areas are utilized for: agriculture, commercial, residential, institutional uses, among others - data shows that the area coverage of these developments has substantially increased over the past two decades.

In order to cope with the city's development trends, several amendments of CLUP have been introduced.

• Proposed Area for Reclassification from Agricultural into Non-Agricultural Use.

Areas being reclassified in the plan are portions of Agricultural Zone, Ecological Tourism Zone, General Development Zone, and Special Institutional Zone.

Agricultural land area is being reduced from 1, 687.82hectares to 1, 308.1hectares in the plan. These areas are now within the Primary Urban Zone, Secondary Urban Zone, and Tourism Strip Zone. These proposed zones are land area which is highly suitable for urban use based on the soil suitability assessment of the city and low risk based on City Climate Change Disaster Risk Assessment (CDRA).

Other areas being reclassified in the plan are those previously zoned as Ecological Tourism Area, Greenbelt Zone, and Special Institutional Area to become the Primary Urban Zone as declared in the approved ordinance amending provisions of the City's Zoning Ordinance specifically Section 7(Zone /Area Boundaries) and pursuant to provisions under Section 11 thereof, i.e. Use Regulation in Primary Urban Zone.

The soon to be completed Tagaytay-Alfonso By-Pass Road of the Department of Public Works and Highways (DPWH) under the Build, Build, Build Infrastructure Program of the President Rodrigo R. Duterte (PPRD) administration, shall address traffic congestion along Aguinaldo Highway leading to Silang Crossing Rotunda and Tagaytay-Nasugbu Road going to Municipality of Alfonso and some towns of Batangas Province. This will also serve as alternate route for public and private vehicles going to municipalities of Amadeo, Mendez, Indang, Alfonso, General Aguinaldo, Magallanes, Naic, Maragondon and Ternate.

Moreover, it paves the way not only to decongest traffic but also to expand economic activities along the strip of said national road. Thus, portion of some agricultural areas covered by five (5) different barangays shall be reclassified into other higher land uses, namely: Primary Urban Zone, Tourism Strip Zone, and Secondary Urban Zone, respectively. Estimated Area covered for reclassification from agricultural to non-agricultural shall be approximately 156 hectares.

• Inadequate health facilities and services

At present, there are two hospital in the city – 1) Ospital ng Tagaytay – a government hospital run/managed by the City Government of Tagaytay and 2)Tagaytay Medical Center - a private tertiary hospital. However, health facilities are still inadequate in general and there is difficulty in providing services in some remote barangays. Health services cover only first aid, pre/post natal check-up, and family planning. The medical personnel-to-population ratio is still below the standard of the Department of Health. Another major concern is the difficulty of delivering services to some remote barangays due to the difficulty of roads and transport.

• Adequate public sports and recreational facilities

The city provides for its residents, visitors and tourists various facilities for both sports and recreational activities. Available sports facilities include: covered courts, basketball open courts, public parks (People's Park and Picnic Grove), theme park (Skyranch), mini zoos, museums, golf course, oval field, and sports centers.

• Good peace and order situation

Peace and order situation in Tagaytay City is generally peaceful; with adequate number of PNP personnel deployed in seven (7) different Police Community Precincts (PCPs) strategically

located within the city's territorial jurisdictions. Police force is supported by Barangay Public Safety Officers (BPSOs) of respective barangays. With the nationwide intensive campaign and all-out war of President Rodrigo Duterte administration against illegal drugs, Tagaytay City is among LGUs considered as "DRUG FREE" city. As a result, crime incidence has dramatically declined.

• Lowering of agricultural productivity resulting in food insufficiency

The traditional economic base of the City has been agriculture. Production though, has been on the decline due to rampant land conversion, and idling of lands due to absentee landowners.

There are no identified protected areas for agriculture nor are there any key production areas which may have contributed to rampant land conversion. Even the livestock and poultry populations are on the decline since production has been discouraged due to incompatibilities with the urbanizing character of new real estate developments. These have caused the City to be an importer of its basic food requirements such as rice and meat.

• Lack of an industrial base

The City has a very small industrial sector and firms are mainly agro-based. This sector is also being eroded due to the policy of discouraging livestock production. The increase in land prices is also causing the shift from agro-industry to more intensive activities such as tourism industry and residential subdivision development. Thus, dislocation of employment from agriculture is not being offset by agro-industrial opportunities.

• Entry of large scale commercial establishment operators

The erstwhile dominance of the small to medium type commercial sector in the City is being threatened by the entry of large-scale commercial operators, which have the capability of attracting markets at the regional, national and even international levels. They are large-scale retailing, tourism and high-end residential investments.

• Tourism considered as the major economic base

The emergence of the City as a major regional tourist attraction has already given rise to a number of tourist-oriented establishments. Its main market consists of domestic (individual and corporate) and Asian tourists.

It is expected that employment would shift from agriculture to service-oriented specifically to the tourism sector.

• Development oriented towards weekend-residential projects

The natural character of the City (climate, scenery, etc.) has caused a massive influx of residential subdivision developments offering weekend homes. They have considerably reduced the agricultural areas and have dislocated many indigenous City residents.

• Strains on the physical infrastructure system

The rapid urbanization of the City has strained the existing infrastructure system. Together with urbanization, Tagaytay City is now suffering from traffic congestion (specifically on weekends and holidays), indiscriminate waste disposal, and inadequate supply of potable water.

• Rapid urbanization straining the natural environment

Urban development has impinged, dangerously, on the steep slopes overlooking Taal Lake. The competition for prime land (along the ridge and with a lake view) has become worse. Strain is being experienced by the various environmental components of the area and, if unmitigated, adverse impacts may be felt by the City and the adjacent lowland areas. This may come in the form of erosion, landslides, flooding, siltation and greater production of effluents such as wastewater, which may pose hazards to the aquifers and the low-lying communities. Even developments on the northern sector can cause the occurrence of some of these hazards as the land generally slopes down to the low-lying towns.

• Limited current water supply capability

Alternative sources of water will have to be explored as it is expected that the rise in population and the magnitude of economic activities will greatly affect the current available supply.

Moreover, with the emerging global issue and current trends on climate change, and considering the high elevation of the city, inadequate supply of potable water is likely to happen in the future.

3.2 Development Constraints

3.2.1 Inadequate infrastructure

The inadequacy of the physical infrastructure, especially of the road network, water supply, and waste disposal systems is further limiting growth. At this stage, these inadequacies are already making themselves felt.

3.2.2 Limited expansion area

The City has large areas with steep slopes, especially at the southern sector, thereby limiting growth in that direction. Future growth will place heavy pressure on City lands that are buildable, i.e., the prime agricultural areas.

3.2.3 Environmental fragility

The City's environment is part of a very fragile upland ecosystem. Any growth and development activity in Tagaytay City will have to consider potential adverse impacts to the lowland areas because of the City's commanding elevation relative to its neighboring municipalities.

3.2.4 Adequate tourist attraction

The City has the best vantage point of Taal Lake and an excellent climate. Another key factor is the city's accessibility and proximity to Metro Manila and other neighboring towns and provinces in the region. These potentials have accelerated the tourism potentials.

3.3 Development Potentials

The City's growth potentials can be drawn from its strengths, as follows:

Good climate is attributed to the high altitudes of the area which equates less air pressure and consequently gives cooler temperatures. As a matter of fact, the lowest temperature recorded is 16 degrees Celsius which is usually encountered during November to February and the highest temperature revolves around 30-31 degree Celsius during summer season. No industrial establishments are present in the area; thus, no heavy air pollution is recorded. Vehicular pollutants are less because the air quality index is regularly monitored.

Endowed with captivating scenery. The panoramic view of the Taal Volcano and Taal Lake is one of the most iconic advantages of the City that boosts its tourism and commerce in a long while. The government also supplements it with maintaining proper waste management and practices

as well as building regulations along the ridges to maximize the scenery for tourists and the community.

Proximity to Metro Manila and other Growth Centers. Tagaytay is one of the nearest travel destinations that is accessible from Manila through the Cavite-Laguna Expressway (CALAX), Aguinaldo Highway and the Manila-Cavite Toll Expressway (CAVITEX) from Indang and Amadeo. Alternate routes are also available from nearby municipalities. Public utility vehicles such as buses and vans are easily accessible, passing every 15 minutes along the major roads and from the terminal. The proximity makes it also accessible to major social facilities such as hospitals, schools and protective services.

Low crime rate. Tagaytay is known as the "Character City of the South", which launched a unique program dedicated to character development practiced in schools, offices and various institutions. Aside from the programs and activities, a coalition for this endeavor is also established to strengthen the program which started in 2000. Index crimes rarely happen in a year and most of the non-index crimes constitute only minor offenses. The City is also declared as drug-free since 2019.

High literacy rate. The free education system from elementary to college is an advantage in the City, contributing to a relatively effective learning system for the people. In fact, the historical enrollment participation rate from 2018 showed a maintained growth with almost 98% until the school year 2021-2022. There is also an increase in historical enrollment from the last school year beginning 2018-2019. The City College of Tagaytay has a comprehensive program on Balik-Eskwla that encourages people who stopped their education due to various reasons, encompassing age, gender and social status. Various vocational programs (e.g., TESDA NC II, NC III) are also offered for free.

Regional tourist attraction. The City is one of the most visited areas in the South due to its closeness and accessibility of travel. Picnic Grove and People's Park are the two most swarmed areas for tourists that are government-owned while amusement parks, hotels, restaurants, resorts and museums are available in multitudes as privately-owned. Based on the Provincial Tourism data, there were about 421, 718 tourist arrivals in 2019, 72, 245 during the pandemic and nearly 600, 000 in 2021.

Awards and achievements. Various awards and recognitions are also given in the City which adds to its character and identity, such as the Seal of Good Local Governance (SGLG), Nutrition Awardee, Cleanest and Greenest City, one of the Most Competitive Cities in the Country, Hall of Fame Awardee in being a Child-friendly City, and many others.

Potentials lie in the following strategic growth directions:

- Strengthening of its status as a major tourism destination;
- Large-scale developments oriented towards eco-tourism with strict environmental control measures;
- Integration of recreational facilities geared towards complementation;
- Integration with the other potential tourist destinations (serving as a jump-off point) within the Lake area; and

• Encouraging tourism to blend not only with the environment but with agricultural activities as well.

4. DEVELOPMENT DIRECTION 4.1 The Plan Vision and Mission

The plan shall be guided by the following Vision and Mission:

VISION

"A premier tourist destination in the country, retirement haven upholding the virtues of a character city, governed by competent leaders and empowered by a peaceful, healthy and resilient community, enjoying a progressive economy, balanced and sustainable development".

MISSION

We shall expand and improve our infrastructures thereby securing a dynamic, safe, peaceful and healthy environment conducive for retirement, learning, sports and religious activities and healthy tourism enterprises.

We shall strive for service excellence through continuous learning on service improvement with emphasis on positive qualities to serve our people and leave a legacy that our family and community will be proud of.

We shall encourage the participation of our stakeholders in crafting and implementing plans, programs, and activities to better address the needs of our people.

We shall fully be dedicated to the preservation and further enrichment of our environment.

We shall strive for excellence in all that we do driven by strength and good character and seek to be competitive with the best in the world.

4.2 Major Sectoral Objectives

The major sectoral objectives were also defined during the visioning workshop:

4.2.1 Physical Development and Infrastructure

Control Urbanization

- Institute land use control systems
- Strictly enforce permit and regulation requirements for subdivisions
- Develop the city to be a major tourist destination and retirement haven

Improve Infrastructure Support System

- Improve accessibility of barangays
- Provide alternative routes
- Expropriate private roads
- Implement better traffic management measures
- Encourage the establishment of modern communication centers
- Upgrade existing power and water supply system

4.2.2 Environmental Sector

- Maintain ecological balance
- Conduct inventory of existing natural resources
- Control habitation on the ridge areas
- Foster environmental awareness
- Develop new water resources
- Implement and strengthen environmental ordinances

4.2.3 Socio-Economic Sector

- Enhance the habitat
- Create more jobs for constituents
- Establish more tourism-oriented facilities at strategic locations
- Establish Agri-tourism centers (i.e. showrooms and outlets)
- Develop sports and recreational facilities
- Construct additional socialized housing units
- Maintain high literacy rate
- Maintain a peaceful community

4.2.4 Development Administration

- Allocate appropriate funds for the approved programs for basic services of human needs/wants
- Strictly enforce a zoning ordinance
- Acquire/expropriate public land for tourism purpose whenever necessary

4.2.5 Development Concept/Structure Plan

The proposed land use development is patterned after the previous (old) Comprehensive Land Use Plan (1997-2007) with the necessary modification based on HLURB -CLUP Guidebook Volume 2 and HLURB-Supplemental Guidelines on mainstreaming Climate Change and Disaster Risks in the CLUP.

The city's total land area is 6,500 hectares. But the vast portion of which (2,017 hectares) representing 31.03 percent of the total land area located mostly in the ridge area falls within the Ecological Development Zone (Forest). It is considered environmentally critical area or hazard /landslide prone area due to steeped slopes. Hence, developments are confined only in the northern part or non-ridge areas covering the remaining area of 4,482.80 has. or 68.97 percent of the city's total land area.

The current and proposed development with radial and circumferential system of the city will be applied as follows:

- 1. The central point is the Central Business Districts (CBDs) located in three different areas of the city, namely:
 - **CBD-A** covers Barangays Kaybagal South and Maharlika West where the seat of power (City Hall Building) of the local government is located. The famous amusement park (SkyRanch), SM Wind Residences, Robinson's Summit Ridge Hotel, Tagaytay International Convention Center (TICC), Casino Filipino (PAGCOR), fine dining restos, hotels, and other business establishments are also found within the

vicinity of the district. The proposed state of the art **Tagaytay Iconic Tower**, the tallest building/edifice so far to be constructed outside of Metropolitan Manila will soon to rise in Tagaytay City.

- **CBD-B** covers Barangays Silang Crossing East and Barangay San Jose. Existing business establishments found in the area are Ayala Malls -Serin and Condo Hotel, Fora Malls and condotels (Filinvest Corp), Cityland condotel tower. This area is considered also as the city's financial district where various banking institutions are located.
- **CBD-C** covers barangays Tolentino East and portions of Brgy. Francisco and Tolentino West. The oldest Public Market of the city is situated in the district. Several hotels and business establishments are existing in the area. A 20-storey condotel will soon to rise in the district.
- Existing built-up areas along major roads are retained. Linear pattern of urban uses/built-up expansion uses on both sides of Isaac O. Tolentino Avenue, Tagaytay -Sta. Rosa Road, Aguinaldo Highway, Tagaytay-Nasugbu Road are expected to expand within the planning period;
- 3. Expansion of
- 4. The remaining agricultural areas will be sustained to augment the needs and local consumption of the local residents;
- 5. Restriction on massive development in the Ecological Development Zone along the ridge area will be sustained to protect the natural environment and prevent environmental degradation;
- 6. Intensified implementation of Pabahay Program for the homeless citizens of the city through identifying possible sites within the General Development Area will be undertaken. Vertical housing units/tenement type of housing is also one of the options to accommodate more beneficiaries;
- 7. Land uses within Special Conservation Area, Special Institutional Area will be sustained;
- 8. National, City and Barangay Roads will be sustained to ensure convenient mobility and transport of goods within the city's territorial jurisdictions;
- 9. Opening of alternate routes to ease traffic congestion specifically the Lagusan Road connecting the SVD trucking road to the By-pass Road.

