

Republic of the Philippines

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Japan International Cooperation Agency (JICA)**

**METRO MANILA
URBAN TRANSPORTATION
INTEGRATION STUDY**

TECHNICAL REPORT NO. 3

**URBAN / TRANSPORTATION
DEVELOPMENT CONDITION
IN ADJOINING AREAS**

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mmutis

MMUTIS STUDY TEAM

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LIST OF ABBREVIATIONS

ADB	-	Asian Development Bank
CALABARZON	-	Cavite, Laguna, Batangas, Rizal and Quezon
CPLUP	-	Comprehensive Provincial Land Use Plan
DOTC	-	Department of Transportation and Communications
HLURB	-	Housing and Land Regulatory Board
MARILAQUE	-	Manila, Rizal, Laguna and Quezon
MCCR	-	Manila Cavite coastal Road
MCX	-	Manila CALABARZON Express
NFTC	-	North Terminal Food complex
NLE	-	North Luzon Expressway
NTPP	-	National Transportation Planning Project
OECD	-	Overseas Economic Development fund
PNR	-	Philippine National Railways
PPFP	-	Provincial Physical Framework Plan
SLE	-	South Luzon Expressway
SLEEP	-	South Luzon Expressway Expansion Project

1. URBAN DEVELOPMENT TREND

1.1 Bulacan

1.1.1 Facts

Capital	:	Malolos
Area	:	2,625 sq. km.
Population	:	1,784,441 (1995); 1,505,219 (1990)
Cities	:	none
No. of Municipalities	:	24

1.1.2 Location

Bulacan lies on the southeastern part of Luzon. It is bounded in the north by the province of Nueva Ecija, on the east by Aurora and Quezon, on the west by Pampanga and on the south by Rizal, Metro Manila and the Manila Bay.

1.1.3 The Land

The western half of the province is generally flat and is drained by the Angat and Pampanga Rivers. Part of this area touches the extensive Candaba Swamp running along its boundary with Pampanga. The lower portion ends in the limited coastline along Manila Bay.

The eastern half of the provinces rises towards the foothills of the Sierra Madre mountain range. Mount Orio, rising 1,170m. above sea level, is Bulacan's highest peak.

Like the rest of Luzon, Bulacan's climate consists of two pronounced seasons: dry from November to April and wet for the rest of the year.

1.1.4 Demographic Trend

The population of Bulacan, according to the 1995 Census of Population, is 1,784,441. This figure is higher by 18.6% from 1,505,219 recorded in 1990. San Jose del Monte is the most populated with 201,394 followed by Malolos (147,414) and Meycauayan (137,081).

1.1.5 Commerce and Industry

The province of Bulacan is slowly becoming an industrialized area. Its proximity to Manila gives it the advantage as a favored site for industrial establishments such leather tanning, cement bag making, ceramics, food processing, shoemaking and many others.

Majority of its people, particularly in the rural areas, are still dependent on agriculture for their livelihood. Palay is the predominant crop grown in the province, followed by corn, vegetables and fruits.

There are five (5) industrial estates in the province. However, they are rather small and agro-industry based (Table 1.1). The province's own vision of an industrial park, the North Food Terminal Complex (NFTC), will soon rise in a 130 ha. area in Bocaue which will act as a depot and distribution center for food and agricultural products coming from the northern provinces of Luzon. Table 1.2 gives an overview of the Project and Figure 1.1 shows the project site.

**TABLE 1.1
 BULACAN INDUSTRIAL ESTATE**

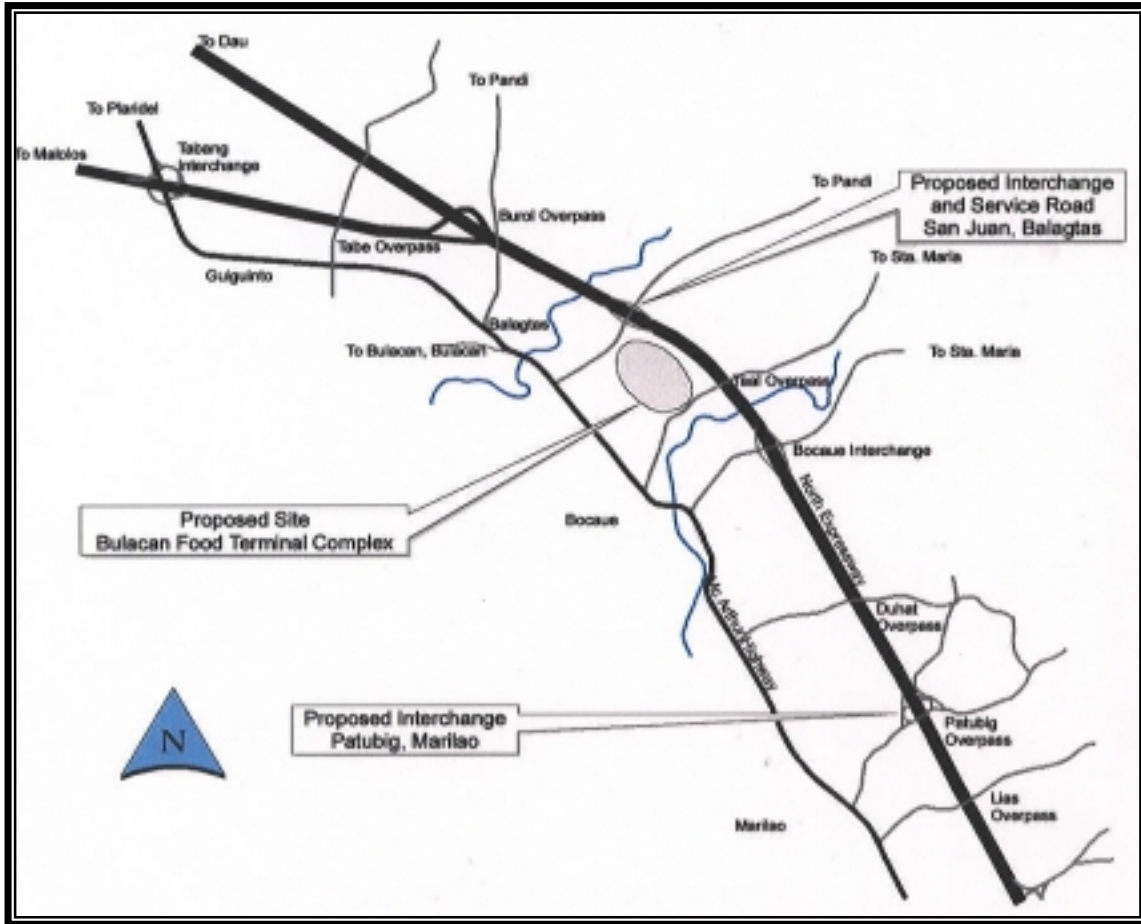
Name	Location	Land Area	Status
Bulacan Agro-Industrial	Calumpit & Malolos	10 has.	Pre-operational
First Bulacan Industrial City	Brgy. Tikas, Malolos	51.7 has.	Operational
Inter-City Industrial Estate	McArthur Highway, Wakas, Bocaue	12 has.	Operational
Meycauayan Industrial Subd.	Meycauayan		Operational
Sapang Palay Industrial Estate	Sapang Palay, San Jose Del Monte	19.65 has.	Operational

Source: BOI

**TABLE 1.2
 OUTLINE OF THE BULACAN NORTH FOOD TERMINAL COMPLEX**

Proponent	Provincial Government of Bulacan
Objectives	<ol style="list-style-type: none"> 1. Promote proper handling, packaging and processing of food produced in Bulacan and other northern provinces 2. Provide an ideal and well-developed site for food-related industries 3. Give the impetus for Bulacan to generate business and employment opportunities
Location	The NFTC will be put up on a 130 ha. land in Bocaue, Bulacan along the stretch of the North Luzon Expressway. The site will consist of three (3) zones: commercial, agro-industrial and storage.
Transport	Aside from the existing Bocaue Interchange, the provincial government of Bulacan expects the following transport projects to improve accessibility to the NFTC: <ul style="list-style-type: none"> • a new interchange and service road at San Juan; • a new Northrail Station within the NFTC; • rehabilitation of the abandoned Cabanatuan railway line which originates from NFTC.
Project Cost and Financing	The total investment cost of more than P 1.4 B will be financed through the Build-Operate-Own (BOO) scheme.

FIGURE 1.1
 THE NATIONAL FOOD TERMINAL COMPLEX, BULACAN

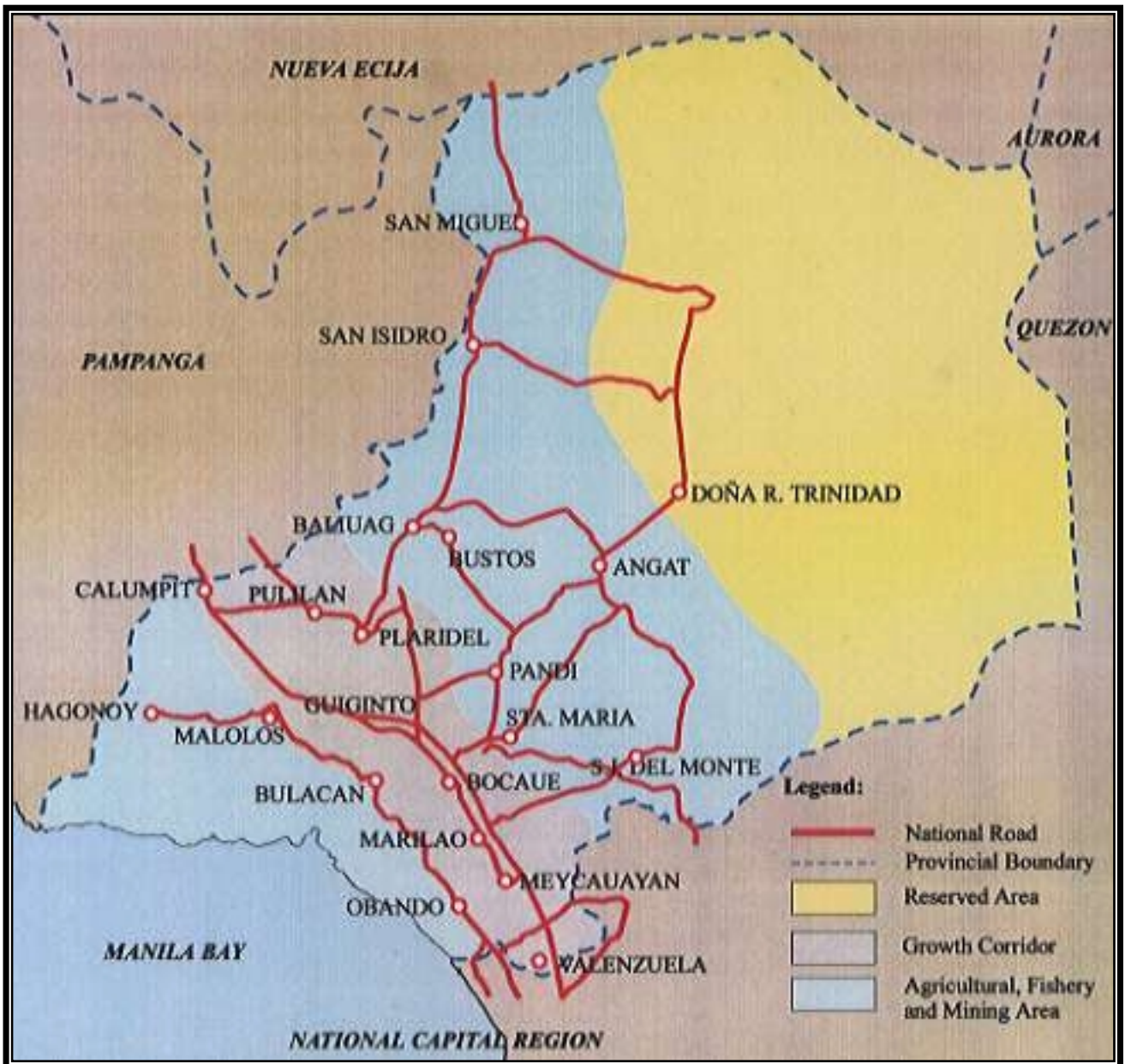


1.1.6 Land Use Proposal

The province drafted the Provincial Physical framework Plan (PPFP) and is revising it to serve as the Comprehensive Provincial Land Use Plan (CPLUP) as required under the 1991 Local Government Code.

According to the PPFP, urban development will continue along the highway corridor from Meycauan to Calumpit. This will also be the growth corridor for light and medium-scale manufacturing industries. The towns of Malolos, Baliuag, and Meycauayan will remain as urban centers. While the other municipalities - San Miguel, San Rafael, San Jose del Monte, Sta. Maria, Bustos, Pandi, Hagonoy, Obando and Bulacan - will be the major food producers because of their agricultural areas and fishery products. Mining and quarrying activities are designated in the upland areas where the towns of Angat, Bustos, San Ildefonso and Norzagaray are located. Dona Remedios Trinidad will be classified as a protected area due to its watershed. The mountainous areas will also be preserved, protected and conserved. From a land use planning view (Figure 1.2), the entire area of Bulacan can be divided into three: growth corridor, agricultural, fishery and mining area, preserved area.

FIGURE 1.2
ZONING BASED ON LAND USE PROPOSAL, BULACAN



1.2 Rizal

1.2.1 Facts

Capital	:	none
Area	:	1,308.9 sq. km.
Population	:	977,488 (1990); 1,312,489 (1995)
Cities	:	none
No. of Municipalities	:	14

1.2.2 Location

Rizal lies immediately east of Metro Manila. Bulacan bound it on the north, on the east by Laguna and Quezon, and on the south by Laguna de Bay. The province has no existing provincial capital but the seat of government is in Pasig City which is part of Metro Manila.

1.2.3 The Land

The terrain is mostly low and flat in the western part with rolling hills and a few rugged ridges in the eastern part. At the foot of these elevations, which forms part of the Sierra Madre mountain range, are the Marikina Valley and Teresa Valley.

The Pasig and Marikina Rivers, both emptying into Manila Bay, drain Laguna de Bay and the Marikina Valley, respectively. Montalban Dam is a chief source of water for the Greater Manila area.

The mountainous portion of the province has evenly distributed rainfall throughout the year. The lakeshore area has two seasons: wet season from June to October and dry season for the rest of the year.

1.2.4 Commerce and Trade

Rizal has a highly industrialized economy. As of 1990, there were 187 industries in ten municipalities. Production of garments is the top industry, followed by trading and service oriented business. Table 1.3 lists three (3) industrial estates operating in the province.

TABLE 1.3
RIZAL INDUSTRIAL ESTATES

Name	Location	Land Area	Status
Antipolo Industrial Estate	Puting Bato, Antipolo	30 has.	Operational
Bagong Nayon-II Mini-Industrial Estate	Bagong Nayon II, Antipolo	200 has.	Pre-operational
SEB Commercial Industrial Center	Ortigas Ave., Taytay	15 has.	Operational

Source: BOI

Due to its hilly nature and proximity to Metro Manila, the province has been the major source of construction materials. Many trucks loaded with soil, sand, stone, cement and other construction materials can be observed headed for Metro Manila.

Compared with the other provinces in the region, agriculture in Rizal is less intense. Still, major agricultural crops such as *palay*, mango, citrus, coffee, cacao and cashew, are produced in the province.

Eight (8) towns of the province lie along the northern coast of Laguna de Bay and depend on the lake for its livelihood. *Tilapia* and other fresh water fish species are raised in the Bay along with ducks. Approximately 51,000 ha. of the lake belong to Rizal.

1.3 Laguna

1.3.1 Facts

Capital	:	Sta. Cruz
Area	:	1,759.7 sq. km.
Population	:	1,370,232 (1990),
Cities	:	San Pablo
No. of Municipalities	:	29

1.3.2 Location

Laguna is located some 30 km. south of Manila. It is bound on the north by Rizal, on the east and south by Quezon and on the west by Cavite and Batangas.

1.3.3 The Land

The terrain is mostly composed of narrow plains along the shores of Laguna de Bay but is mountainous towards the Sierra Madre region in the east, Mt. Makiling in the west and Mt. Banahaw in the South. Laguna has no distinct seasons. It is generally cool in the mountainous areas and warmer in the plains.

1.3.4 Brief History

Laguna derives its name from *La Laguna* meaning “the lake” referring to Laguna de Bay, the largest inland body of water in the Philippines, which forms the province’s northern boundary.

Captain Juan de Salcedo conquered the province and surrounding areas for Spain in 1571. Seven years later, Franciscan friars started spreading Christianity. Soon, towns around the lake were founded. In 1678, San Pablo Delos Montes, now San Pablo City, was established.