CHAPTER 2 SPATIAL DEVELOPMENT STRATEGY

1. INTRODUCTION

The Spatial Development Strategy provides the direction to the physical growth of the City within the plan period. This emerges from the analysis of the City's natural environment, the on-going urbanizing activities, the Vision of a Resort and Retirement City and the most feasible way of managing the various land using activities. Consideration was also given to the City's development constraints and growth potentials.

2. DEMAND AND SUPPLY ANALYSIS

2.1 Demand Supply Management Strategy

The internally generated demand for urban land can very well be managed given the available supply. It is the external demand which has to be closely managed, or else the City may witness urban sprawl not only all throughout its urbanizable lands but also on the steeply sloped areas. It should be noted also that the City recognizes its attraction to the outside market and that this could further advance its growth and development. Thus, outside market demand shall have to be accommodated at designated areas in order to prevent unmitigated urban sprawl.

One big factor working for the City is the presence of wide opportunities to rationalize land development. There are several strategies that the City may adopt in order to balance demand and supply:

- Prevent urban sprawl on agricultural areas and woodlands by consolidating urban activities within the confines of the present built-up areas.
- Provide development opportunities for the outside market within predetermined areas: in-between existing built-up and areas with tourism potentials.
- Undertake a City land banking system in order to limit speculation and to ensure equitable access to land especially for dislocated indigenous residents (e.g. socialized housing, public recreation, etc.)
- Encouraging flexible use of land via compatible functions such as eco-tourism, agri-tourism or agri-residential

In identifying the total areas suitable for urban development, numerous policies pertaining to land uses should be considered. Hereunder are the significant laws and policies applicable to the City. In compliance therewith and in principle the following areas should not be allocated for urban development, or necessary regulations should be put in accordance with regulation.

- **Expanded National Integrated and Protected Area Systems Act (E-NIPAS Act)** or RA 11038. By virtue of the Expanded National Integrated IPAS law, the Taal Volcano Protected Landscape (TVPL) with an approximate total area of 62, 292.16 hectares was declared as a permanent national park. It covers municipalities under the provinces of Batangas and Cavite. About 2, 738.75_area in San Tagaytay City falls under this policy.
- **Proclamation No.** 740. This includes all areas within a one (1) kilometer radius from the People's Park in the Sky as defined by Proclamation No. 740 dated Feb. 16, 1996. This shall be developed as another PUD and all uses shall be in consonance to the Proclamation's stipulations : recreational, scientific, planned

area for new development and other similar purposes. About 317.83 hectares fall under this area.

- **Existing Built-up Area.** These areas are already occupied by structures for various purposes, therefore should not be considered as expansion areas for new development. Urban areas of the municipality based on existing land use are 1, 2021.08 hectares.
- Philippine Disaster Risk Reduction and Management Act of 2010 or RA 10121. Integrating the results Climate and Disaster Risk Assessment (CDRA) to local plans will help devise necessary measures to mitigate impact of hazards. Approximately 2, 895.89 hectares is highly susceptible to landslide.

Land use accounting of the available supply shows that approximately 1, 512.02 hectares are suitable for future development if the area.

Barangay	Area(Ha)
Asisan	48.32
Bagong Tubig	1.41
Calabuso	7.07
Dapdap West	21.74
Francisco	95.92
Guinhawa North	53.97
Guinhawa South	49.43
Iruhin Central	46.30
Iruhin East	13.30
Iruhin West	114.10
Kaybagal Central	53.56
Kaybagal North	34.80
Kaybagal South	28.93
Mag-asawang Ilat	24.89
Maharlika East	0.92
Maharlika West	0.02
Maitim II Central	43.71
Maitim II East	75.43
Maitim II West	38.43
Mendez Crossing East	26.71
Mendez Crossing West	19.07
Neogan	75.22
Patutong Malaki North	173.71
Patutong Malaki South	121.33
Sambong	0.18
San Jose	61.61
Silang Crossing East	12.62
Silang Crossing West	22.04
Sungay East	53.40
Sungay West	20.21
Tolentino East	50.37
Tolentino West	31.24
Zambal	92.08
Grand Total	1512.02
Source: Overlay through GIS	L

 Table 2. Supply Areas for Development per barangay

3. SPATIAL DEVELOPMENT STRATEGY

3.1 Guidelines

The following shall serve as guides in the formulation of the Spatial Development Plan for Tagaytay City:

- The present state of urban and rural development that has given rise to the existing City form and structure;
- The inherent development constraints posed by the City's natural environment such as the predominance of critically sloped areas;
- The recognition that the City is located in a fragile upland ecosystem and any development therein would have distinct environmental impacts within and outside its territorial jurisdiction;
- The existing physical infrastructure support system, particularly the road network, that plays a vital role in determining land development strategies;
- The strategy should ensure equitable access to land and other natural resources among all the stakeholders in the City; and
- The Vision set forth for Tagaytay City : A Resort and Retirement Haven.

3.2 General Objectives

The general objectives of the Spatial Development Strategy are:

- Prevent random and dispersed urban sprawl (which is happening now) that could prove very costly in terms of providing urban services over wide expanses of low density development; it is adversely affecting agricultural lands and the steeply-sloped areas;
- Consolidate urban activities to achieve economy in providing the necessary urban services and to make such services accessible to all members of the community;
- Rationalize and alleviate urban pressure along the Tagaytay-Nasugbu Road and Isaac Tolentino Avenue (*formerly Tagaytay-Calamba Road*) : the prime strip of the City;
- Attain the City's vision of a Resort and Retirement Haven by infusing the City with a healthy mixture of an urban-rural character;
- Provide for flexible clustering of urban functions by instituting performance requirements;
- Protection of the suitable agricultural and woodland areas; and
- Protection and further enhancement of property values.

3.3 Plan Features

3.3.1 The Cityscape

The linear configuration of the City provides a natural setting for the establishment of a modified grid pattern of streets. The main horizontal grid shall be the proposed Arterial Highway, which takes away the inter-town traffic from the City proper. The minor grid shall be the Tagaytay-Nasugbu Road and Isaac Tolentino Avenue (*formerly Tagaytay-Calamba Road*), which shall now be an intra-City road.

The focal point of the City shall be the Primary Urban Zone plus a well-developed Tourism Zone capitalizing on the ridge view. Land distribution shall ensure easy access from urban to rural

areas and vice-versa through wedges of open spaces in-between urban developments. The subridge area shall be protected in order to preserve further the City's urban-rural ambiance.

Land use divisions shall be of the "flexible-type" wherein complementary uses shall be allowed per designated zone. Emphasis shall be put, however, on performance criteria such as Floor Area Ratios, Footprints, Impervious Surfaces, Heights, etc. The detailed requirements for each land use type are appended under the Zoning Ordinance for Tagaytay City.

Over-all; the Cityscape is a statement that an urban area can exist in perfect harmony and in a most complementary relationship with a highland environment.

3.3.2 Circulation System

• The New Arterial Highway

The construction and completion of the by-pass road taking-off from the intersection of the Tagaytay-Batangas Arterial Highway and the Tagaytay-Manila via Silang Road westward to the town of Alfonso is already on-going. The city has succeeded in its lobbying effort for this long-time conceived project of DPWH. This shall serve as the primary inter-town route significantly reducing urban pressure along the prime strip of the City, which is mainly due to inter-town traffic.

An added feature of this Spatial Development Strategy is the on-going arterial highway towards the east initially connecting to the Tagaytay-Sta. Rosa road traversing the Kaykulot Road in Barangay Sungay East and thence to the Tagaytay-Canlubang Road. The purpose of this is to direct inter-town traffic from Laguna (Sta. Rosa, Canlubang and Calamba) to the arterial highway (westward) avoiding the passage through the Tagaytay-Sta. Rosa Road and Isaac Tolentino Avenue.

• The Tagaytay-Nasugbu Road and Isaac Tolentino Avenue (formerly Tagaytay-Calamba Road)

This is the prime strip of the City providing the most scenic view of Taal Lake : one of the most precious assets of the City. This road shall be "downgraded" in function: instead of serving intertown through-traffic, it shall be redesigned to function as a major intra-city route. The objective is to maintain the "intimacy" of the existing road and decongest it of traffic thereby alleviating urbanization pressure on the ridge area.

Among other areas, this road gives Tagaytay its wonderful character due to the scenic drive along the ridge. The provision of adequate street furnishings will further strengthen the Resort and Retirement City concept. The carriageway width shall be maintained and provisions for planting, tree canopies and street lighting (already installed) shall be provided at the roadside. Add-on street amenities such as distinctive landmarks, road signs and monuments shall be placed strategically in order to complete the visual experience of driving along the prime strip.

• Radial Roads

All radial streets have an average distance of two (2) kilometers from the proposed Arterial Highway and the Tagaytay-Nasugbu Road and Isaac Tolentino Avenue (*formerly Tagaytay-Calamba Road*). Their lateral spacing does not exceed 1.2 kilometers. These roads shall serve as

intratown routes and filter traffic from the Highway to the inner City. The radial roads are as follows:

Table 3. Radial Roads			
ROAD NAME	PRESENT CATEGORY	NEW CATEGORY	
Mirasol Street Bernardo Baybay Lane	Barangay Road	Minor	
Tagaytay-Anuling Road	City Road	Major	
Tagaytay-Mendez Road	National Road	Major	
Heroes Farm Road	Barangay Road	Minor	
Mayor's Drive	City Road	Major	
Crisanto de los Reyes Avenue	City Road	Major	
Magallanes Street	Barangay Road	Minor	
Bonifacio Drive-Lourdes Drive	Barangay Road	Minor	
Aguinaldo Highway	National Road	Major	
S.V.D. Trucking Road	City Road	Minor	
Market Street-Malabag Segundo	City Road	Minor	
Malabag First Road	Barangay Road	Minor	
Lagusan Drive	City Road	Major	
Tagaytay-Sta. Rosa Road	National Road	Major	
Gen. Gonzales Street	Barangay Road	Minor	
Tagaytay-Kabangaan Road	Barangay Road	Major	

Source: City Engineering

3.3.3 The Tourism Zone

The Tourism strip shall be defined by a 60-meter northward distance from the center of the Tagaytay-Nasugbu Road and Isaac Tolentino Avenue (*formerly Tagaytay-Calamba Road*) and all areas within 18% downward slope on the southern side of the said road. This shall be a key towards strengthening and advancing the City's role in the tourism circuit. Further, it shall serve as one of the key venues for the "sustainable ecological tourism base" of the City's vision.

Developments herein shall be of the urban-tourism type: restaurants, entertainment, recreational, etc. (as contrasted to Ecological Tourism Areas, which shall be discussed below). This area is further classified into two (2): the Northern Tourism Strip (north of the Tagaytay-Nasugbu-Isaac Tolentino Avenue) and the Southern Tourism Strip (south of said road). Building heights and densities shall be heavily regulated in order to protect the general view of the Lake area. In the Southern Tourism Strip, structures are further classified into Obstructive (blocking the Lake view) and Non-Obstructive (without blocking the Lake view).

3.3.4 The Primary Urban Zone (Commercial 1)

Amendments have been introduced involving the area coverage of Primary Urban Core by virtue of City Ordinance No. 2009-054 and City Ordinance No. 279, Series of 2019, respectively. Its primary purpose is to expand land allocation for commercial and other mix-use development use particularly in northern portion of the city thus encourage more investments and generate more income for the city. The on-going construction of arterial highway of the DPWH is one of the key factors and/or considerations for the expansion of PUZ. The expansion of PUC shall not only decongest the existing business center but also spread commercial activities on areas covered by the above-cited city ordinance.

3.3.5 Secondary Urban Zone (Commercial 2)

Secondary Urban Core Areas shall be of the neighborhood development type providing primary services and facilities to the adjacent barangays. These are located at the three points of intersection of Tagaytay-Mendez, Crisanto De Los Reyes Avenue and Tagaytay-Sta. Rosa Road.

3.3.6 General Development Zone (*Residential***)**

This equivalent to the suburban area. The use is predominantly residential (subdivisions) with the necessary facilities and amenities. The dynamics of urban existence wherein residential areas shall have easy access to stores, schools, etc. are realized by allowing the existence of these complementary activities within one area management unit. These areas shall provide opportunities to house the internal residential requirements of the City's population. Opportunities are also given to the external market through the in-filling of vacant and underutilized lands. General suburban development shall be confined within the boundaries of this area.

3.3.7 Agricultural Development Zone

These areas are located in the northern periphery and provide wedges to the General Development Area. Focus shall be on the development and strengthening of agricultural production and to maintain the rural ambiance of the City. These areas shall also serve to arrest the unmitigated urban sprawl that the City has been experiencing in the past years.

3.3.8 Ecological Development Zone (Forest land)

These areas shall be those with steep and critical slopes and are at the southern portions of the City below the ridge. Agro-forestry shall be the main development thrust in these areas with the objective of providing a permanent yet productive vegetative cover.

3.3.9 High Density Housing Zone

According to the results of CDRA, Barangays Bagong Tubig, Calabuso and Sambong were the priority areas when it comes to population. Although these barangays are identified as decision areas at risk for hazard, there are no population subjected for relocation. Howeever, there are socialized housing projects that are located in Bgys. Zambal, Kaybagal and Sungay. The Sungay site (10 has.) is already owned by the city government while sites in the other two barangays have yet to be procured. Site identification is based on providing eastern, central and western locations for socialized housing in order to attain a more or less even distribution. Requirements for the Zambal site is three (3) has. while that for the Kaybagal site is (1) ha. Housing facilities recommended are of the walk-up apartment type in order to free up land that may be used as sites for communal farming.

3.3.10 Ecological-Tourism Zone

These are for ecological-tourism development and are located at the east where the quiet location, terrain and panorama are highly suited for such. All development herein shall conform to the principle of "...an environmentally sound tourism activity in a given ecosystem yielding socioeconomic benefits and enhancing natural and cultural diversity conservation."

3.3.11 Special Conservation Zone

This includes all areas within a one (1) kilometer radius from the People's Park in the Sky as defined by Proclamation No. 740 dated Feb. 16, 1996. This shall be developed as another PUD and all uses shall be in consonance to the Proclamation's stipulations : recreational, scientific, planned area for new development and other similar purposes.

3.3.12 Special Institutional Area

These are located on the north-eastern part of the City. All new sites for church-related institutions are to be located in this area under a quiet, rural setting.

3.3.13 Climate and Disaster Risk Assessment Decision Areas Landslide Vulnerability And Risk Assessment Of Tagaytay City

In many years, landslide event is one of the most destructive natural phenomena that had always been affecting most parts of the Philippines. It had costed numbers of lives and properties in the past and continuously wreak havoc in the country with increasing intensity. In view of these events, the Mines and Geosciences Bureau (MGB) had initiated to perform landslide hazard analysis and mapping as well as vulnerability and risk assessment (VRA) that can provide useful information for catastrophic loss reduction, and assist in the development of guidelines for sustainable land use planning. The result of the study will aid the decision makers, disaster managers and affected communities to carry out landslide warning activities that will improve their level of awareness, preparedness and effectiveness.