1.3.5 Commerce and Industry

Agriculture and fishing has always been the backbone of the provincial economy. Laguna is the country's second largest coconut producer after Quezon. Other important crops produced by the province are *palay*, sugarcane and fruits, especially citrus and *lanzones*.

Fishing is very important for the towns surrounding the lake. Fish pens cover a large area of Laguna de Bay as well as Sampaloc Lake in San Pablo City.

Cottage industries also flourish in the province. It is noted for woodcarvings, paper-mache figures from Paete and Barong Tagalog from Lumban.

Many industries and factories are located along the lakeshore and along the South Luzon Expressway. Table 1.4 shows the major industrial estates in the province.

**TABLE 1.4
LAGUNA INDUSTRIAL ESTATES**

Name	Location	Land Area	Status
Canlubang Industrial Estates	Cabuyao & Calamba	171 has.	Operational
Calmery Industrial Park	Canlubang & Calamba	200 has.	Operational
Laguna Int'l Industrial Park	Brgys. Ganado & Mamplasan, Binan	85 has.	Operational
Laguna Technopark	Binan & Sta. Rosa	98.72 has.	Operational
Light Industry Science Park of the Philippines	Bo. Diezmo, Cabuyao	106 has.	Operational
Silangan Industrial Park	Canlubang & Calamba	-	Operational

1.3.6 Residential Development

Robust residential development still continues in the western part of the province mainly due to its proximity to Metro Manila. Table 1.5 shows the subdivisions in the province, both the developed and those that are still under construction.

These subdivisions occupy a total of 7,895,446 sq.m. or 51,748 lots. They are widely dispersed in 16 municipalities.

TABLE 1.5
LIST OF SUBDIVISIONS, LAGUNA

Name	Location	Land Area (sq.m.)	No. of Lots
Villa Corazon	Sabang, Pagsanjan	64,494	396
Villa Corazon II	Brgy. Malaking Ambling, Magdalena	-	-
Villa Corazon III	Brgy. Poblacion, Pila	9,948	52
South East Meadows	Brgy. San Roque, San Pablo City	52,103	264
Villa Fatima Subdivision	Bo San Vicente, San Pedro	28,212	97
La Residencia de Sta. Rosa –IIA	Brgy. San Jose, Sta Rosa	138,486	449
South Fairways Homes-Classic I	Brgy. Landayan, San Pedro	409,999	2,735
JAKA Village	Sn. Vicente, Santa Rosa	22,393	87
Lopez Heights Subdivision	Brgy. Anos, Los Banos	105,188	212
Sacay Grand Villas	UP Los Banos	19,986	47
Laguna South Lakes Gardens	Bo. Bucal, Calamba	39,196	154
Camino Executive Village	Brgy. Mulawin, Pagsanjan	20,173	77
Landmark II Subdivision	Bo. Majada, Calamba	214,501	
Bay Shoreville Subdivision	Sinilahan, Sta. Rosa	9,784	113
Bay Shore Subdivision Ph. II	Sinilahan, Sta. Rosa		150
Nuestra Senora del Pilar Village	Alaminos	49,651	190
Elizabeth Bay Area	Bo. Dela Paz, Binan	30,000	356
Calamba Major Homes	Majada, Calamba		225
San Pedro Homesite I, II-A & II-B	Bo. San Vicente, San Pedro	198,889	2,507
Don Pablo Subdivision	Brgy. Tagapo, Sta. Rosa		
Jeil Compound	Brgy. Pansol, Calamba		14
St. Francis Subdivision	San Pablo City	35,590	176
Celino Subdivision	Bo. Gatid & Duhat Sta. Cruz	50,360	221
Golden City Sta. Rosa I-E	Bo. Balibago, Sta. Rosa	-	69
Golden City Sta. Rosa I-E	Sta. Rosa	108,889	1,016
Golden City Sta. Rosa III-E	Sta. Rosa	16,751	162
Golden City Sta. Rosa IV-E	Bo. Dita, Sta. Rosa		516
Golden City Sta. Rosa II-F	Bo. Dita, Sta. Rosa	11,432	110
Acacia Parkhouse I	Brgy. Saimsim, Calamba	93,759	812
Villa Olympia III	Brgy. San Vicente, San Pedro		33
Villa Olympia IV	San Pedro		
The Rosada	Brgy. Tagapo, Sta. Rosa	42,304	240
Sunrise Subdivision	Mayapa, Calamba		64
Asuncion Village	Gatid, Sta. Cruz	16,213	70
Paz II Compound	Bo. San Vicente, San Pedro		84
Villa La Prinza	Bo. Prinza, Calamba		680
Las Villas De Manila	San Francisco, Binan	262,895	515
Camella Homes Woodhill	Bo. San Antonio, San Pedro	73,422	272
Camella Homes Bermuda II	Bo. Banlic, Cabuyao	54,081	542
Malaban Lakeshore Subdivision	Wawa, Malaban, Binan	96,236	894
Cataquiz Homes I	Bo. Tagapo, Sta. Rosa	30,715	237
San Carlos Village	Bo. Banay-banay, Cabuyao		
Gregorio Compound I	Brgy. Masaya, Bay	1,744	7
Gregorio Compound II	Brgy. Masaya, Bay		
Victoria Plains Subdivision I	Victoria	226,472	1,230
Pacita Complex I, I-E	Brgy. Canlalay, Binan	47,393	152
Hillsborough	Bo. Cabanbanan, Pagsanjan	23,354	99
Olivares Homes South III	Bo. Calaboso, Binan	17,312	109
Clapson House Subdivision	San Nicolas, San Pablo City	6,215	54
St. Joseph Village I	Brgy. San Vicente, Binan	23,309	114
St. Joseph Village II	Brgy. Sto. Tomas Binan	19,329	286
St. Joseph Village III	Cabuyao	33,426	
St. Joseph Village IV	Brgy. Butong, Cabuyao	30,367	429
Glewood Park Subdivision	Brgy. Tulo, Calamba	125,217	302

TABLE 1.5
LIST OF SUBDIVISIONS, LAGUNA
(CONTINUATION)

Name	Location	Land Area (sq. m)	No. of Lots
Lakeview, Village	Bo. Dela Paz, Binan	30,000	300
San Antonio Village II	Bo. Linga, Pila	12,279	71
Genesis Homes	Bo. San Vicente, San Pedro	26,287	261
Palo Alto Highland Subdivision	Bo. Palo Alto, Calamba	25,000	217
Town and Country Southville I-B	Bo. Calaboso, Binan	20,000	78
Town and Country Southville I-C	Bo. Calaboso, Binan	9,120	47
Town and Country Southville I-D	Bo. Calaboso, Binan	15,075	33
Town and Country Southville IV-A	Bo. Calaboso, Binan	9,880	35
Town and Country Southville VII	Bo. Calaboso, Binan	161,066	679
Mariaville Subdivision	Brgy. Calo, Bay		126
Alfonso Homes I	Brgy. Labas, Sta. Rosa	27,854	300
Spring Homes	Bo. Bucal, Calamba		634
Jade Village	Los Banos		8
Garden City II	Queens Row West, Baclaran, Binan	19,843	253
Sta. Cecilia III	Bo. Parian, Calamba	34,272	176
Sta. Cecilia III-A		8,568	
Sta. Cecilia IV	Bo. Parian, Calamba	38,864	194
Susana Homes	Brgy. Calaboso, Binan		154
Progressive Village II	Tagapo, Sta. Rosa	27,154	500
San Martin Village	Bo. Buenavista, Magdalena		266
Hong Kong Village	Brgy. Banay-banay, Cabuyao		1134
Lakewoods Subdivision	Los Banos		711
Lakewoods Subdivision III	Brgy. Tadalac, Los Banos	84,526	176
Manhattan Village Subdivision	Brgy. San Francisco, San Pablo City	99,654	296
Belle Reve	Bo. Don Jose, Sta. Rosa	325,656	216
Evergreen Executive Village – I	Cabuyao	17,148	204
Evergreen - II		68,593	349
La Concordia Homes	Pook, Sta. Rosa		90
Pena Francia Compound	San Rafael, San Pablo City	9,364	47
Laguna Bel Air	Brgy. San Jose, Sta. Rosa	699,982	
Prince Village	Brgy. Banlic, Cabuyao	21,616	82
Sta. Barbara Compound	Brgy. Del Remedio, San Pablo City		34
Cristina Homes	Brgy. San Antonio, San Pedro		322
Famille International Village	Bo. Dela Paz, Binan		300
Villa Leonicia Subdivision	Brgy. Poblacion, Pila		176
Park Spring I	Bo. San Vicente, San Pedro		948
Villa Guadalupe Subdivision	Bo. Mulawin, Pagsanjan	9,664	22
Aztec Homes	Bo. Looc, Calamba		310
Cabuyao Central	Brgy. Pulo, Cabuyao	84,398	270
Greenlane North Subdivision	Brgy. Real, Calamba		26
Villa Celestina	Brgy. Magsaysay, San Pedro		101
South Breeze Executive House	Bo. Halang, Binan	40,460	149
Villa Susana I	Brgy. Maliit, Sta. Rosa	58,686	208

TABLE 1.5
LIST OF SUBDIVISIONS, LAGUNA
(CONTINUATION)

Name	Location	Land Area (sq. m)	No. of Lots
Ciudad Montrina	Cabuyao	7,646	96
Oogong Homeowners	Brgy. Oogong, Sta. Cruz	19,245	170
Highland Subdivision	Brgy. Palo Alto, Calamba		62
Bonanza Subdivision	Bo. Putho, Los Banos	7,715	38
Don Abelardo Homes	Brgy. Parian Calamba	75,879	354
Metropolis Subdivision I	San Pablo City	51,735	113
Pueblo Del Rio Subdivision	Brgy. Banadero, Calamba	62,680	281
The Promenade	Don Jose & Maliit, Sta. Rosa	293,646	228
St. Annes Home	Bo. San Antonio, San Pedro	4,917	36
Acacia Parkhomes I	Brgy. Saimsim, Calamba	93,759	812
Crystal Ville	Brgy. Mamatid, Cabuyao	21,070	217
Lake City Village	San Gregorio, San Pablo City	13,190	40
Conpil Village III	San Pedro	8,382	76
Rosa Subdivision	Bo. San Vicente, San Pedro	10,841	162
Francisco Subdivision	Brgy. Santa Clara Norte, Pila	15,354	101
Israel Village	Brgy. San Antonio, San Pablo	21,832	241
Celestine Homes	Brgy. Marinig, Cabuyao		685
San Isidro Homes	Bo. Putol, Cabuyao	34,634	345
Cocovilla Subdivision I & II	Brgy. San Miguel, San Pablo	67,380	526
Pope Pious Village	Brgy. Concepcion, San Pablo City	38,200	
Satellite Ville	Bo. Sinalihan, Sta. Rosa	33,907	391
Hacienda Sta. Elena II & III	Brgy. Don Jose, Makinang Apoy Malitlit, Sta. Rosa	444,340	73
The Homelands	Brgy. Pulo, Calamba	3,542	525
Dona Demetria Homes	Brgy. Mendiola, Siniloan	21,197	142
Sto. Nino Homes Subdivision	Brgy. Sto. Nino, San Pablo City	56,696	407
Greenville Subdivision II	Brgy. Tagapo, Sta. Rosa	33,118	149

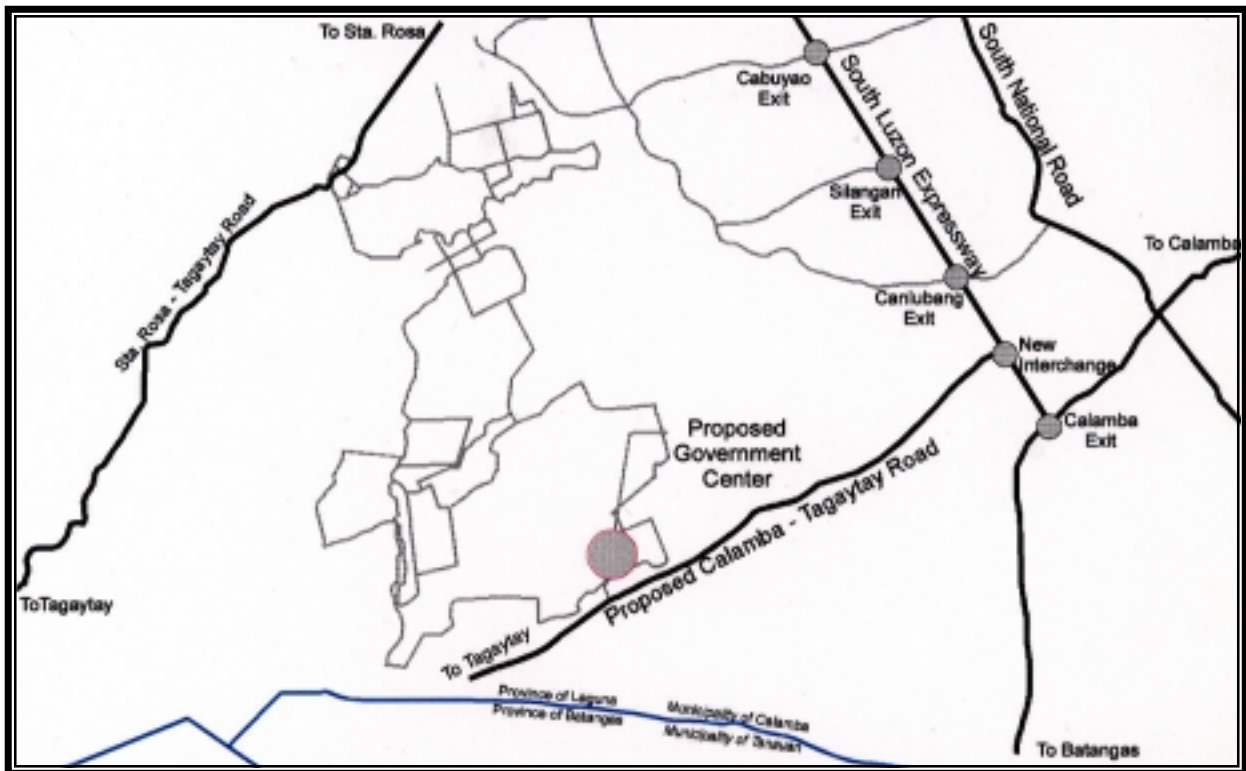
1.3.7 Development Directions

The area along the South Luzon Expressway and the Laguna de Bay has been fully urbanized and can be considered as a suburb of Metro Manila. This trend in development is expected to continue towards Calamba up to Tagaytay Ridge in Cavite by the following projects:

Government Center: This is a proposal to relocate the regional government seat of Region IV from Sta. Cruz to Canlubang, Laguna. For this purpose, the Calamba-Tagaytay road will be developed. This endeavor has an estimated cost of 323 million pesos, including Right-Of-Way (R-O-W) acquisition. With this relocation project, the following related projects are determined or are still under consideration (shown in Figure 1.3).

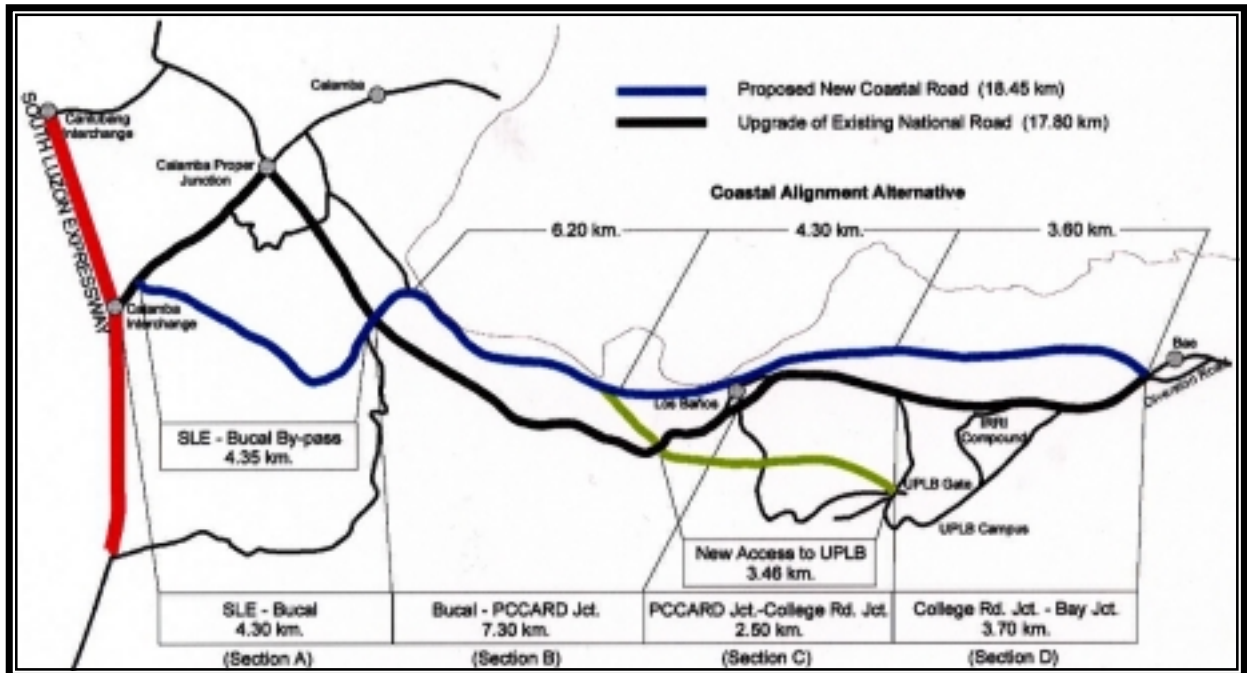
- Ayala Land's new town development project near the proposed government center.
- Extension of railway line from Binan.
- Simultaneous relocation of the provincial capitol from Sta. Cruz, Laguna.