Tagaytay, being one of the populous cities in Luzon and had been one of the places frequently being visited by a number of local and foreign tourists, was targeted for this study. At least 20 barangays are affected by high landslide while 30 barangays are affected by moderate landslide. In terms of population, a total of 2,682 individuals (3.77% of the total population) are affected by high landslide while 10,603 individuals (14.9% of the total population) are affected by moderate landslide. Of these numbers, the area with highest exposure to landslide is Barangay Iruhin West with 1,301 individuals.

In terms of building footprints, a total 4,200,423.31 sq. m. are covered by building structures. The building structures are in the form of houses, commercial building, factories and the like. From the total area, 120,760.84 sq. m. are affected by high landslide while 723,909.10 sq. m. are affected by moderate landslide. Table 4 shows the build-up areas per barangays that are affected by landslide.

Based on the analyses, Tagaytay City has total road length of about 372,414.70 meters. 25,080.83 meters of this area are affected by high landslide while 43,949.79 meters are affected by moderate landslide.

Areas found to be highly susceptible to landslide must be cleared of residents. Informal settlers that are living on landslide prone areas must be advised to be relocated.

For areas planned for future development, a geological and geohazard assessment must initially be done to ensure proper and safer siting of buildings/houses for human settlement. In connection to this, the government had already issued the Department of Environment and Natural Resources Administrative Order (DAO) 2000-28 entitled: "Implementing Guidelines on Engineering Geological and Geohazard Assessment" as additional requirement for Environmental Compliance Certificate (ECC) application with regards to land development to ensure the suitability and safety of the land development.

Landslide in the Philippines was due to its geographical location at which complex weather systems affects the country such as the Northeast and Southwest Monsoons, Inter-tropical Convergence Zone (ITCZ), Low Pressure Area and Tropical Cyclone. These weather systems cause severe and massive damage to the country.

In view of these events, the Mines and Geosciences Bureau, had initiated to perform landslide hazard analysis and mapping as well as vulnerability and risk assessment (VRA) that can provide useful information for catastrophic loss reduction, and assist in the development of guidelines for sustainable land use planning. The result of the study will aid the decision makers, disaster managers and affected communities to carry out landslide warning activities that will improve their level of awareness, preparedness and effectiveness.

Landslide Assessment Activities

Historical mass movements and slope stability assessment

The hazard assessment in Tagaytay City was initiated by MGB Region IV-A Assessment team in the year 2010 which produced a 1:50,000 scaled landslide hazard map. This map is color coded with corresponding degree of susceptibilities: red –high, green –moderate and yellow –low. In the 2014, the MGB Central Office conducted another hazard assessment activities in the city and produced a 1:10,000 scaled map that is more detailed and comprehensive.

A number of areas in Tagaytay City were assessed as having high to very high susceptibility to landslide. Expectedly, areas having such susceptibility ratings are confined in slopes that are relatively steep, including those that were cut following road construction. Among the notable areas include major thoroughfares connecting Tagaytay to Talisay as well as several areas within the barangays of Sambong, Bagong Tubig and Calabuso, Dapdap East, Dapdap West, Francisco, Iruhin Central, Iruhin East, Kaybagal South, Mendez Crossing East, and Maharlika West. In the said areas, the sloped assessed having high landslide susceptibility are very steep and highly unstable, especially that the volcanic materials have been weathered considerably and or simply unconsolidated. Active gully development as well as old and active landslide have been noted in a number of areas suggesting weak nature of the underlying deposits.

Based on the recent landslide assessment, there are 24 out of 34 barangays in Tagaytay City are situated on areas affected by landslide as a consequence of intense rainfall events that leads to oversaturation of weak materials on steep sloped areas. These barangays are Bagong Tubig, Calabuso, Dapdap East, Dapdap West, Francisco, Iruhin Central, Iruhin East, Iruhin West, Kaybagal South, Maharlika East, Maharlika West, Mendez Crossing East, Mendez Crossing West, Sambong, San Jose,

Silang Crossing West and Sungay West, Dapdap East, Dapdap West, Francisco, Iruhin Central, Iruhin East, Kaybagal South, Mendez Crossing East, and Maharlika West. In the said areas, the sloped assessed having high landslide susceptibility are very steep and highly unstable, especially that the volcanic materials have been weathered considerably and or simply unconsolidated. Active gully development as well as old and active landslide have been noted in a number of areas suggesting weak nature of the underlying deposits.

Based on the recent landslide assessment, there are 24 out of 34 barangays in Tagaytay City are situated on areas affected by landslide as a consequence of intense rainfall events that leads to oversaturation of weak materials on steep sloped areas. These barangays are Bagong Tubig,

Calabuso, Dapdap East, Dapdap West, Francisco, Iruhin Central, Iruhin East, Iruhin West, Kaybagal South, Maharlika East, Maharlika West, Mendez Crossing East, Mendez Crossing West, Sambong, San Jose, Silang Crossing West and Sungay West.

Barangay Calabuso is bounded by unstable and very steep sloped walls as indicated by bending trees and tension cracks. There are also areas within the barangay that sits on an old landslide. Barangay road leading to the barangay proper and slopes that bound Tagaytay Highlands are also unstable which bounded by steep sloped wall.

In Barangay Dapdap East, the Palace in the Sky is surrounded by very steep slopes which are prone to landslide. An active landslide was noted in this area (near souvenir shop) with an approximate dimension of 5.0 m wide and 8-10 m high. Several old and new landslide were noted along Dapdap East Road. Several active and old landslide were observed in Sitio Catmon in Barangay San Francisco.and along the main road to Talisay.

Slope instability were also observed on several slopes in Barangay Iruhin Central and Iruhin East. Active landslides were noted in Purok 86 of Barangay Kaybagal South. Similar situation was noted in Purok 100 in Barangay Maharlika West and Purok 119, Mendez Crossing East where active landslide and gullies along steep sloped walls. Several landslide occurrences were also observed in Barangay Sambong, Barangay San Jose, Barangay Silang Crossing East and Barangay Silang Crossing West relative to the steep sloped walls along Tagaytay Ridge.

Hazard, Exposure and Vulnerability Analysis

Table below shows the number of population to be affected by landslide occurrences in Tagaytay City. At least 20 barangays are affected by high landslide while 30 barangays are affected by moderate landslide. In terms of population, a total of 2,682 individuals (3.77% of the total population) are affected by high landslide while 10,603 individuals (14.9% of the total population) are affected by moderate landslide. Of these numbers, the area with highest exposure to landslide is Barangay Iruhin West with 1,301 individuals.

Tuble 4.1 opulation Exposed to Lunashae Hazar as			
Barangay	High	Moderate	Low
Asisan	0	0	1,713
Bagong Tubig	106	644	21
Calabuso	74	1,016	0
Dapdap East	713	0	0
Dapdap West	678	336	0
Francisco	140	993	2,122
Guinhawa North	0	1	572
Guinhawa South	0	99	1,188
Iruhin Central	236	743	1
Iruhin East	205	902	19
Iruhin West	73	1,228	1,900
Kaybagal Central	0	130	4,529
Kaybagal North	0	8	2,752
Kaybagal South	31	186	6,212
Mag-asawang Ilat	0	157	1,215
Maharlika East	3	153	1,191
Maharlika West	1	80	923

Table 4. Population Exposed to Landslide Hazards

Barangay	High	Moderate	Low
Maitim II Central	0	3	1,250
Maitim II East	0	91	2,425
Maitim II West	0	9	713
Mendez Crossing East	3	182	1,958
Mendez Crossing West	0	40	2,488
Neogan	0	294	2,776
Patutong Malaki North	0	7	1,792
Patutong Malaki South	0	0	2,475
Sambong	251	925	77
San Jose	41	708	3,757
Silang Crossing East	1	75	1,258
Silang Crossing West	0	24	1,138
Sungay East	33	525	3,277
Sungay West	69	897	3,346
Tolentino East	12	77	2,448
Tolentino West	12	71	1,356
Zambal	0	0	983
TOTAL	2,682	10,603	57,895

Source: CDRA Results 2023

In terms of building footprints, a total 4,200,423.31 sq. m. are covered by building structures. The building structures are in the form of houses, commercial building, factories and the like. From the total area, 120,760.84 sq. m. are affected by high landslide while 723,909.10 sq. m. are affected by moderate landslide. Table 4 shows the build-up areas per barangays that are affected by landslide.

Tuble 5. Dunuing Poolprints Exposed to Lunusnue nuzurus				
Barangay	High	Moderate	Low	
Asisan	0.00	0.00	159,621.60	
Bagong Tubig	5,994.74	36,461.42	1,183.97	
Calabuso	10,700.58	146,585.40	0.00	
Dapdap East	14,455.66	0.00	0.00	
Dapdap West	14,455.66	0.00	0.00	
Francisco	21,395.72	10,951.72	0.00	
Guinhawa North	0.00	137.71	77,576.91	
Guinhawa South	0.00	5,250.03	62,998.49	
Iruhin Central	25,291.06	79,501.96	137.26	
Iruhin East	7,494.42	32,913.17	706.58	
Iruhin West	4,900.94	82,428.23	127,573.20	
Kaybagal Central	0.00	6,368.17	221,274.60	
Kaybagal North	0.00	456.52	151,063.50	
Kaybagal South	901.48	5,403.81	180,600.50	
Mag-asawang Ilat	0.00	11,650.67	90,292.56	
Maharlika East	123.89	7,550.32	58,926.49	
Maharlika West	71.40	7,284.33	83,752.74	
Maitim II Central	0.00	386.76	146,618.90	
Maitim II East	0.00	2,846.11	75,692.90	
Maitim II West	0.00	648.63	52,789.54	
Mendez Crossing East	88.84	6,062.63	65,161.86	
Mendez Crossing West	0.00	851.55	52,789.54	
Neogan	0.00	20,299.97	191,374.20	
Patutong Malaki North	0.00	387.21	102,891.50	
Patutong Malaki South	0.00	0.00	117,255.90	
Sambong	6,507.62	23,992.57	1,985.14	

Table 5. Building Footprints Exposed to Landslide Hazards

Barangay	High	Moderate	Low
San Jose	2,375.08	40,643.01	215,735.50
Silang Crossing East	155.79	8,638.60	145,777.30
Silang Crossing West	16.69	3,659.65	176,153.80
Sungay East	1,715.21	27,392.63	171,125.40
Sungay West	4,174.64	54,444.71	203,118.60
Tolentino East	505.89	3,341.49	106,220.60
Tolentino West	472.95	2,913.36	55,376.89
Zambal	0.00	13.29	57,911.63
TOTAL	120,760.84	723,909.10	3,355,771.74

Source: CDRA Results 2023

Based on the analyses, Tagaytay City has a total road length of about 372,414.70 meters. 25,080.83 of this area are affected by high landslide while 43,949.79 meters are affected by moderate landslide.

Barangay	High	Moderate	Low
Asisan	0.00	63.92	15,814.89
Bagong Tubig	1,875.38	2,025.67	590.83
Calabuso	4,708.93	7,057.24	0.00
Dapdap East	1,178.04	0.00	0.00
Dapdap West	2,972.87	130.27	0.00
Francisco	1,312.77	5,007.55	7,051.46
Guinhawa North	0.00	0.00	3,958.36
Guinhawa South	0.00	167.25	7,902.61
Iruhin Central	1,770.65	7,223.88	0.00
Iruhin East	257.29	2,047.97	0.00
Iruhin West	51.41	4,245.80	7,895.50
Kaybagal Central	0.00	514.21	25,447.92
Kaybagal North	0.00	0.00	15,250.24
Kaybagal South	15.70	766.53	23,043.03
Mag-asawang Ilat	0.00	734.09	6,513.79
Maharlika East	0.00	148.67	4,473.21
Maharlika West	0.00	67.25	10,923.17
Maitim II Central	0.00	0.00	11,329.84
Maitim II East	0.00	14.81	8,779.75
Maitim II West	0.00	15.92	6,619.69
Mendez Crossing East	103.56	347.33	5,521.17
Mendez Crossing West	0.00	57.10	5,931.07
Neogan	0.00	1,141.67	13,544.98
Patutong Malaki North	0.00	49.35	15,401.50
Patutong Malaki South	0.00	0.00	20,395.14
Sambong	1,984.64	473.90	728.26
San Jose	4,517.31	3,410.33	15,505.10
Silang Crossing East	1,650.49	559.61	9,306.90
Silang Crossing West	0.00	157.07	15,484.43
Sungay East	1,551.90	2,694.62	9,393.86
Sungay West	496.63	3,869.40	12,636.78
Tolentino East	0.00	258.22	10,238.04
Tolentino West	633.27	586.16	7,565.80
Zambal	0.00	114.01	6,136.76
TOTAL	25,080.83	43,949.79	303,384.08

Table 6. Road Lengths Exposed to Landslide Hazards

Based on the analyses, a number of areas in Tagaytay City were assessed as having high to very high susceptibility to landslide. Expectedly, areas having such susceptibility ratings are confined in slopes that are relatively steep, including those that were cut following road construction. The most populous barangays in Tagaytay City which are affected by high and moderate landslide are Iruhin West, Iruhin East, Sambong, Francisco, Dadap West, and Calabuso which have >1000 individuals affected.

In terms of building footprints, a total area of 120,760.84 sq. m. is affected by high landslide while 723,909.10 sq. m. are affected by moderate landslide. These buildings are noted situated near steep to very steep slopes. Although some of them were already mitigated with beams, some of them experienced foundation failures and house collapses. Among the notable areas include major thoroughfares connecting Tagaytay to Talisay. Within the city, a total road length of 25,080.83 meters are affected by high landslide while 43,949.79 meters are affected by moderate landslide. Landslide occurrences were mostly observed along unprotected road walls made up of weak soil or weathered and intensely fractured/thinly bedded bedrock. Active gully development as well as old and active landslide have been noted in a number of areas as well as several areas within the barangays Sambong, San Juan, Bagong Tubig, Calabuso, Francisco, Kaybagal South, Mendez Crossing East, and Maharlika West. In the said areas, the sloped assessed having high landslide susceptibility are very steep and highly unstable, especially that the volcanic materials have been weathered considerably and or simply unconsolidated suggesting weak nature of the underlying deposits.

Conclusion

- 1. The database for household and population for high and moderate susceptible areas for landslide were created and the number of buildings and individuals to be affected high, moderate and low susceptible areas for landslide were identified.
- 2. At least 20 barangays are affected by high landslide while 30 barangays are affected by moderate landslide. In terms of population, a total of 2,682 individuals (3.77% of the total population) are affected by high landslide while 10,603 individuals (14.9% of the total population) are affected by moderate landslide. Of these numbers, the area with highest exposure to landslide is Barangay Iruhin West with 1,301 individuals.
- In terms of building footprints, a total 4,200,423.31 sq. m. are covered by building structures. The building structures are in the form of houses, commercial building, factories and the like. From the total area, 120,760.84 sq.
 m. are affected by high landslide while 723,909.10 sq. m. are affected by

moderate landslide.

Based on the analyses, Tagaytay City has total road length of about 372,414.70 meters. 25,080.83 meters of this area are affected by high landslide while 43,949.79 meters are affected by moderate landslide.