FIGURE 1.3
PROPOSED GOVERNMENT CENTER



New Coastal Road: At present, the south and east sides of Laguna de Bay are neglected and left behind by the rapid urbanization of the other sides of the bay, primarily due to its poor accessibility to Metro Manila. A coastal or hillside diversion road is, therefore, needed to improve access to said areas in addition to the existing national road. The provincial government of Laguna has so far prepared the detailed design of this project to be situated between Calamba and Bae (shown in Figure 1.4).

**FIGURE 1.4
 PROPOSED NEW COASTAL ROAD**



Aside from these projects, the provincial government expects several areas of the province to reach a fully urbanized status in the near future. These areas include the municipalities of San Pedro, Binan, Santa Rosa, Cabuyao, Calamba, Los Banos and Bae (shown in Figure 1.5).

1.4 Cavite

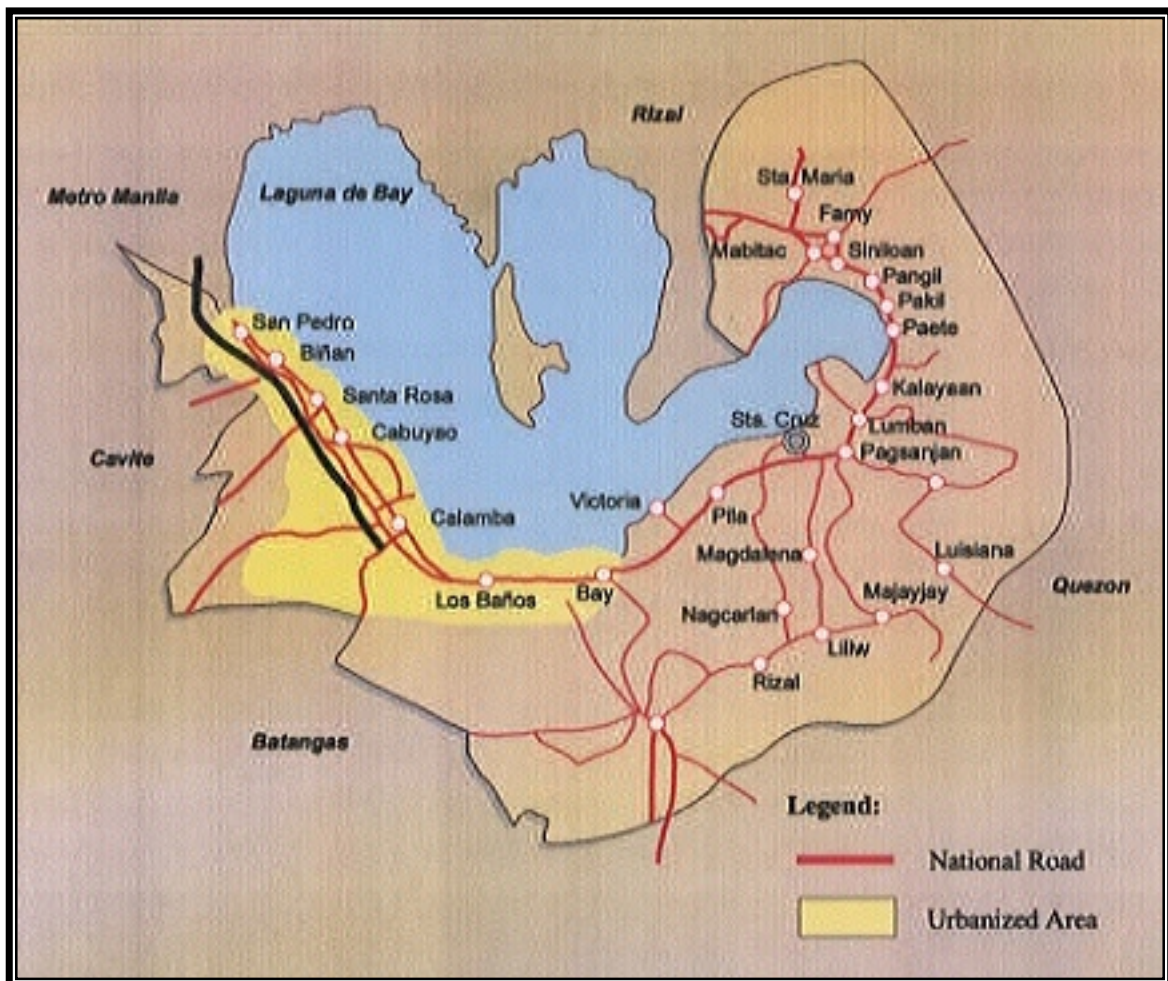
1.4.1 Facts

Capital	:	Trece Martires City
Area	:	1,287.6 sq. km.
Population	:	1,610,324 (1995); 1,152,534 (1990)
Cities	:	Tagaytay, Trece Martires
No. of Municipalities	:	20

1.4.2 Location

Cavite lies along the southern shore of Manila Bay. It is bounded on the north by Manila Bay and Metro Manila, on the east by Laguna, on the west by the South China Sea and on the south by Batangas.

FIGURE 1.5
FULLY URBANIZED AREA IN THE NEAR FUTURE



1.4.3 The Land

The portion of the province bordering Manila Bay consists of low lands or flat-lying areas. Rolling and undulating lands characterize the central portion while the remaining areas are upland or hilly and mountainous. Tagaytay Ridge is the highest point of the province with elevation measured at 640 meters above sea level.

Five major rivers cut through the province and empties into the Manila Bay. These are Maragondon, Labac, Canas, Ilang-Ilang, and Imus rivers.

The province has two (2) distinct seasons. It is relatively dry from November to April and wet for the rest of the year.

1.4.4 Tourist Attractions

Cavite has three (3) tourism centers: the highlands for its scenic beauty; the Ternate-Naic corridor for its unspoiled beaches, and Cavite City for its historic and cultural heritage.

- The province's highest elevation, Tagaytay City, is a natural promontory overlooking Taal Lake and its active volcano.
- Naic has a number of first class beach resorts at affordable price. Some of these are Aroma, Happy Holiday, Punta Grande, Rikkitoy, Seaside and Palm Beach. The island-fortress of Corregidor is visible from the shoreline of Ternate and Naic.
- The balcony of the Aguinaldo Shrine in Cavite is where Gen. Emilio Aguinaldo, the first President of the Republic, declared Philippine Independence on 12 June 1898. To commemorate this historic event, the Philippine Flag is raised here every year by top government officials.

1.4.5 Commerce and Industry

Cavite is predominantly an agricultural province. Major crops produced here include palay, corn, vegetables, fruits, root crops, coffee, coconut and sugar cane.

The province is endowed with rich offshore and coastal fishing grounds. Fishing is consequently a major source of livelihood in coastal municipalities.

At least 130 industrial establishments are now operating in Cavite. An Additional ten (10) industrial estates have been or are being developed in various parts of the province. Table 1.6 shows the major industrial estates in the province.