Recommendation/ Decision Areas

- 1. If possible, areas that are highly susceptible to landslide must be cleared of residents. Informal settlers that are living on landslide prone areas must be relocated. More warning signs and alarms systems must be installed on critical areas
- 2. Information and Education Campaign (IEC) must be undertaken for the people to educate the risk involved in living within the landslide prone areas
- 3. To do ground/field verification on the building footprint especially the critical infrastructure (e.g. schools, hospital, public buildings);
- 4. Residents in a particular area should report to their respective government agencies through their local government units all the ground movement that directly affects the communities for further study and assessment
- 5. For areas planned for future development, a geological and geohazard assessment must initially be done to ensure proper and safer siting of buildings/houses for human settlement. In connection to this, the government had already issued the Department of Environment and Natural Resources Administrative Order (DAO) 2000-28 entitled: "Implementing Guidelines on Engineering Geological and Geohazard Assessment" as additional requirement for Environmental Compliance Certificate (ECC) application with regards to land development to ensure the suitability and safety of the land development

Population	Urban Use Areas	Lifeline Utilities	Natural Resource-based Production Areas	Critical Point Facilities
Bagong	Bagong	Bagong Tubig -	Dapdap East	Radar System,
Tubig	Tubig	Barangay Road		Barangay Sambong
Calabuso	Calabuso	Bagong Tubig -	Dapdap West	Water Pumping Station,
Calabuso	Calabuso	National Road		Barangay Sambong
Sambong	Iruhin East	Calabuso -		Water Source,
Sambolig	II UIIIII East	Barangay Road		Barangay Calabuso
		Calabuso -		
		National Road		
		Calabuso - City		
		Road		
		Dapdap East -		
		Barangay Road		
		Dapdap East - City		
		Road		
		Dapdap West -		
		Barangay Road		
		Dapdap West -		
		City Road		
		Iruhin East -		
		Barangay Road		
		Sambong -		
		Barangay Road		
		San Jose -		
		National Road		
	4 77 11	Sungay West		

Table 7. Summary Decision Areas in Climate and Disaster Risk Assessment (CDRA)

Source: Decision Areas Table – CDRA 2022-2023

Tagaytay City

4. LAND ALLOCATION

The final land allocation is presented in the following table below.

Exist	ing Land Use	;	Proposed Land Use	
Classification	Area (Ha)	Percentage (%)	Area (Ha)	Percentage (%)
Agricultural	1687.82	25.97%	1308.1	20.12%
Commercial	176.81	2.72%	1907.46	29.35%
Grassland/Brushland	2705.13	41.62%		
Institutional	107.52	1.65%		
Parks & Recreation	52.96	0.81%		
Residential	4007.07	04.049/	822.92	12.66%
Socialized Housing	1367.87	21.04%	6.52	0.10%
Rivers & Creeks	85.97	1.32%		
Roads	255.60	3.93%		
Tourism	47.17	0.73%	231.69	3.56%
Utilities	5.38	0.08%		
Cemetery	7.77	0.12%		
Protection Forest			1911.95	29.41%
Special Conservation			311.37	4.79%
Grand Total	6500	100.00%	6500	100.00%

Table 8. Comparison of Existing and Proposed Land Uses

Source: Digitized through GIS Software

CHAPTER 3 SECTORAL PLANS

1. INTRODUCTION

The people of Tagaytay are unanimous in envisioning their City to be a progressive City the center of eco-tourism activities and institutional establishment. This vision requires that the City will be able to absorb the demand of being both an institutional center and a tourism haven. The sectoral plans shall answer the requirements of the City's vision, objectives, and the Spatial Development Strategy. These plans shall ensure that the Vision is properly supported by adequate physical and socio-economic infrastructures as well as environmental management measures.

2. PHYSICAL INFRASTRUCTURE PLAN

Over-all Goals and Objectives

In order for the City to be able to deliver the necessary facilities given the desired development, integrated physical infrastructure and transportation plans have to be conceptualized. For this end, the overall goals of the plans are:

- a) to assess the present conditions of the physical infrastructure facilities and transportation system based on their respective thresholds;
- b) to identify the general physical infrastructure and transportation demands of the City given the overall vision; and
- c) to conceptualize the physical infrastructure and transportation policies that shall outline plans needed for the direction/s of development for the next ten (10) years.

Given the above goals, the corresponding objectives of formulating and conceptualizing the physical infrastructure and transportation plans are:

- a) determine the physical infrastructure and transportation threshold requirements of Tagaytay City given its envisioned development;
- b) develop the conceptual integrated physical infrastructure and transportation plans; and
- c) identify and prioritize programs and projects in stages, within the ten-year development plan, that can facilitate the development of the City;

2.1 Infrastructure Policy

The infrastructure policy suggested will be able to address the following:

- a) Giving high priority on the various carrying capacities of the City without jeopardizing the environment and physical condition in developing the necessary infrastructure facilities supportive to the vision set for the City of Tagaytay;
- b) Adhering strictly to internationally and locally set standards for infrastructure facilities development and construction;
- c) Infrastructure development shall conform with the land use measures and controls formulated in the comprehensive land use for the City;
- d) Visual intrusion should carefully be addressed in the construction of infrastructure facilities, especially in areas identified as potential tourist spots of the City;
- e) Infrastructure facilities should, as much as possible, be in harmony with the ecological and environmental aesthetics of the City; and

f) The overall infrastructure developments should be in line with the vision of the City in terms of urban and tourism developments and conform with the various plans formulated for the province in particular and the region, in general, where the City is situated.

Conceptualization of the Integrated Physical Infrastructure and Transportation Plans

From the formulated policies for the City of Tagaytay come the respective infrastructure and transportation plans that will enumerate the necessary programs and projects for the envisioned development of the City. The figure in the succeeding page elaborates the approach in conceptualizing the plans and their corresponding programs and projects. The plans, as alreadymentioned earlier, are to be in line with the land use plan developed for the City. (*refer to Figure No. 4*)

2.2 Road and Transportation Systems

Goal

To provide an adequate, efficient, safe, and well-integrated transportation network that can serve as linkage among the different land uses within the City as well its neighboring municipalities and to facilitate the free flow of goods through the provision of transport facilities and efficient transport management schemes.

Objectives

- 1. To determine the necessary improvements needed in the existing road networks, bridges and intersection layouts that will ease up congestion, shorten travel time, and minimize cost of travel along any road section within the City.
- 2. To encourage the development of more efficient modes of transport that will adequately meet the current and projected mobilization demand of both goods and people.
- 3. To improve or provide necessary farm-to-market access and barangay to barangay linkages that will encourage farm productivity and cropping diversity.
- 4. To provide transport facilities that will improve efficiency of current transportation system.

Projections of Future Needs

Traffic forecasting mainly concerns with the presentation of the magnitude and characteristic of the traffic at full development of the City of Tagaytay. It primarily consists of the basic components of the classical traffic modeling namely: trip generation, trip distribution and trip assignment. This section primarily deals with the estimation of the number of person trips generated and attracted by the different land uses within the development area. The person trips were estimated by the proposed land use zones.

The proposed land use are generally mixed-use comprising of different proportions of convention, office, hotel, resorts, residential, and commercial classifications. Specific mixed-use proportions were assigned to each land uses so as to quantify trip attraction and generation for a specific classification of a proposed land use. Floor area ratios (FAR) as specified in the bulk and density controls together with lot occupancy and building height limits were used in generating a forecast. To be consistent, the same computation as that in the determination of water demand was adopted in generating the Gross Floor Areas.

This scenario therefore requires for several combinations of schemes ranging from traffic engineering, management, law enforcement, demand management and others in order to come up with an efficient transport system and a relatively lower demand.

The trip generation analyses suggest a very high number of person and vehicle-trips that will be generated by the development. In addition, existing traffic, which is not fully represented in the forecast is likewise expected to have a high growth rate within the planning period as the level of economic activity is enhanced in and around the study area. This traffic demand will have to be ultimately born by the road network.

Program and Projects

1. Increase the capacity of adjacent national roads and develop a Barangay Road Network.

The national road traversing through the city provides the major access to and from the development area. It will continue serve as the main artery where vehicular traffic is expected to heavily concentrate.

The capacity of the national road will have to be improved to accommodate higher traffic volumes. Since the construction of additional lanes or widening of existing ones is deemed to devaluate the beauty of the existing single lane highway along the ridge. Road capacities can be enhanced by improving road surface conditions as well as widening of barangay roads in order to provide a network of several alternative routes other than the main thoroughfare.

- 2. Strengthen the development alternative for more bypass roads The road network of the city consist only of a major spine road passing along the center. It is expected that this present system will experience severe traffic congestion and bottlenecks in the future. More bypass roads shall have to be considered in order to provide an alternative route.
- Provision of traffic control and management schemes
 The provision of traffic signals and control can also provide cost-effective
 measures in increasing road efficiency and capacities.
 Traffic management can also provide solutions in improving overall traffic safety
 and efficiency especially in the central business area where vehicle and human
 functions meet on the road environment.
- 4. Provision of pedestrian facilities such as covered walk to encourage walking as an alternative mode. Notice that assuming 40% of the total forecasted trips will be walk trips, this will directly entail a corresponding percent reduction in the number of trips.

Tourism establishment complete with lodging, food service and leisure should likewise be encouraged as its being complete reduces trips to and from various leisure or food centers.

- 5. Provide parking facilities and public transport terminals in order to discourage roadside parking and terminal operations at key intersections.
- 6. Evaluate the feasibility of providing bicycle lanes parallel to several major thoroughfares both as a tourism feature and a functional facility for local cyclers.
- 7. Improve local expertise in transportation engineering, planning, and enforcement through the conduct of in-house trainings for City engineers, planners, and traffic enforcers.

2.3 Communication

Goal

To upgrade the City's major communication system so as to provide an efficient, state of the art communication service that will link each and every household, business, and other key entities to the rest of the City, the country, and the world.

Objectives

- 1. To encourage government and private agencies and corporations to expand and improve the present communication services and facilities in the City.
- 2. To provide an equitable distribution of communication services and facilities within the City.
- 3. To sustain the existing communication facilities so as not to disrupt the flow of communication of inter-government transaction as well as the private sector.

Program and Projects

- 1. To increase the portion of populace serviced by various communication modes by establishing a healthy market that will invite communication investments that will meet the varied preferences and demands of the potential consumers.
- 2. Invite other companies to venture into this industry sector for healthy competition and more effective communication system.

2.4 Power

Goal

To provide dependable and adequate power supply and services for the City's increasing population and actively growing commercial and economic activities.

Objectives

To encourage continuous upgrading and expansion of power distribution in order to provide stable and reliable power.

Program and Projects

The issue on power supply is primarily handled by Meralco, which is not within the authority of the City Government. In this regard, the City does not deal with direct planning and project implementation. Constant evaluation and monitoring of the existing and current power demand in relation to Meralco's provision of services in the City however will prompt the City Government when to formulate needed actions in ensuring adequate power provisions.

2.5 Water

Goal

To provide and sustain adequate and efficient water services covering the largest possible area and serving the highest possible number of Tagaytay City residents.

Objective

To improve and expand the existing Tagaytay City Water District (TCWD) facilities and to explore other potential water sources to meet the City's water demand.

Year	Water Demand (per day in cubic meter)
2020	16,000 cum
2025	22,000
2029	24,000

Table 9. Domestic Water Demand Projection

Program and Projects

- 1. Aquisition of additional Water Delivery Trucks
- 2. Construction of New Supply Source (Ground source), Water Reservoir and installation of Booster Pumps;
- 3. Pipeline extension and upgrades
- 4. Meter Replacement
- 5. Appurtenances replacement and installation (i.e. valves, production meters)
- 6. Installation f Generator Sets (spring source)

2.6 Solid Waste

Goal

Effectively manage the solid waste generated that must be disposed in an efficient, equitable and environmentally sound manner, consistent with the mandated provisions of Republic Act No. 9003, otherwise known as the Ecological Solid Waste Management Act of 2000 and the duly approved City Solid Waste Management Plan.

Objectives

- a. To reduce volume of solid waste requiring disposal by increasing percentage of source reduction, segregation, re-use, recycling and composting process;
- b. To regularly evaluate and assess solid waste management strategies of the City for ten (10) years and identify course of actions to be undertaken;
- c. To ensure provision of sound solid waste disposal services;
- d. To strictly implement environmental policies/ordinances;

Program Strategies

Solid Waste Reduction at source is one of the key strategies of proper solid waste management to effectively meet the diversion targets. The City's solid waste generation comes largely from household and next are from commercial establishments and institutions; they are the primary source of solid waste.

Source reduction – catalyze shift in consumer, business, and product manufacturing practices that reduces the amount of toxicity of solid waste in the city. This key strategy can be effectively attained through other sub-strategies to wit;

- a. **Re-use, recycling and composting** The City must aggressively strengthen public and private efforts on waste reduction program such as the use of eco-bags, paper bags and tumblers instead of plastics and other unrecyclable containers and packaging. Also strengthen composting efforts even in simple methods of composting biodegradable waste and infrastructural support to increase the quantity and quality of recovered waste materials. To build resilient highly efficient and continually improving programs to reduce the amount of solid waste for disposal.
- b. **Information, Education and Communication** Significantly increase awareness and understanding of solid waste management needs, impact and the critical social, economic and environmental impact and issues facing the City of Tagaytay and built support for programs to engage citizens in actions needed to maximize waste reduction and minimize resources for additional disposal facility.

- c. **Establishment of Material Recovery Facility** As mandated by law every barangay must have MRF; the City will continuously support the needs of the barangay to efficiently manage and operate their respective MRF. Also the business sector will be encouraged to have their recyclables redemptions area and / or simple MRF.
- d. **Enactment of appropriate local laws and regulation** Strengthen the policy implementation of existing ordinances regarding solid waste disposal and enactment of new local ordinances appropriate to the locality that will help minimizing the residuals waste intended for disposal.
- e. **Awards and Incentives** Formulation of different small program , projects and activities to small groups, barangays, associations, business establishment with corresponding incentives and awards; Programs/ activities and projects that the main objectives is to minimize and reduce the volume of waste to be generated and meet the City's diversion targets.
- f. **Monitoring System** Creation of regular monitoring system at every barangay with respect to proper solid waste management. To have bench mark data of all the aspect of solid waste generation, disposal, collection, composition and population of waste generators. This will help the stakeholders actions needed to attain the diversion targets.

3. SOCIO-ECONOMIC PLAN

3.1 Over-All Goals and Objectives

Economic activity in Tagaytay City is predominantly focused on tourism. As such, the infrastructure support system and tourism facilities are improved to attract more tourists and investors. Collaborative efforts between the City Government and the private sectors in promoting tourism related programs are highly encouraged to ensure success and sustainability. Innovative marketing strategies, such as local trade fairs and mass media, are explored to showcase the city's tourism potentials.

3.2 Tourism Development

Goal

To further develop and strengthen Tagaytay City's role as a major tourist destination in the country oriented towards the low-intensity, high value type.

Objectives

- 1. To achieve complementation and integration of tourism facilities in order to answer the requirement of the target clientele;
- 2. To develop diverse tourism attractions with a host of day and night-time activities;
- 3. To package the image of the City as a wholesome tourism center; and
- 4. To promote cultural development as a tourism attraction.
- 5.