**TABLE 1.6
 CAVITE INDUSTRIAL ESTATES**

NAME	LOCATION	LAND AREA	STATUS
Cavite-Carmona Industrial Estate	Carmona	100.0 has.	Operational
Grandville Industrial Complex	Carmona	9.0 has.	Operational
Mt. View Industrial Complex - 1	Carmona	24.0 has.	Operational
Mt. View Industrial Complex - 2		22.3 has.	Operational
Southcoast Industrial Estate	Carmona	13.4 has.	Operational
First Cityland Heavy Industrial Center	Dasmarinas	32.1 has.	Operational
DBB-NHA Industrial Estate	Dasmarinas	8.6 has.	Operational
First Cavite Industrial Estate	Dasmarinas	154.5 has.	Operational
New Cavite Industrial City	Gen. Trias	52.0 has.	Operational
Gateway Business Park	Gen. Trias	19.0 has.	Operational
Manggahan Industrial Center	Gen. Trias	10.2 has.	Operational
GMA-NHA Industrial Estate	GMA,	10.0 has.	Operational
Imus Informal Industrial Center	Imus	200.0 has.	Operational
Cavite Economic Zone	Rosario	276.0 has.	Operational
Bulihan-NHA Industrial Estate	Silang	3.0 has.	Operational
Maguyam Industrial Complex	Silang	16.4 has.	Operational
Anabu Hills Industrail Estate	Anabu & Imus		Operational
Welbourne Industrial Park	Carmona	12.0 has.	Operational
Lu Chu Industrial Estate	Amaya & Tanza		Operational
Daiichi Industrial Estate	Silang	60.0 has.	Operational
Greenway Business Park	Silang		Operational
Dasmarinas Technopark	Dasmarinas	38.14 has.	Operational

1.4.6 Residential Development

In 1995, Cavite has a population of 1.6 million with a density of 12.5 persons/ha. The east-west corridor between Zapote and Rosario and the north-south corridor between Zapote and Dasmarinas are considered highly urbanized areas.

According to the Provincial Physical Framework Plan (PPFP), Cavite's population is estimated to reach 2.5 million by the year 2002 (Table 1.7). The province has received a substantial number of new urban settlers and is expected to increase in the near future as shown below:

<u>Year</u>	<u>Population</u>	<u>Annual Increase (%)</u>
1970	520,180	-
1980	771,320	4.0%
1990	1,152,534	4.1%
1995	1,610,324	6.9%
2005	2,356,182	6.7%

**TABLE 1.7
 POPULATION DISTRIBUTION**

CITY/MUNICIPALITY	1995 Population	2002 Projected Population
District 1		
Cavite City	92,641	94,088
Bacoor	250,821	462,431
Kawit	56,993	73,328
Noveleta	27,306	41,324
Rosario	54,086	69,401
District II		
Trece Martires City	20,451	34,864
Carmona	35,686	48,455
Dasmarinas	262,406	501,190
Gen. Mariano Alvarez	86,824	115,345
Gen. Trias	66,837	98,741
Imus	177,408	343,619
Tanza	77,839	120,031
District III		
Tagaytay City	29,419	48,090
Alfonso	34,613	43,267
Amadeo	22,728	28,067
Gen. Aguinaldo	11,893	17,139
Indang	42,765	51,489
Magallanes	17,115	25,584
Maragondon	25,828	32,151
Mendez	20,321	24,838
Naic	58,046	69,736
Silang	124,062	169,067
Ternate	14,236	23,937
Total	1,610,324	2,536,182

Source: PPDO, PLUC-TWG, 1996

A large number of new residential developments are currently under way to meet strong urbanization. In 1996, the Housing and Land Use Regulatory Board (HLURB) approved the development of 98 subdivisions in the province. These will provide more than 50,000 housing lots/units. Table 1.8 shows the subdivisions in the province, both the developed and those that are still under construction.

These subdivisions occupy a total of 15,688,446 sq.m. with 51,748 lots dispersed in 16 municipalities.

TABLE 1.8
LIST OF HOUSING SUBDIVISIONS, CAVITE

Name	Location	Land Area (sq. M)	No. of Lots
The Park Place Village	Aguinaldo Highway, Imus	-	297
Silver Towne II	Bo. Malagasang, Imus	-	136
Silver Towne III	Bo. Malagasang, Imus	20,114	196
Silver Towne IV	Malagasang, Imus	27,860	282
Landhuas Village	Silang & Carmona	140,000	1293
Citi Homes Molino Ph. I	Bo. Molino, Bacoor	61,640	500
Ph. I-A	Bo. Molino, Bacoor	28,040	163
Ph. II-A	Bo. Molino, Bacoor	-	490
Ph. II-B	Bo. Molino, Bacoor	-	271
Ph. V-A	Buhay na Tubig, Imus	13,470	187
Ph. II-C	Bo. Molino, Bacoor	-	671
Ph. III-C	Bo. Molino, Bacoor	9,088	81
Ph. IV	Bo. Molino, Bacoor	43,007	482
Ph. IV-B	Bo. Molino, Bacoor	16,999	180
Ph. V	Buhay na Tubig, Imus	1,880	13
Bahayang Pag-asa Greatwoods	Bo. Molino, Bacoor	42,806	245
Bahayang Pag-asa Woodside Subdivision	Brgy. Pasong Buaya, Imus Tanzang Luma, Imus	- 8,324	335 135
Camella Homes Noveleta Ph. II	Sn. Antonio, Noveleta	-	29
Camella Homes Springville Meadows	Bo. Molino, Bacoor	77,148	501
Camella Homes Springville Gardens I Ph. IV	Bo. Molino, Bacoor	56,123 20,000	484 200
Camella Homes Springville South Ph. I	Bo. Molino, Bacoor	55,657	344
Camella Homes Springville South Ph. II	Bo. Molino, Bacoor	87,393	572
Camella Homes Springville East Ph. II	Bo. Molino, Bacoor	46,165	339
Camella Homes Springville I	Bo. Molino, Bacoor	-	33
Camella Homes Springville Executive I	Bo. Molino, Bacoor	-	290
Camella Homes Soprento V	Bo. Panapaan, Bacoor	-	191
Camella Homes Barcelona Ph. III	Bo. Tanzang Luma, Imus	-	518
Camella Homes Barcelona Ph. IV	Bo. Tanzang Luma, Imus	39,946	312
Villa Apolonia	Poblacion, Naic	-	392
Capitol Hills Executive Subdivision	Trece Martires City	207,413	2745
Capitol Hills Subdivision	Trece Martires City	-	427
The Golden Grove	Dasmarinas	-	811
St. Mary's Homes	Sn. Augustine, Dasmarinas	-	206
Cavite Viejo Subdivision	Bo. Gahak, Kawit	-	222
Parkdale Classic	Bo. Anabu, Imus	-	296
Parkdale Classic II	Bo. Anabu, Imus	14,626	150
Lily's Village	Trece Martires City	-	96
The coastal City	Bo. Timalan, Naic	-	3358
Coastal Homes	Bo. Timalan, Naic	405	405
Winnard Hills I Ph. B & D	Brgy. Burol, Dasmarinas	-	1025
Winnard Hills Ph. E	Brgy. Burol, Dasmarinas	-	213
Alfonso Village	Alapan, Imus	-	611
Mariane Village I	Bayan Luma, Imus	9,548	80
Meadow Ville	Bo. Anabu, Imus	28,957	317
South Meadow	Bo. Anabu, Imus	11,026	89
Town & Country Dasmarinas	Bo. Burol, Dasmarinas	504,309	1602
Tagaytay Palm Villas	Kaybagal, Tagaytay City	14,036	48
Vista Verde South Executive Ph. I	Bo. Mambog, Bacoor	-	282
Vista Verde South Village Ph. II	Bo. Mambog, Bacoor	196,043	554
Plaridel VI Subdivision	Medcion Ist, Imus	-	112
Southfields Executive Village	Brgy. Salitran, Dasmarinas	-	-
Golden City Dasmarinas PH. 6,7,&8	Brgy. Salawag, Dasmarinas	-	1800