Programs and Services

Development of the Primary Urban Zone and People's Park Areas

The City shall fully develop the People's Park to serve as anchor to tourism development with emphasis on ecological protection and preservation. This shall be complemented by the development of the Primary Urban Core areas as the City Center where urban-oriented tourism facilities (of relatively higher densities) shall be established.

Rehabilitation of Cliffside Area

Through reforestation of denuded areas along the cliffside, the natural beauty of Taal Lake will be enhanced. Along the roads and ridge area, ornamental plants and trees may be planted. Cleanliness in the City should be maintained through strict enforcement of environmental laws and local ordinances.

Agri-Resort Complex

Fruit and vegetable plantations are potential tourist attractions in Tagaytay. Visitors shall be guided on a tour to agricultural fields where a showcase of various phases of crop production awaits them. Tourists can likewise avail of freshly picked tropical fruits and vegetables. Through this exposure, a growing concern for environmental resources will be promoted.

Shopping Areas

Area for shopping activities should be established where tourists can avail of native goodies and handicrafts. Facilities should be able to cater to low-scale (fruit stand, native delicacies, meat shops, etc. such as those along the road) and up-scale (mall shopping).

Marketing and Promotion

The City shall take the lead in undertaking tourism marketing and promotion activities either through direct involvement or tying-up with private facility developers.

3.3 Institutions

Goal

To position the City as a Center of Institutions in the region

Objectives

- 1. To provide for a more efficient delivery system of government and social services;
- 2. To attract the (re) location of institutional establishments such as government offices, schools, universities, etc.
- 3. To establish facilities for conventions, seminars, conferences, etc.
- 4.

Programs and Services

Centralization of Government Services

The City Centrum shall be developed to serve as a "one-stop shop" of government services. Physical proximity of the various government offices will greatly facilitate people's access to public services and enhance the government service delivery system. Complete convention and seminar facilities shall also be provided for in the Centrum.

Training/Capability Building Programs

Programs to enhance the capability of public servants in the conducts of their duties shall be regularly instituted.

3.4 Agriculture

Goal

To increase agricultural productivity using modern and sustainable farming methods.

Objectives:

- 1. To improve knowledge and skills of farmers on modern and sustainable farming;
- 2. To strengthen rural-based organizations in order to facilitate the implementation of livelihood programs and other support services effectively;

3. To provide support services to farmers in terms of livelihood programs, credit facilities, and post-harvest equipment.

Programs and Services

Training Program for Farmers

The program aims to build the capability of farmers on modern and sustainable farming methods. Sustainable farming practices will be promoted as a strategy to maintain ecological balance as urbanization accelerates in the City. The program shall cover all aspects on crop production, livestock production and management and post-harvest technology.

Support Services for Farmers

Credit services and facilities should be made available to farmers in the City. Support services may likewise come in the form of income-generating projects to uplift their living conditions. Through farmer organizations, alternative livelihood activities should be initiated as agricultural production becomes less intensified in Tagaytay. Alternative livelihood activities will help cushion impact of decreasing agricultural productivity on the farmers.

Organizational Development

Rural-based organizations should be strengthened as partners in carrying out income-generating activities as well as credit program for farmers and their families. Cooperative development among farmers should likewise be promoted.

Post-Harvest Equipment

The number of post-harvest facilities in Tagaytay City should be increased. Farmers should gain easy access to this equipment. Ideally, processing of agricultural products should be done within the City.

3.5 Education

Goal

To provide the citizens with quality modern education within the context of developing and optimizing human resources toward a progressive tourism-led City.

Objectives

- 1. To provide quality primary, secondary and tertiary educational facilities and services;
- 2. To improve competencies of teachers particularly those at the primary and secondary levels;
- 3. To promote technical vocational courses with emphasis on tourism-related courses.

Programs and Services

Expansion and Improvement of Public High Schools

The city government has established four (4) Public High Schools, namely: 1) Tagaytay City National High School (TCNHS) located along Mayor's Drive, Brgy. Mendez Crossing East; 2) Tagaytay City Science National High School (TCSNHS) located at Barangay Sungay West; 3) Francisco Perez Tolentino National High School(FPTNHS) located along Lagusan Drive, Brgy. Tolentino West and; Tagaytay City Integrated School located at Brgy. Guinhawa, Tagaytay City. School facilities have also been improved including state-of-the art multi-storey school buildings, science and computer laboratories, play grounds, libraries, school canteens, covered

gymnasiums, perimeter fence for the security of students, among others. These schools also accommodate senior high students when the K to 12 program of the Department of Education was implemented.

Expansion and Improvement of Public Elementary Schools

New school buildings including basic school facilities and amenities for the Sixteen (16) public elementary have been put in place in response to the city's growing demand of school-going population.

Competency-Building of Teachers

Schoolteachers at all levels should undergo continuous education in order to improve their knowledge and skills. Special focus must given on modern educational methods. Teachers should be properly equipped as they provide quality education to the student population.

Non-Formal Education and Functional Literacy Program

The City Government in close collaboration with the Department of Education (DepEd), and Technical Education and Skills Development Authority (TESDA) has been serious in its campaign in providing non-formal education and functional literacy programs -- which includes massive implementation of Alternative Learning System (ALS) and functional literacy programs for the out-of-school youth and adult illiterate who cannot avail of formal education.

3.6 Social Welfare And Development

Goal

To provide social intervention and opportunities that will uplift the condition of distressed and disadvantaged members of society enabling them to restore their social functioning and participate in the City's development.

Objectives

- 1. To enable the elderly and persons with disabilities to enhance their social functioning;
- 2. To provide capital assistance to poor families as they engage in income-generating activities;
- 3. To protect the welfare of women and enhance their role in the City's development;
- 4. To promote strong inter-personal relationship among families.
- 5. To make accessible social services and facilities especially to depressed barangays.
- 6.

Programs and Services

Information Dissemination

Social welfare programs and services should be made accessible to those in need. A massive information drive on programs and services offered by the City Government should reach target beneficiaries. Awareness of these programs can help improve delivery of social services to individuals and families that have not yet been reached.

Provision of livelihood programs for Person with Disabilility

Land should be acquired where socialized housing units may be constructed. In order to house squatter households, approximately 1,500 additional housing units need to be constructed.

3.7 Protective Services

Goal

To promote and maintain a safe and peaceful community conducive for the City's growth and development.

Objectives

- 1. To maintain peace and order within the city's territorial jurisdictions.
- 2. To protect the citizens against potential source of fire occurrence that may be brought about by residential development and tourism-related activities.

Programs and Services:

Police Services

The City's peace and order situation is safeguarded by the Philippine National Police (PNP). The police force falls under the jurisdiction of the Department of Interior and Local Government (DILG) which holds office at the City Hall Complex. They are supported by Barangay Police Security Officers (BPSO). There is sufficient number of PNP uniformed personnel deployed in six (6) Police Community Precincts (PCPs) strategically located in various parts of the city equipped with mobile patrol cars and communication equipments. CCTV cameras are also installed in various road intersections to monitor traffic situation in the area and possible entries and activities of some lawless elements.

Fire Protection Services

The Bureau of Fire Protection (BFP) is mandated to protect residents from fire occurrence. Currently, there is also sufficient fire fighters equipped with fire fighting facilities and equipments including fire trucks, ladder –fire truck, communication equipments. The BPF Fire Station has transferred to the newly-constructed building at Foggy Heights Subdivision, Brgy. San Jose, Tagaytay City.

Driven and inspired by the efforts of the city government as one of the country's Most Child-Friendly LGU, the Tagaytay City Fire Station has customized the existing fire sub-station as an **Emergency Preparedness Learning Venue for Kids.** This is considered the first-ever **Fire Museum** in the country. Its main concept focuses on teaching the kids about the firefighter's job and what to do during emergencies. Children have to undergo different training stages as they start their skills enhancement journey with **Berong Bumbero**.

Disaster Preparedness

Section 12 of Republic Act No. 10121 known as the Philippine Disaster Risk Reduction Management Act of 2010, mandates the establishment of Local Disaster Risk Reduction Management Office (LDRRMO), in all Local Government Units including the barangays which shall be responsible in setting the direction, development, implementation and coordination of disaster risk management programs within their territorial jurisdictions.

Thus, Climate and Disaster Risks Assessment (CDRA) ought to be mainstreamed into Comprehensive Land Use Plan (CLUP) with the following purposes:

- 1. Better understand natural hazards and climate change and how these how these would likely alter the development path of the locality;
- 2. Understand risks posed by natural hazards and climate change on exposed areas, sectors and communities;

- 3. Identify priority decision area and development challenges posed by climate change and natural hazards;
- 4. Determine realistic projections on demand and supply of land;
- 5. Incorporate spatial development goals, objectives and targets to reduce risks and vulnerabilities;
- 6. Make informed decisions to effectively address risks and vulnerabilities;
- 7. Identify appropriate risks reduction and climate change adaptation and mitigation measures and inputs to the comprehensive development planning and investment programming.

3.8 Health and Nutrition

Goal

To make available comprehensive and integrated quality health services and facilities to the whole population.

Objectives

- 1. To build adequate modern health facilities in the City;
- 2. To make health facilities and services accessible to depressed and far-flung barangays;
- 3. To monitor health and nutritional status of pre-school population in order to eliminate malnutrition;
- 4. To promote preventive health care through intensified information education campaigns (IECs).
- 5.

Programs and Services:

Expansion /improvement of Existing City Hospital (Ospital ng Tagaytay)

A 40-bed primary City Hospital provides modern health care services to city residents and residents of nearly towns and municipalities of Cavite and Batangas Provinces. It is strategically located along Crisanto de Los Reyes Avenue (formerly Ipil Street). The facility consists of five (5) major departments/sections: Emergency, Laboratory, OPD, X-RAY/Ultrasound, Admin Office, etc. There is still the need to improve its services and the basic requirements of DOH for upgrading to secondary hospital. In order to augment health care services, a four (4) storey 49 bed-capacity hospital building will be completed and operational located along Aguinaldo Highway, Brgy. Maitim II East. Eventually, the hospital shall be categorized as 1st Level Secondary Hospital.

Health Monitoring

Monitoring of health status, specifically of pre-school children, should be regularly conducted. Community outreach activities such as "Operation Timbang" should be undertaken in the community/barangay level. The City Health Office and City Nutrition Office shall take the lead in the monitoring activities with the assistance of Barangay Health Workers, Barangay Nutrition Scholars and other volunteers.

Information Educational Campaign (IEC) on Health Care

Information Educational Campaign on preventive and alternative health care may be undertaken by the City Health Office. Through training programs, local residents would be equipped with a working knowledge on preventive and alternative health care. Use of herbal medicine may likewise be promoted.

3.9 Sports and Recreation

Goal

To build active and healthy citizenship through participation in sports, recreational and sociocultural activities.

Objectives

- 1. To provide and maintain adequate and affordable facilities for sports, recreational and socio-cultural activities;
- 2. To promote youth-oriented activities that bear socio-cultural relevance;
- 3. To promote healthy lifestyle/healthy-living.

Programs and Services

<u>City Public Park</u>

A Public Park shall be provided for residents where they can enjoy Tagaytay's cool climate. The proposed park (covering an area of about 2 has.) located adjacent to Tagaytay International Convention Center, should be surrounded by trees and should symbolize the City's commitment to preserve Tagaytay's environmental resources. It should likewise bear a historical mark that would rekindle the citizen's sense of history. The place is likewise intended to be a center for cultural activities.

Children's Playfield

Each residential subdivision should devote a specific area for playfields where children can engage in active and carefree activities. Facilities may include swings, slides, seesaw, as well as lanes for strolling.

The barangays should also allocate space for playgrounds for day care children.

4. ENVIRONMENTAL MANAGEMENT PLAN

4.1 Over-All Goals And Objectives

The City's most prized possession is its environment. However, proper measures have to be instituted so that all stakeholders shall be able to capitalize on this on a sustainable manner. Overall, adequate protection, management and enhancement systems are to be put in place to guide the City's growth. The delicate balance between progress and environmental integrity shall be achieved.

4.2 Terrestrial, Natural and Scenic Environment

Goals

- 1. To maintain the original natural land cover of areas' in the City that are suitable for sustaining ecological existence and growth.
- 2. To be a host in providing nature sanctuaries to various wildlife, flora and fauna for the purpose of protection and conservation.
- 3. To promote the appreciation of nature and ecology in the consciousness of the people and of the eco-tourism of potentials of the City.
- 4. To maintain a clean, comfortable and inviting environment for the residents and visitors complementing the nature-City theme.
- 5. To highlight the nature potential of the City and to enhance its natural assets for the enjoyment of the general public.

Objectives

- 1. To specifically designate areas for protection of endemic species as cooperative undertaking of the public and private sectors.
- 2. To formulate City ordinances that shall provide appropriate habitat for the development, growth, and propagation of endemic species.
- 3. To inventory sites that would be appropriate for nature sanctuaries.
- 4. To identify various arrangement of public and private sectors in providing sanctuary to various species.
- 5. To identify and designate a body that will spearhead the promotion of a nature, ecology, and eco-tourism potentials of the City.
- 6. To educate the people on the importance of maintaining ecological balance vis-avis economic activities.
- 7. To maintain garbage-free environment in the City especially in eco-tourism sites.
- 8. To provide measures to curb the increase of urban pollution problems.
- 9. To conduct an active campaign in establishing nature and recreational parks as priority undertaking of the public and private sector.
- 10. To adopt measures to improve and enhance the potentials of existing nature parks.

Programs

- 1. Conduct various workshops and trainings for caring and protection of endemic species. Multidisciplinary education, training and research on protection of endemic species.
- 2. Introduce a program of wildlife adoption by public and private sectors.
- 3. Designation of City budget for possible purchase of private lands for nature sanctuaries.
- 4. Continuous public and private sectors consultative workshops on partnering arrangement for establishment of nature sanctuaries.
- 5. Formation of a body to coordinate all nature conservation efforts and tourism activities of the City. This body shall also be concerned on maintaining a balance between economic activities and environmental protection.
- 6. To adopt a Local Environmental Code that would respond to the unique needs of the City.
- 7. Come up with a program of stopping the dumping of garbage in nature preserved areas.
- 8. Strict compliance with pertinent provisions of Clean Air Act.
- 9. Come up with City Nature Fund which can be formed from grants of various entities and fees and penalties from violators in nature reserved areas.
- 10. Program to prevent soil erosion in the developing areas on critical slopes.

Projects

- 1. Conduct feasibility study on qualifying and identifying sites for sites for endemic species.
- 2. Construction of necessary facilities to attract the formation, improvement and construction of habitat of endemic species.
- 3. Conduct feasibility study on establishment of sites for nature sanctuaries.
- 4. Establishment of technologically sound and environmentally accepted landfill.
- 5. Establishment and construction of nature parks in areas where settlement may be constrained.

6. Construction of necessary soil protection infrastructure or civil works especially in areas where landslides are imminent and adjacent to roadways and passes.

4.3 Water Resources

- 1. To provide sufficient, dependable and good quality water to the residents of the City.
- 2. To protect pristine sources of water for the entire City in line with nature conservation efforts.
- 3. To determine future sources of water and identify ways to protect and conserve them.

Objectives

- 1. To designate existing sources of water as protected areas, which shall be protected from human encroachment.
- 2. To optimize the utilization of water resource by proper source management and usage of necessary hydraulic structures and appurtenances.
- 3. To recognize the importance of managing the watersheds where sources depend on for recharge.
- 4. To consider the domestic needs as the priority use in the entire City.
- 5. To continue to explore new and better quality of water for future generations.
- 6. To locate future sources of water for other competing use in the City.

Programs

- 1. Conduct information drive and education on protection of water resource. People should be educated to regard water sources as a collective good and that its protection is for the good of everyone.
- 2. Introduction of regulation to penalize the unwarranted destruction and contamination of water source.
- 3. Introduction of periodic maintenance of hydraulic appurtenances.
- 4. Introduction of watershed management program which shall include reforestation, protection, conservation and enhancement.
- 5. Intercommunity efforts and arrangements in protecting common watersheds.
- 6. System of prioritization in allocation of water resource.

7.

- Projects
 - 1. Protective structures or fencing should be placed to prevent the unwanted encroachment of people and animals.
 - 2. Effective signages should be installed to notify future land developers of their locations.
 - 3. Replacement and rehabilitation of outmoded systems when necessary and if possible the use of environmental friendly technology.
 - 4. Inventory and identification of watershed area, local and regional aquifer system. This shall include geophysical methodologies.
 - 5. Geophysical survey of the water potential, including sampling for quality, for the entire City.
 - 6. Quality testing of surface water for non-domestic use.

4.4 Urban Environment

Goals

- 1. To preserve the natural environmental conditions of the City through proper zoning, location and management of economic activities.
- 2. To maintain a habitable and healthy urban environment through the provision of sanitary facilities and the introduction of anti-pollution measures.

Objectives

- 1. To establish developmental guidelines on environmentally constrained areas.
- 2. To implement the mechanisms of the Environmental Impact Assessment (EIA) as necessary guidelines for any future development.
- 3. To include Environmental Risk Assessment as necessary component in maintaining the environmental soundness of any development.
- 4. To have an efficient liquid waste disposal and treatment system for the City.
- 5. To adopt an efficient solid waste management, collection and disposal system for the City.

Programs

- 1. Intensifying activities related to urban forest, greenbelt areas and regreening.
- 2. Imposing appropriate ordinances to prevent littering in tourism areas.
- 3. Restriction of fixed structures in designated zones.
- 4. Possible reversion of ecologically aesthetic area from alienable and disposable land into public parks.
- 5. Program to control land speculation by instituting land-monitoring system by the City.
- 6. Establish a system of garbage sorting for easy separation and separation of recyclable from non-recyclable, biodegradable from non-biodegradable.
- 7. Program of maintenance of sewage canals and dislodging activities.
- 8. Require business establishments which generate a great volume of liquid wastes such hotels, restaurants, food-chains, etc. to install Sewage Treat Plant (STP). This measure shall greatly contribute in protecting our ground water source and ensure a sustainable potable water for the people of Tagaytay.
- 9. Program for declogging and maintenance of open canals.
- 10. Strict compliance and implementation of existing environmental laws and ordinances.
- 11. Adopt measures to reduce vehicle emissions in the City.

Projects

- 1. Physical delineations, signages and protective structures around protective areas.
- 2. Construction of efficient and sanitary toilet facilities with shared or dedicated septic chambers for sewage treatment.
- 3. Construction of sewage treatment plant wherever economically feasible.
- 4. Construction of viable sanitary landfill duly approved by DENR.
- 5. Construction of drainage system within the City.

4.5 Rural Environment

Goals

- 1. To maintain the natural pristine character of the rural areas of the City for the enjoyment of the City residents and the visitors.
- 2. To balance the environmental protection with agricultural activities in line with nature environment and sustainable development.

Objectives

- 1. To intensify reforestation efforts in forested rural areas.
- 2. To promote agro-forestry as an important strategy of utilizing the forested areas.
- 3. To minimize the use of inorganic chemicals in agricultural activities.
- 4. To promote environmental friendly activities in agricultural activities.

Programs

- 1. Reforestation of denuded areas with indigenous plant species.
- 2. Program of agro-forestry to promote maintenance and ownership of reforested areas.
- 3. Program of reduction of usage of inorganic and agrochemicals in agricultural activities.
- 4. Introduction of Sloping Area Land Technology (SALT) in sloping terrain to minimize soil erosion.
- 5. Prohibition of slash and burn approach in land clearing.
- 6. Prohibition of the use of herbicides in grass and weed treatment.
- 7. Protection of surface and groundwater from contamination by prohibiting the use of chemicals in land activities.
- 8. Formulation of the City Forest Land Use Plan

Projects

- 1. Construction of erosion control infrastructures to prevent erosion and landslides.
- 2. Construction of slope protection works.
- 3. Construction of river and stream works protection for prevention of soil erosion.

CHAPTER 4 DEVELOPMENT ADMINISTRATION

1. INTRODUCTION

This chapter prescribes an institutional arrangement to guide the implementation of the Tagaytay City Land Use Plan. Existing institutions and organizational structures, including their functions and linkages, and the processes involved in plan formulation and implementations are documented. Issues and problems are identified and possible solutions in the form of new policy directions and initiatives are outlined.

1.1 THE EXISTING ORGANIZATION

The present organization of the local government of Tagaytay is a divisioned structure with two (2) distinct branches: the Executive and the Legislative branches.

1.1.1 The Executive Branch of Local Governance

The Executive Branch is composed of eighteen (18) departments and eight (8) offices, which are divided into services, divisions, and sections. The City Mayor heads the organization; from him, all the executive authority and responsibility emanates. The City Administrator is positioned next in the executive hierarchy insofar as it exercises delegated authority from the City Mayor. He supervises the operations of line and staff departments, offices and units.

1.1.2 The Legislative Branch of Local Governance

The Vice-Mayor presides over the Sangguniang Panlungsod (SP) which is the policy- making body of the City. The SP is composed of the Vice-Mayor, the elected regular council members, the president of the city chapter of the "Liga ng mga Barangay", the president of the "Pederasyon ng mga Sangguniang Kabataan" and one (1) representative each from the women's sector and disabled persons. The Office of the City Secretary serves as the Secretary to the Council. It also provides legislative, administrative and secretarial support services to said body.

As the main policy-making body of the local government, the SP, among others enacts ordinances, approves resolutions, and appropriates funds for the general welfare of city residents. It likewise regulates activities related to the use of land, street, sidewalks, bridges, parks and other public places, and approves the construction of the same.

A unique feature of the SP in Tagaytay is that the councilors have their designated political jurisdiction known as the Councilor's Area of Responsibility (CAR). This serves as an extension of the Mayor's Office. It aims to rationalize ensure that public services is delivered efficiently, effectively and equitably. In this sense, the lead legislators also perform a policy implementation function. In addition, the councilors act either as chairpersons, vice-chairpersons and/or member(s) of regular committees of the city council.

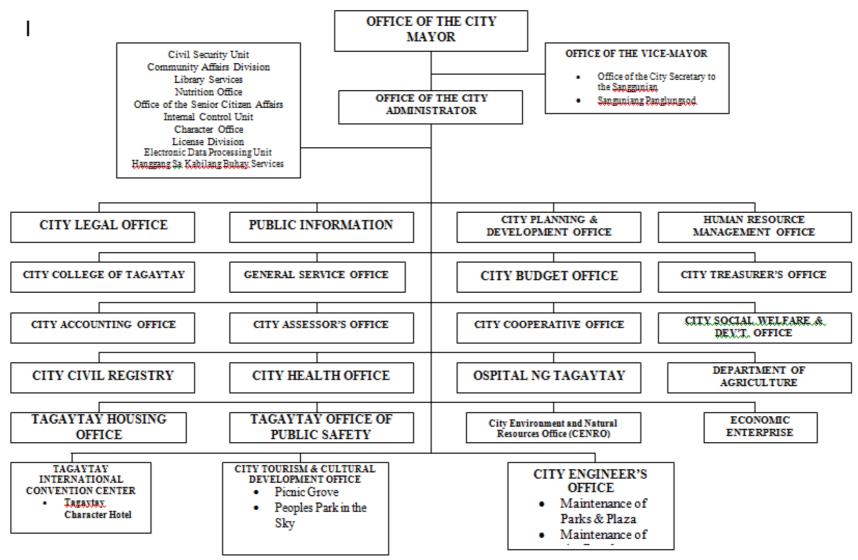


Figure 1. Organizational Chart of the City Government of Tagaytay

1.1.3 The Barangay

The basic political unit - the barangay - is the basic planning and implementing unit of the City Government. It is the forum where government policies, plans, programs, projects and activities in the community are discussed. It is where the collective views of the people may be expressed, crystallized and given due course and where contending claims may be amicably settled.

With the aim of accelerating development through democratized governance and decentralization, Republic Act No. 7160, otherwise known as the Local Government Code of 1991, was enacted. With this law, barangays were granted more powers and prerogatives. Barangay officials are deemed persons in authority in their respective jurisdiction; hence, they are mandated to maintain public order and ensure the protection of life, liberty, and property, including the appurtenant rights and interests related thereto.

1.1.4 National Government Agencies

Several national government agencies and instrumentalities have branch offices operating in the City. Enumerated below are such City-based agencies and their respective mother units.

Regional Trial Court (under administrative supervision of the Supreme Court);

City Prosecutor's Office (Department of Justice);

City Trial Court (under administrative supervision of the Supreme Court);

City Auditor's Office (Commission on Audit);

Philippine National Police/Fire Department (under operational control and supervision of the City Government, subject to direction of the Department of Interior and Local Government;

Registry of Deeds (coordination with Land Management Bureau and the Land Registration Authority)

Other national government agencies that provide services to the City's residents through their field offices include: the Philippine National Red Cross, the Bureau of Internal Revenue, the National Bureau of Investigation, and the Bureau of Posts.

Under the Local Government Code, numerous functions of national government agencies have been devolved to local government units (LGUs). In Tagaytay City, these functions have been absorbed by its government offices as shown in Table 10.

Tuble 10. Devolved Functi		
NATIONAL AGENCY	DEVOLVED FUNCTION	CITY OFFICE
Housing and Land Use	Approval of subdivision plans and	Subdivision
Regulatory Board	the determination of conformance	Administration, under
(HLURB) now	of horizontal and vertical projects	the Office of the Mayor
Department of Human	to administrative guidelines and	
Settlements and Urban	standards, including statutes and	
Development (DHSUD)	rules	
Land Transportation Franchising and Regulatory Board (LTFRB)	Accepts and recommends to the Tricycle Franchising Board (TFB) the approval of applications for Motorized Tricycle Operator's Permit (MTOP/ Franchise), cancellation of said MTOP, change of ownership of a tricycle unit,	Tricycle Regulation Unit (TRU)

Table 10. Devolved Functions

NATIONAL AGENCY	DEVOLVED FUNCTION	CITY OFFICE
	amendment and renewal or	
	termination of such franchise.	
Department of	1.) Technology transfer through	Office of the City
Agriculture	extension services	Agriculturist
	2.) Assistance in the procurement	
	of species adaptable and	
	appropriate to its determinate	
	purpose.	
	3.) Immunization of livestock, and	
	improvement of animal husbandry	
	4.) Assistance in the procurement	
	and dispersal of fingerlings, and	
	aquaculture	
	5.) Capability-building of	
	cooperatives and associations in	
	order to foster development.	
Department of Social	Social development and assistance	Office of the City Social
Welfare and	to marginalized sectors, the urban	Worker
Development (DSWD)	poor, the disabled, women and	
	children through the establishment	
	of day care centers, advocacy of the	
	rights of the poor and provision of	
	necessaries and services	
Department of Health	Establishment and operation of	Office of the City Health
(DOH)	health care centers, maternity	Officer
	lying-in hospitals, clinics for	
	sexually transmitted diseases,	
	laboratories, mobile clinics, etc.; Provision of guidance counselling,	
	immunization, and nutrition	
Department of	Implementation of the Anti-Smoke	Pollution Control Unit of
Environment and	Belching Program through the	the Environmental
Natural Resources	apprehension of owners of	Sanitation Office
(DENR)	pollutive vehicles	Samtation Onice

2. LOCAL SPECIAL BODIES

The Local Government Code or R.A. No. 7160, created various offices for the participation of the people through their "non-governmental organization" or "NGO". They are shown in Table 11. These bodies perform an "advisory" function to the Sanggunian in respect to priority programs and projects to be implemented.

Table 11. Office Organized under K.A. No. 7160		
LOCAL SPECIAL BODIES	FUNCTIONS	
City Health Board	Serves as an advisory committee to the	
	Sanggunian concerned on health issues, and	
	the application of appropriations for public	
	health	

Table 11. Office Organized under R.A. No. 7160

LOCAL SPECIAL BODIES	FUNCTIONS
City Development Council	Assists the Sanggunian in charting the
	direction of socioeconomic development, and
	ensuring synergy in formulating plans and
	implementing projects and programs in a
	manner consistent with the ideals of
	sustainable development
Pre-Qualification, Bid and Awards	Primarily responsible for the conduct of
Committee (PBAC)	public biddings for construction projects,
	including the evaluation of the same, and the
	recommendation of awards for the
	implementation of infrastructure programs
City School Board	Serves as an advisory committee of the
	Sanggunian anent matters akin to the
	promotion of quality education, and the
	appropriation of funds therefor
City Peace and Order Council	Formulates plans and recommends measures
	to improve public safety and public order

3. POLICY RECOMMENDATIONS

3.1 MORE EFFECTIVE LINKAGE AMONG LOCAL PLANNING ACTIVITIES

A stronger linkage between the comprehensive development plan, the land use plan and investment programs must be institutionalized in order to maximize benefits to Tagaytay residents. In this connection, the ideal linkages as envisioned by the study team and demonstrated in the current project are presented in Figure G. The linkage has two basic processes that relate to the city comprehensive development plan. On the one hand, the comprehensive development plan must serve as the basis for the development of a land use plan. In turn, the land use plan provides the framework for the formulation of the zoning ordinance. The land use plan and the zoning ordinance would then be the main basis for the preparation of development regulations which would then guide private sector investments and activities.

Consequently, the comprehensive development plan serves as the main source of project ideas and multi-year investment programs. In turn, the investment program becomes the basis for the preparation of an annual budget. Given a budget, projects could then be implemented and project outcomes would have a pump-priming effect on local investments. Although not explicitly depicted in Figure 4.2, it is noteworthy that plans and programs at the city level must be vertically linked to plans and programs at higher levels (provincial, regional and national).

3.2 STRONGER LINKAGE BETWEEN CITY PLANS AND SECTORAL PLANS

Similarly, the linkages between sectoral master plans and city plans are just as weak. Although the roles of national government agencies (NGOs) in the identification and management of specific land use categories are generally well delineated, there is often little coordination between these agencies and the city government in respect of its land use planning activities. The consideration of existing sectoral plans is not evident in the existing land use plan of Tagaytay. In this connection, the ultimate test of linkage and integration is that such sectoral master plans must be incorporated as legal pronouncements of LGUs in local land use plans and zoning ordinances.

The major reason for this state of affairs is the rather weak mechanisms for linkage and integration. Presently, the main administrative mechanism for linkage is supposed to be a hierarchy of interagency land use committees at the national and regional levels as shown in Table 12.