Golden City Dasmaringas Ph. 9 & 10	Brgy. Salawag, Dasmaringas	-	2048
Golden City Dasmaringas Ph. 11	Brgy. Salitran, Dasmaringas	-	136
Golden City Imus 1A-3	Brgy. Anabu, Imus	26,309	-
Goldenville Subdivision	Bo. Sabang, Dasmaringas	48,000	468
Goldenville Subdivision II	Bo. Sabang, Dasmaringas	39,479	572
Opal Village	Bo. Anabu, Imus	-	53
Regina Ville Classic	Trece Martires City	28,597	292
Cherry Homes	Langkaan, Dasmaringas	-	440
Meiji Garden Executive Subdivision	Langkaan, Dasmaringas	-	232
Diamond Village Dasmaringas II	Salawag Dasmaringas	-	800
ACM Homes	Bo. Anabu II, Imus	-	360
ACM Woodstock Homes	Brgy. Alapan, Imus	-	446
ACM Woodstock Homes Ph. I	Brgy. Alapan I, Imus	27,643	397
ACM Woodstock Homes Ph. II	Bo. Carsadang Bago, Imus	32,869	250
ACM Woodstock Homes Ph. III & IV	Bo. Carsadang Bago, Imus	46,452	401
ACM Homes Ph. V	Bo. Carsadang Bago, Imus	16,182	223
Lakefield Subdivision	Bo. Tinabunan, Kawit	-	784
Ecotrend Subdivision IV	Licas, Bacoor	-	39
Regatta Classic	Brgy. Anabu, Imus	1,372	21
Regatta Classics III	Brgy. Anabu II, Imus	-	199
Regatta West	Bacundala, Imus	-	175
Elisa Homes I & II	Bo. Molino, Bacoor	-	979
Las Quintas Residence	Ternate	64,745	64
Las Quintas Residence Ph. II	Ternate	96,018	87
Mary Cris Homes	Brgy. Alapan, Imus	44,533	121
Mary Cris Homes Ph. II	Brgy. Bucandala, Imus	21,925	360
San Lorenzo Heights	San Jose, Dasmaringas	126,435	462
Woodsite II	Pasong Buaya, Imus	25,760	274
Woodsite III & IV	Pasong Buaya, Imus	80,005	560
Wood Estate Village	Sabang, Dasmaringas	109,369	1096
Wood Estate Village-Molino II	Molino, Bacoor	138,435	1386
Landmass Park Ph. I	Bo. Biga, Tanza	18,408	220
Landmass Park Ph. II	Bo. Biga, Tanza	-	175
Landmass Park Ph. III	Bo. Biga, Tanza	22,857	180
Ciudad Adelina Ph. II	Bo. Conchu, Gen. Trias	186,120	1051
Ciudad Adelina Ph. III	Trece Martires City	152,805	907
The Pacific Parkplace Village	Paliparan, Dasmaringas	223,118	119
Grand Park Place Village	Imus	406,169	-
The Park Place Ville Zone I	Brgy. Anabu, Imus	-	354
The Park Place Ville Zone 3	Brgy. Anabu, Imus	74,600	286
The Park Place Ville Zone 4	Brgy. Anabu II, Imus	54,280	195
Park Place Home Villas	Brgy. Anabu II, Imus	106,513	391
Liwayway Subdivision	Bo. Anabu, Imus	57,514	489
Pabahay 2000	Gen. Trias	216,092	3236
Emerald Village	Brgy. Salitran, Dasmaringas	8,372	76
San Marino Heights	Brgy. Salawag, Dasmaringas	48,852	501
San Marino Square	Brgy. Paliparan, Dasmaringas	39,082	352
San Marino South Ph.I	Brgy. Salawag, Dasmaringas	50,002	500
San Marino West Ph.I	Brgy. Salawag, Dasmaringas	50,011	510
San Mrino West Ph. II	Brgy. Salawag, Dasmaringas	-	-
San Marino East Ph. V	Brgy. Salawag, Dasmaringas	-	-
San Marino East Ph. I	Brgy. Salawag, Dasmaringas	25,134	359
San Marino North Ph. I	Brgy. Salawag, Dasmaringas	-	347
Saphire Village	Brgy. Salitran, Dasmaringas	9,905	27
Ruby Village	Brgy. Salitran, Dasmaringas	-	48
Graceland Village Subdivision	Rosario	19,136	59
Pearl Subdivision	Brgy. Salitran, Dasmaringas	-	53
Villa Pura II Subdivision	Tagaytay City	7,550	22
Villa Pura III Subdivision	Bo. San Jose, Tagaytay City	10,038	25
High Groove	Tagaytay City	44,744	108
Crystal Village	Brgy. Salitran, Dasmaringas	-	56

Crystal Ville Village	San Francisco, Gen. Trias	219,096	1374
Manila Southwoods Residencial Ph. II	Baybay, Carmona	610,395	482
Hotelier Village II	Malagasang, Imus	20,394	205
Garnet Village	Brgy. Salitran, Dasmaringas	8,630	-
Bahay Pangarap	Burol, Dasmaringas	143,996	2130
Raintree West Subdivision	Dasmaringas	-	290
Raintree West II	Bo. Salawag, Dasmaringas	33,642	113
Tanza Group Housing Project	Tanza	-	556
Bloomfields Subdivision	Alapan, Imus	-	226
Sterling Mile	Brgy. Salawag, Dasmaringas	2,376	30
Metrogate Trece Martires City	Trece Martires City	115,935	-
Metrogate Dasmaringas Ph. II & III	Langcaan, Dasmaringas	225,745	1465
Metrogate Silang Estate Ph. I	Bo. Biluso, Silang	161,338	587
Mabuhay Homes Ph. I & II	Brgy. Paliparan, Dasmaringas	104,948	1679
Mabuhay Homes 2000 Ph. IV	Brgy. Paliparan, Dasmaringas	60,441	306
Mabuhay Homes 2000 Ph. V	Brgy. Salawag, Dasmaringas	145,602	2157
Mabuhay City Dasmaringas Ph. I	Brgy. Paliparan, Dasmaringas	-	2091
Villa Theresa Subdivision	Brgy. Burol, Dasmaringas	91,418	912
Golden Mile Dasmaringas	Brgy. Salawag, Dasmaringas	9,784	122
Summercrest Village	Tanza	-	689
Classic Mile Dasmaringas	Brgy. Salawag, Dasmaringas	8,354	61
Tagaytay Farmville Subdivision	Tagaytay City	31,750	43
Tradition Homes I	Trece Martires City	-	202
Tradition Homes I	Trece Martires City	-	122
Villa del Mar	Sacamayor, Tanza	40,000	440
Metroland Terraces Subdivision	Trece Martires City	37,074	184
Perpetual Village IX	Bacoor	25,513	173
Buensueso Homes- Tanza	Bo. Biwas, Tanza	-	279
Prima Homes- Imus	Bo. Alapan, Imus	13,115	192
Bonair Homes	Molino, Bacoor	33,354	346
Armstrong Village	Brgy. Salawag, Dasmaringas	55,481	823
Villa Elisa Subdivision	Bo. Anabu, Imus	-	334
Carissa Homes Tanza Ph. I	Brgy. Bagtas, Tanza	66,909	852
Carissa Homes Tanza, Ph. II	Brgy. Bagtas, Tanza	111,351	1527
Carissa Homes Tanza Ph. III	Brgy. Bagtas, Tanza	91,031	1348
Carissa Homes Tanza Ph. IV	Brgy. Bagtas, Tanza	104,096	1532
Sarreal Village Ph. II	Bo. Bucandala, Imus	54,392	1348
La Trinidad	Trece Martires City	-	1499
La Trinidad Ph. II-A	Trece Martires City	115,322	849
Housicon Homes- Bacoor	Brgy. Mambog, Bacoor	20,000	301
Housicon Homes- Tanza Ph. II	Brgy. Jalugan, Tanza	-	176
Cherry Homes Subdivision II	Bo. Mambog, Bacoor	45,486	531
Villa Verde Subdivision	Pasong Buaya, Imus	25,808	371
Cavite Country Homes	Tanzang Luma, Imus	-	950
Vista Verde South Ph. II	Bo. Mambog, Bacoor	196,043	554
D.V. Salud Compound	Brgy. Wawa III, Rosario	9,926	85
Cavite Valleyfield II	Brgy. Bagbag, Rosario	9,785	100
Treelane II-C Subdivision	Brgy. Bayan Luma, Imus	21,853	116
Treelane III Subdivision	Brgy. Bayan Luma, Imus	101,726	419
Richlane Subdivision	Brgy. Anabu II, Imus	47,330	188
Planeville Subdivision	Rosario	-	-
Villa Apolonia II Subdivision	Brgy. Sabang, Naic	102,770	1424
Fiesta Homes	San Jose, Dasmaringas	40,525	134
Satellite Homes	San Jose, Dasmaringas	-	175
Satellite Homes II	San Jose, Dasmaringas	27,607	296
Satellite Homes III	San Jose, Dasmaringas	51,931	605
Summer Meadow Subdivision	Brgy. Salitran, Dasmaringas	-	410
MF Homes	Brgy. Sacamayor, Tanza	-	88
St. Chapbel South	Brgy. Salitaran, Dasmaringas	-	1289
St. Chapbel South Ph. II	Brgy. Salitaran, Dasmaringas	-	189
Juliard Homes II Subdivision	Imus	10,000	75