LEVEL	COORDINATING BODY	MAIN RESPONSIBILITY
		Preparation of NPFP; formulation of
National	National Land Use Committee	national land use standards and
		guidelines
		Preparation of the RPFP; Review of
Regional	Regional Land Use Committee	physical framework and land use plans of
		provinces and cities
	Provincial Development	
Provincial	Council acting as Provincial	Preparation of the PPFP; Review of
FIOVINCIAI	Land Use Coordinating	municipal land use and zoning plans
	Committee	
	City Development Councils	Preparation of city/ municipal land use
City	acting as City Land Use	and zoning plans and monitor
	Coordinating Committees	implementation

Table 12. Coordinating Mechanisms

*As provided in the draft National Land Use Act (NLUA)

The National Land Use Committee (NLUC) and the Regional Land Use Committees (RLUCs) are multi-sectoral in composition. The NLUC is composed of the Deputy Director-General of the NEDA Secretariat (Chairman); the Undersecretary of DENR (Co-Chairman); the undersecretaries of the member agencies (DA, DAR, DILG, DOTC, DTI, DOT and DPWH); the Secretary-General of the HUDCC; the Administrator of the NAMRIA; the Chief Executive Officer of the HLRB; and the Executive Director of the National Water Resources Board.

The regional counterpart of the NLUC is the RLUC and is headed by the Regional Director of the NEDA Secretariat (Chairman) and the Regional Executive Director of the DENR (Co-Chairman) respectively. The members include the regional heads of the NLUC member agencies and the regional representatives of the Leagues of Provinces, Cities, and Municipalities.

Under the proposed National Land Use Act (NLUA), the Provincial Development acts as the Provincial Land Use Coordinating Committee (PLUCC), and the City and Municipal Development Councils as the City or Municipal Land Use Coordinating Committee (C/MLUCC). These local land use committees are mandated to prepare and periodically update land use and zoning plans as well as monitor the implementation of the zoning ordinance.

The main instrument for the integration and synchronization of spatial and a land use plan is a hierarchy of physical framework and land use plans. With the NPFP at the national level, the RPFP at the regional level, the PPFP at the provincial level and the city/municipal land use plans at the city and municipal level, this organization corresponds to the land use committees at various levels. Under this system, higher level physical framework plans are to provide the basis for the

preparation of lower level physical framework and land use plans. In short, lower-level plans should be consistent with the goals and objectives of higher level plans.

Moreover, sectoral and special land use plans are to be prepared in the context of physical framework plans at various levels.

On paper, the mechanisms for linkage and integration appear straightforward. In Tagaytay, however, the linkages are not clear-cut and apparent. There seems to be at least two reasons for this state of affairs: the non-activation of the City Land Use Committee and the current low capacity of the CPDO for comprehensive development and land use planning.

It is, therefore, recommended that a City Land Use Committee (CLUC) be fully and immediately activated for Tagaytay. It shall be composed of the members of the City Development Council, representatives of local sectoral agencies, as well as representatives of NGOs and the private sector. The main function of the CLUC is to periodically update the land use and zoning plans of the city, monitor their implementation, as well as ensure their consistency with sectoral land use plans and the provincial physical framework plan.

Supportive of this strategy, the CPDO should serve as the secretariat of the CLUC and consequently must absorb the functions of zoning administration, which is currently lodged with the Office of the Mayor. In this connection, the capacity of the CPDO for comprehensive development and land use planning should be strengthened. In the short-term, technical assistance to the CPDO should be extended.

CHAPTER 5 INVESTING IN AND FINANCING THE REALIZATION OF THE PROPOSED COMPREHENSIVE LAND USE PLAN

1. INTRODUCTION

The decentralization process centered on the 1991 Local Government Code (LGC) presents opportunities to cities like Tagaytay for expanding local community participation in the development process; improving the delivery of basic services, infrastructure and facilities at the local level; and increasing local resource mobilization. Tagaytay City has been reacting positively to the challenges of decentralization in a broad-based partnership with its constituency. The process has not yet stabilized and the city still needs to strengthen its ability to effectively respond to the challenges of rapid urbanization.

2. CITY EXPENDITURE GROWTH AND ALLOCATION PATTERNS

Local government budgets increase with urbanization since the associated high population densities generates externalities which need to be addressed through public regulation and public involvement in service provision, for example, urban transport and traffic management, infrastructure services, sanitation, public health, public safety, local housing, and even public service employment.

A recent study on Philippine urban finance has clearly established that urbanization is associated with increases in LGU expenditures.

Local Expenditure of the city in the last five (5) years indicating the corresponding increase of budget allocation per year is presented at follows:

Table 13. Five Year Local Expenditures		
YEAR	AMOUNT (in Pesos)	INCREASE (%)
2016	809,352,791.00	
2017	868,739,660.00	6.83%
2018	975,631,309.00	11.0%
2019	1,080,261,623.00	9.68%
2020	1,182,075,208.00	8.61%

Table 13. Five Year Local Expenditures
--

In 2016, General Public Services (51.94%), Economic Services (15.82%) and Social Services (9.76%), respectively, appeared to be the top three (3) services with the largest budget share allocation. This trend has been maintained in the last five (5) years and expected to continue in the succeeding years.

2.1 **REVENUE DIMENSIONS OF CITY DEVELOPMENT**

In Tagaytay City, it is very clear that urbanization will continually pressure the LGU budget by driving up expenditures. Between 2016 and 2020, city revenues increased at an annual growth rate roughly commensurate to the increase in expenditures from P809 million in 2016 to P1.18 billion in 2020. On the whole, it would appear that changes in city revenues, particularly locallyraised revenues would determine the ability of the city government to expand and improve the quality of its services.

The efficiency of city governments in raising revenues can be judged based on the following four criteria:

- 1) The cost of providing local services should be recovered to the extent possible, from charges on the beneficiaries.
- 2) Services whose costs cannot be recovered from charges should be financed from general taxes.
- 3) Social services, whose benefits generally spill over to produce national benefits, should be financed by grants from the national government.

These three (3) efficiencies criteria suggest that general urban services should be financed by local taxes; and social services should be supported by national government grants.

Percentage of Total Revenue	% Share
Local Taxes	37.24%
Internal Revenue Allotment (IRA)	38.0%
Operating and Miscellaneous	22.81%
Other Sources of Revenue	1.94%

 Table 14. Revenue Shares, By Major Categories, Tagaytay City: 2020

2.2 FISCAL CONSTRAINTS AND OPPORTUNITIES

Tagaytay City must generate a greater share of total revenues than it does at present if it is to play a more significant role in the economic development process.

City expenditures must increase sufficiently for the City Government to effectively deal with the existing deficit in services, and probably, even hold the absolute levels of public service constant. Otherwise, the City constituents will have to bear with roads not being properly maintained, public markets and slaughterhouses in very unsanitary and even deteriorating conditions, drainage systems clogged with debris, the solid waste system not able to cope up with increasing demands, and various signs of unmet and even deteriorating local public services.

On the revenue side, the growth in population and per capita incomes could be expected work to enlarge the revenue base of the city government. The base has largely remained untapped largely because of lagging revenue efforts. As a result, revenues have not improved to the extent required to properly upgrade and even just maintain service levels. This situation will not significantly change unless reforms are made to bring revenue growth more in line with expenditure requirements.

The problem of an urban fiscal gap can be approached through:

- increased local revenue efforts with or without increased revenue authority;
- increased central government transfers; and
- reduced local expenditure responsibility.

The second approach is not feasible given the budgetary deficit problem of the national government. Local expenditure responsibility can no longer be reduced further with impairing the living standards and the economic productivity of Tagaytay City. The only feasible approach is the first one–increased revenue effort.

Overall Framework for The Promotion Of Fiduciary Responsibility

Similar to other LGUs in the Philippines, the key obstacles toward the improvement of local government financial management systems in Tagaytay City include:

Negative Inertia --- Efforts toward improvement of financial management systems are hampered by the fact that it involves going against the grain more than 20 years of thoroughly entrenched negative inertia. Existing systems are largely iniquitous in that they do not recognize, much less reward, good fiscal performance nor penalize non-compliance;

Antiquated and Cumbersome Systems and Approaches ---- The efficiency of existing systems, as well as any attempts at introducing improvements or innovations, is inhibited by the use of cumbersome and antiquated systems and forms that were dumped on the local finance officials with virtually no technical support. As a result, few officials have a strong conceptual grasp as to how interrelated systems, processes and forms are part of the overall financial management of local government, or significantly, how these can be utilized "intelligently" and to full effect;

Lack of Appreciation of Available Options and Key Concepts – at the local level there is a lack of systematic appreciation of what is involved in weighing the technical and political "trade-offs" for effective local financial management. Few, it would appear, are fully conversant in a process that requires a familiarity with the "push" and "pull" of these forces --- the technical and political --- on both the selection of tools and approaches and their implementation under an overall financial management system. Additionally, there seems to be little understanding of the importance of dynamic self-sustaining systems and approaches that respond flexibly to everyday realities. In effect, local officials are not grounded in the key concepts behind approaches (such as user charges and cost recovery), thus the result is poorly implemented "improvements" that fail to improve the system;

Lack of Dialogue and Information Sharing – A notable impediment appears to be the continuing failure of local officials to share ideas, innovations and problems among themselves in the areas of revenue mobilization, budgeting, credit finance, and capital investment programming. In an environment characterized by a lack of an institutionalized system of internal dialogue (legislative-executive and intra-executive) at the local level, real opportunities and the potentials of synergy are foregone.

There can be no "magical" solutions as the history of Philippine fiscal reforms shows that major proposals rarely have a chance for adoption and implementation for the following reasons:

- Policy-makers and citizens have a tendency to resist major changes in the economic environment;
- Most major fiscal reforms are associated with substantial unexpected losses among the high income classes while windfalls are likely to be spread over a larger number of less well-off people;

- Local politicians usually adopt a "culture of expediency" when it comes to politically risky fiscal reforms; and
- Major fiscal reforms get bogged down in a three-way debate over credit, turf, and operating procedures involving the Department of Finance (DOF), the Department of the Interior and Local Government (DILG), and the local governments.

A gradual and stepwise adjustment of the existing structure toward a more desirable state is perhaps the best that can be hoped for. The adjustments should however involve a package of cumulative and mutually consistent reforms so that no matter what time phasing is adopted, an improvement in the state of affairs will come about.

Cumulative And Mutually Consistent Fiscal Reform Package

Local fiscal reforms in Tagaytay City should aim at:

- increasing the amount of financial resources available to the city; and
- improving local technical and administrative capabilities to manage such financial resources to service not only the city's routine administrative costs but also a wider range of service and capital improvement needs.

Three key areas of urban financial management need to be strengthened

- Fund Mobilization;
- Budgeting; and
- Cash Management

Improvements in these areas will firmly establish the fiscal integrity of the city government of Tagaytay. Funds need to be mobilized to finance urban development; sound budgeting practices need to be established to ensure optimum resource allocation; and prudent funds (cash) management tools need to be institutionalized so as to protect public funds.

Fund Mobilization

The City Government needs to:

- improve the collection of existing taxes;
- increase direct cost recovery; and
- access the local credit market responsibly.

City tax collection should focus on existing taxes through the improvement of the following areas:

- Eliminating administrative inefficiencies to lower transaction costs;
- Improving records management including the setting up of integrated tax rolls to facilitate the tracking of tax bills and performance monitoring of collectors;
- Developing and applying "presumptive income levels" to help cities assess the gross annual receipts of business for business tax purposes;
- Defining collection norms for treasury personnel including costs of managing and collecting various types of taxes;
- Developing and applying performance incentives for tax collection; and
- Institutionalizing a system, which will regularly publicize city tax evasion enforcement activities.

The City Government need to move toward linking payment to local government for the provision of services through user fees, for example, garbage collection fees for residences as well as business establishments. The City Government needs to focus on the following reforms:

Determining, setting, and monitoring cost recovery oriented user fees for markets, slaughterhouses, and garbage collection; and

Developing the effective use of special levies to recover part of (up to 60%) the costs of local roads, drainage, and other local infrastructure projects.

Pricing the issuance of property development permits to include not only the normal service charges related to the issuance of the permit but also an amount to recover 1) local development planning and monitoring expenses, and 2) and an amount to recover the imputed cost of the impact of the development on the existing local resource base. The City Government should probably review its current formula.

Debt financing is required to support costly but long-life urban capital programs since 1) it lightens the financial burden during the project year(s); and 2) it allows the payment of the cost to be shared by future users promoting "intergenerational equity". There is a large scope for utilizing loans in rapidly growing urban areas like Tagaytay City, where the economic base (and therefore the revenue base) and the demand for infrastructure and services is growing.

To further encourage potential institutional lenders to increase its financial exposure to the City Government of Tagaytay, the local government needs to:

- set up financial statements that are comparable to those used by financing institutions moving towards the direction of establishing balance sheet systems of fiscal management; and
- develop the capability to prepare cohesive investment proposals for bankable urban projects.

Budgeting

Given the limitation in resources and the diverse needs facing the city government, the annual budget should be an important instrument to highlight priority activities and investments, thus, assuring their full funding. The current city budget is largely generated from a "procurement process" which is, in effect, no plan at all.

The ultimate objective should be for Tagaytay City to develop and institutionalize a budget process that will enable people to vote on the package of services and investments for which they would be willing to pay in taxes, fees and charges, and would hold local officials accountable for the provision of these services and investments.

The city budgeting process need to be effectively centered around the Local Finance Committee (LFC) to ensure coordination between planning, budgeting and treasury.

The City LFC need to be strengthened technically and organizationally for them to credibly determine and recommend to the City Chief Executive:

- Appropriate size of the budget; and
- Composition of the budget.

Cash Management

City cash management practices need to be improved to (1) minimize wastage in procurement; and (2) ensure "timeliness" in fund disbursements. Specifically, Tagaytay City should aim at:

- lowering the transaction costs for city procurements; and
- ensuring the matching of expenditure requirement with fund availability.

The institutional capability of city fiscal staffs can be developed by strengthening (1) the personnel and (2) the technical and administrative tools available to them.

Human Resource Improvement Program

Upgrade staff skills or hire new staff skilled in property valuation.

(Staff should be able to effectively make an analyses of RPT records and generate meaningful reports such as analyses of variances, trend analyses, etc. that will be useful for taxation purposes.)

Coordinate with the League of Cities of the Philippines (LCP) for key city officials to visit, observe, and learn from other Philippine cities where there are success LGU tax collection stories.

(Tagaytay City officials can either visit these cities or the officials responsible for these success stories can be invited to Tagaytay City as resource persons.)

Organize orientation seminars followed by on-the-job-training on basic planning and forecasting techniques including the preparation of budgets, financial plans, and feasibility studies. Such training activities can be implemented through the various local government leagues.

Tagaytay City could invite resource persons from the National Economic and Development Authority (NEDA)'s regional development staffs and other offices like the D1LG, the DOF, and the DPWH and from the academe as well as the private sector to orient them on the preparation of bankable capital investment programs rooted on realistic and sustainable local development plans.

Beef up the human resource and systems capability of the Office of the Local Planning and Development Coordinator through the training of existing staff and the hiring of experienced professionals.

Resource persons from national agencies like the Department of Human Settlements and Urban Development (DHSUD) as well planning practitioners from the private sector and the local academe can help give orientation and training on LGU land regulatory functions.

Information Management Tools

Convert existing data and new local-level and locally generated census data on real properties, taxpayers, and business establishments into an integrated computerized database system to be shared by the Assessor, Treasurer, and other officials involved in revenue generation.

This proposed system will improve revenue collection service standards by: (1). Processing tax payments promptly without depending on taxpayers' personal records; (2). Generating a delinquent taxpayers list at the end of each tax season for prompt and accurate service of delinquency notices; (3). Generating summary reports and analyses of variances as well as historical trends; (4). Profiling taxpayers, particularly the big ones; and (5). Generating support data requirements for conducting field inspection and examination.) Convert current and historical accounting data on budgets, receipts, and disbursements into an integrated

computerized database system to support planning, budgeting, and management performance reporting.

Decision making for local planning purposes will be facilitated if the required information can be delivered in a timely and cost-effective manner to the appropriate decision-makers.

Phased integration of all relevant maps and databases around a Geographic Information System (GIS) for use in city development planning

The internal consistency of city plans as well as major city development decisions will be much easier to ensure within a GIS framework. The initial digital maps developed by the Consultant team in connection with the preparation of the land use plan can serve as a take-off point for future city GIS activities.

The management, manpower, organization, and systems/procedures recommendations outlined here can only produce positive results if they are applied by the city as a package. One missing component can hinder the full achievement of positive results that will arise from the application of the other components.

2.3 THE TAGAYTAY CITY CIP

The role of the Capital Investment Program (CIP) is to harness financial and organizational resources to improve major long-lived capital assets within an LGU in the pursuit of such politically chosen goals as alleviation of community problems and provision of community needs.

Local government capital investment programming takes place in an economic, legal, political and organizational setting, and is part of the overall development planning-investment programming-budgeting-project implementation cycle of Philippine LGUs. (*See Figure # 9*). This cycle is constrained by the 1991 LGC, relevant state accounting regulations, local ordinances, accepted standards, and local tradition.

The CIP acts as the long-term financial blueprint for the realization of Tagaytay City's developmental goals, including its desired spatial structure. Coordinating the CIP with the city development plan and the annual budget process forces the city development and legislative councils as well as the City Mayor to look into long-range developments and their implications for costs, service provision and ultimately, the growth and spatial structure of the city.

Financing Aspects

The city is adopting a thoroughly self-reliant stance towards local project financing, and minimally relying on national government and foreign grants.

The Tagaytay City Government intends to cash in on the tremendous increase in the city's property values as well as the increased business activity brought about by the influx of visitors to the City.

The city plans to effectively and efficiently tap these local revenue sources through a reengineering of its local revenue administration system along the general lines suggested in Section 5.3 of this chapter via the implementation of the following components:

- Computerization of a streamlined system of local tax base identification, assessment, and collection;
- Skills upgrading of local; staff;
- Aggressive tax information campaign;

Periodic review and amendment of the local tax code; and Tie-up of improved tax collection to better city facilities and services for the city's constituents.

Specifically, the City Government plans to focus during first three years (2020-2023) on the following key local tax items

1) Real Property Tax (RPT) – The City intends to implement the Tagaytay's newly approved schedule of fair market values which took effect in 2018; improve tax collection through aggressive tax drives including the use of administrative and judicial remedies on delinquent taxpayers. These efforts along with the implementation of Impact Fee Ordinance are expected to remarkably boost the city's RPT collection within the planning period.

2) Tax On Goods and Services. The City intends to create a unit under the City Treasurer, which shall examine the books of accounts of business establishments within the City. This will be done to counter-check the veracity of the sworn declarations of business income that serve as the basis of business tax computations. The City particularly intends to focus on hotels and other tourism-related establishments. The City intends to achieve an annual increase in business taxes in the succeeding years.

3) IRA and Other National Government Grants – The IRA of the City has marginally increased in the last five years (2016-2020).

2016 : 292 million

2017: 330 million (11.51% increase) 2018: 358 million (7.82% increase)

2018: 358 million (7.82 % increase)

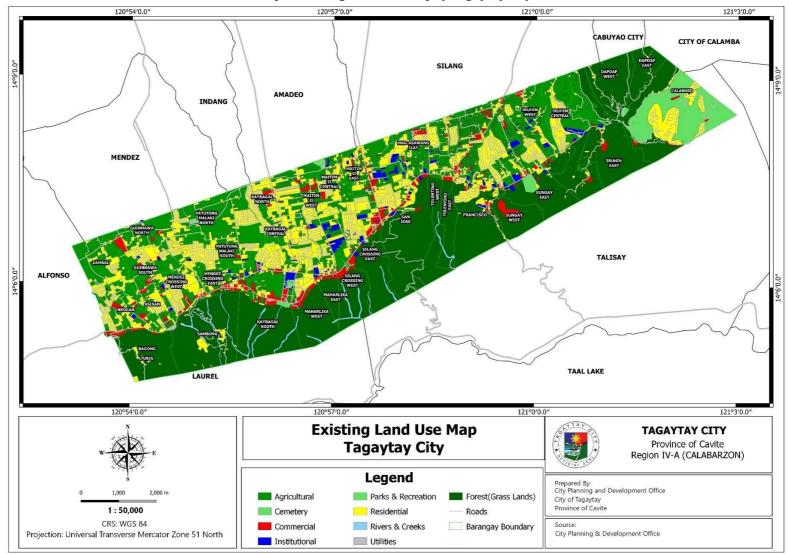
2019: 395 million (9.36% increase) 2020: 449 million (12.02 % increase)

- 2020: 449 mmon (12.02 % mcrease)
- 4) **Non-Tax Revenues –** Non-tax revenues are projected to increase by 10 to % in the next five (5) years (2020-2024) and 12% in the succeeding five (5) years (2025-2029), respectively.

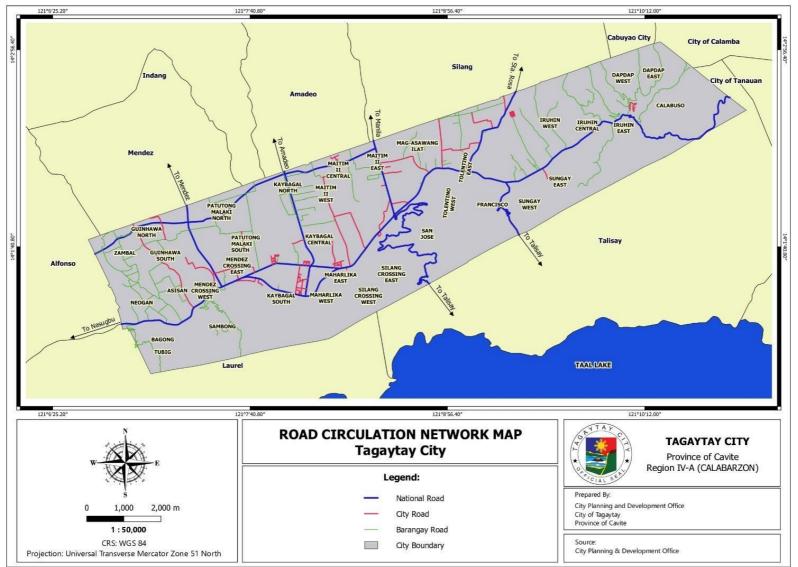
YEAR	AMOUNT	Percentage Increase
2020	741,775,404	10%
2021	815,952,999	10%
2022	897,548,299	10%
2023	987,303,129	10%
2024	1,086,033,441	10%
2025	1,216,357,454	12%
2026	1,362,320,348	12%
2027	1,525,798,789	12%
2028	1,708,894,643	12%
2029	1,913,962,000	12%

Table 15.	Non-Tax Revent	ue Proiection
Tuble 101	non runneven	

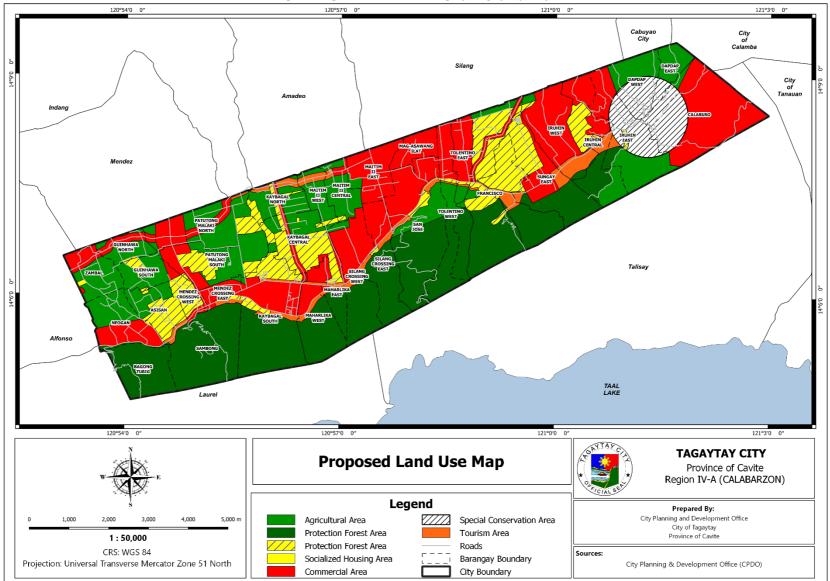
Tagaytay City



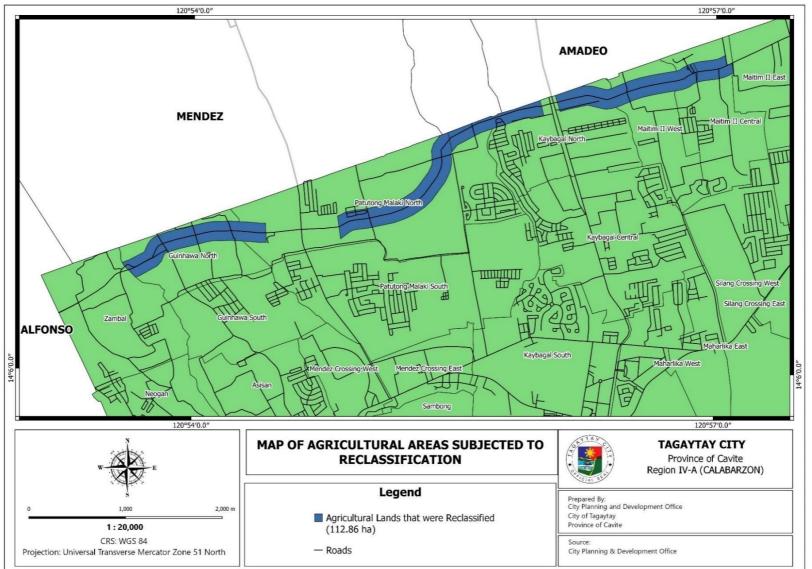
Map 1. Existing Land Use Map of Tagaytay City



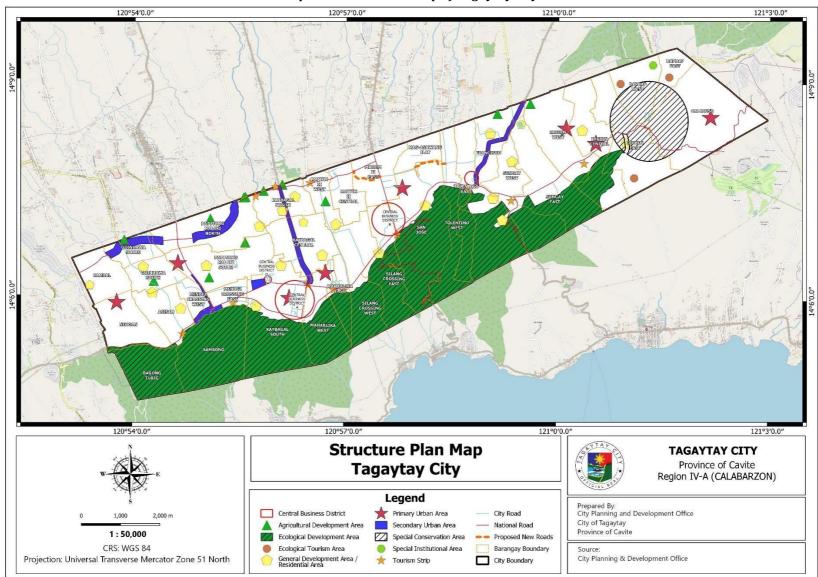
Map 2. Road Circulation Network Map of Tagaytay City



Map 3. Proposed Land Use Map of Tagaytay City



Map 4. Map of Agricultural Areas Subjected to Reclassification



Map 5. Structure Plan Map of Tagaytay City

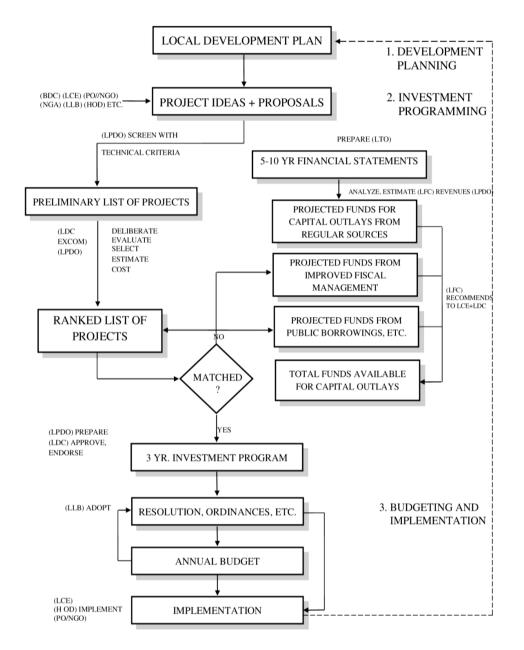


Figure 2. Cip Process as Part of The Development Planning-Investment Programming-Budgeting and Implementation Cycle

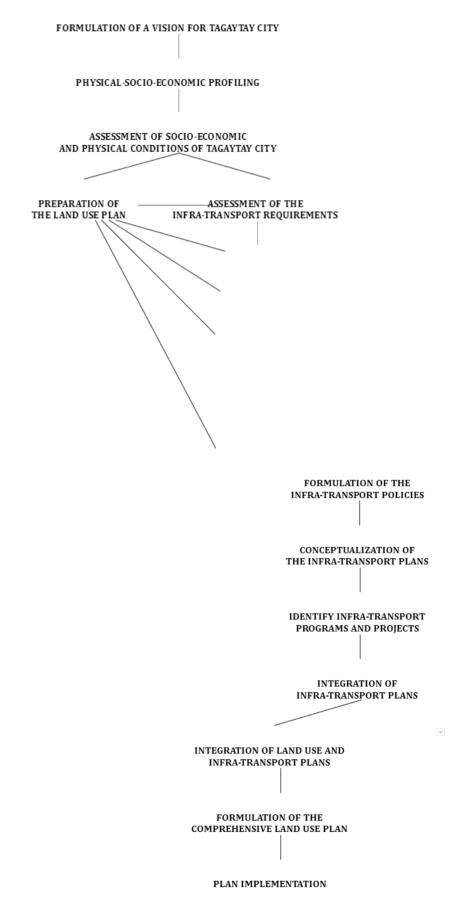


Figure 3. Conceptual Approach in Infrastructure and Transportation Planning

Figure 4. City Planning and Development System