Kraus Park	Bo. Molino, Bacoor	27,431	290
Lilia Heights Subdivision	Bo. Asis III, Mendez	10,818	87
Fairway View	Brgy. Salawag, Dasmaringas	265,679	1112
Bahay Katuparan	Brgy. Bagtas, Tanza	331,229	6004
Bellevue Meadows	Brgy. Bagtas, Tanza	61,133	1000
Altamira	Ternate	123,099	237
Greenville Heights	Brgy. Tabin, Kawit	-	-
Delta Homes I	Brgy. Aniban, Bacoor	3,567	21
Village Park Subdivision	Lankaan, Dasmaringas	88,676	1218
Plaza Homes	Bo. Anabu, Imus	-	-
Viva Homes Estate Subdivision	Brgy. Salawag, Dasmaringas	11	-
Parklane Country Homes-Dasmaringas	Brgy. Sabang, Dasmaringas	-	-
Parklane Country Homes Ph. I	Brgy. Santiago, Gen. Trias	-	1382
Parklane Country Homes Ph. II	Brgy. Santiago, Gen. Trias	167,814	1092
Parklane Country Homes Ph. VI	Brgy. Santiago, Gen. Trias	50,824	577
Telon Complex Subdivision	Brgy. Paliparan, Dasmaringas	517,401	2250
Villa Evelina	Brgy. Sacamayor, Tanza	-	430
Christine Village Subdivision Ph. IV	Tanza	57,000	764
Pillars Executive Homes Subdivision	Bukandala, Imus	8,933	143
South Ridge Villas Ph. I Subdivision	Dasmaringas	-	96
Dasma-Manhattan Homes	Dasmaringas	1,001	18
Tierra Nevada	Gen. Trias	594,538	4534
La Mediterania	Dasmaringas	77,416	355
Fiesta South Homes	Bo. Salitran, Dasmaringas	-	174
Landimex Homes	Brgy. Maguyam, Silang	35,000	289
Bezvedele Towne Royale	Brgy. Panadahan, Tanza	187,912	3414
Tierra Grande Royale	Brgy. Buenavista, Gen. Trias	24,846	398
Meadow Park Subdivision	Bo. Molino, Bacoor	60,989	384
Amaya Townville	Bo. Amaya, Tanza	7,133	87
Rancho Imperial de Silang	Brgy. Tartaria, Silang	111,042	2040
San Augustine Village Ph. II	Brgy. San Vicente, Tanza	-	391
Villa Juanita Subdivision	Sahud Ulan, Tanza	30,000	162
Springville Executive Homes	Brgy. Molino, Bacoor	76,475	362
Pamayanang Upehco II	Bo. Salawag, Dasmaringas	62,734	636
Magnagon Spring Homes	Bo. Maguyam, Silang	35,000	155
Villa Fresca	Tagatay City	32,450	48
Carmel Heights Royale Subdivision	Brgy. Piela, Dasmaringas	-	197
Robinson Vineyard Subdivision	Sn. Agustin, Dasmaringas	209,801	1009
Transville Homes	Trece Martires City	-	403
Ayala South Yale Ph. I-B	Bo. Molino, Bacoor	123,518	155
The Orchard Residential Ph. I-A	Bo. Salitran, Dasmaringas	54,383	109
The Orchard Residential Ph. IV	Bo. Salitran, Dasmaringas	39,819	67
The Orchard residential Ph. VI-A	Bo. Salitran, Dasmaringas	30,000	62
Sunny Crest Village	Salitran II, Dasmaringas	31,091	431
Mega Homes 2000	Brgy. Wawa III, Rosario	-	85
General Trias Homes	Brgy. San Juan, Gen. Trias	-	141
St. Judes Homes Ph. I-B	Bo. Molino, Bacoor	20,308	234
Los Pinos	Imus	54,548	545
San Rafael Classics Homes	Bo. Habay, Bacoor	11,157	91
San Rafael Executive Villa	Bo. Habay, Bacoor	22,566	230
San Rafael Executive Villa Ph. II	Bo. Habay, Bacoor	5,797	47
Sun Pointe Subdivision	Bo. Pasong Buaya, Imus	65,221	573
Villa Luisa Homes Ph. III	San Agustin III, Dasmaringas	39,811	522
Villa Olympia Heights	Brgy. Paliparan, Dasmaringas	577,801	2200
Rosalia Executive Village Ph. II	Brgy. Habay, Bacoor	19,658	-
Georosville Subdivision	Brgy. Pag-asa II, Imus	-	254
Villa Angelina I	Bo. Mambog, Bacoor	7,020	45
Solar Homes Dasmaringas Ph. II	Brgy. Lancaan, Dasmaringas	52,261	290
Pasademia Heights Subdivision Ph. I	Bo. Manggahan, Gen. Trias	388,589	1175
Casimiro Westville House I	Brgy. Ligas, Bacoor	13,898	97
Royal Pines West	Tagaytay City	-	-

Villa Cecilia Subdivision	Tagaytay City	9,521	20
Royal Villas	Alfonso	6,864	32
Dexter Ville Classics	Brgy. Sabang, Dasmaringas	40,740	491
Dexter Ville Classics Annex	Brgy. Sabang, Dasmaringas	31,363	139
Manila Southwoods Residential IV	Kabilang Baybay, Carmona	226,338	355
Holiday Homes Cavite	Gen. Trias	245,959	2038
The Villa at Tagaytay Highlands	Tagaytay City	45,417	48
Regal Homes	Brgy. Alapan I, Imus	80,255	1090
Macario Homes II	Bo. Molino, Bacoor	7,646	45
South Midland	Brgy. Lalaan, Silang	111,324	283
Velvetview Subdivision	Kaybagal South, Tagaytay	8,750	23
South Plains I	Bo. Salitran, Dasmaringas	35,771	130
South Plains Ph. I-A	Brgy. Sabang, Dasmaringas	20,200	66
South Plains Ph. I-B	Brgy. Sabang, Dasmaringas	11,498	38
South Plains Ph. II-A	Brgy. Sabang, Dasmaringas	12,500	45
South Plains Ph. II-C	Brgy. Sabang, Dasmaringas	-	74
South Plains Ph. II-D	Brgy. Sabang, Dasmaringas	20,000	78
Tagaytay Country Homes III-C&D	Crossing East, Tagaytay	51,904	170
Maria Salud Village I	Bo. Salinas, Bacoor	19,144	125
Le Praire	Bo. Luksuhin, Alfonso	247,000	647
Franceville Executive Homes	Brgy. Bulihan, Silang	106,797	368
South Gardens Homes	Brgy. Salitran, Dasmaringas	-	821
Kenmore Homes	Bo. Habay, Bacoor	8,887	84
Ila Homes	Brgy. Daang Amaya, Tanza	38,418	133
Windsor Homes	Brgy. Burol III, Dasmaringas	41,581	419
Max Village	Bo. Molino, Bacoor	19,050	158
Summer Meadow Subdivision	Brgy. Salitran, Dasmaringas	-	220
Heritage Homes	Trece Martires City	116,605	1166
Ecotrend Subdivision	Brgy. Ligtas III, Bacoor	18,682	122
Lorenza Ville Subdivision	Sahud Ulan, Tanza	13,881	72
Granville Homes	Malagasang, Imus	44,088	513
Sunnydale Homes	Bo. Sabang, Dasmaringas	14,824	141
Grenwoods Village	Brgy. Paliparan, Dasmaringas	577,401	2200
Grand Plaza Homes	BO. Anabu, Imus	73,711	397
Bel-Adea Subdivision Ph. I	Brgy. de Fuego, Gen. Trias	58,597	661
Tagaytay Woods Borough	Tagaytay City	45,045	128
Alta Homes Sunny Vale Subdivision	Bo. Molino, Bacoor	18,837	234
Villa Josefa Homes	Brgy. Habay, Bacoor	23,217	288
Summerfield Ph. I	Osorio, Trece Martires City	109,000	1622
Monte Cielo	Kaybagal, Tagaytay City	-	48
Ohkridge	Bo. Salawag, Dasmaringas	33,642	113
Metroland Terraces Ph. II	Trece Martires City	43,342	317
Robecon Subdivision	Brgy. Bagbag, Rosario	12,218	54
Hidden Farm Subdivision	Brgy. Amuyong, Alfonso	-	21
Gold Crest Villas	Trece Martires City	7,000	84

1.4.7 Land Use Direction

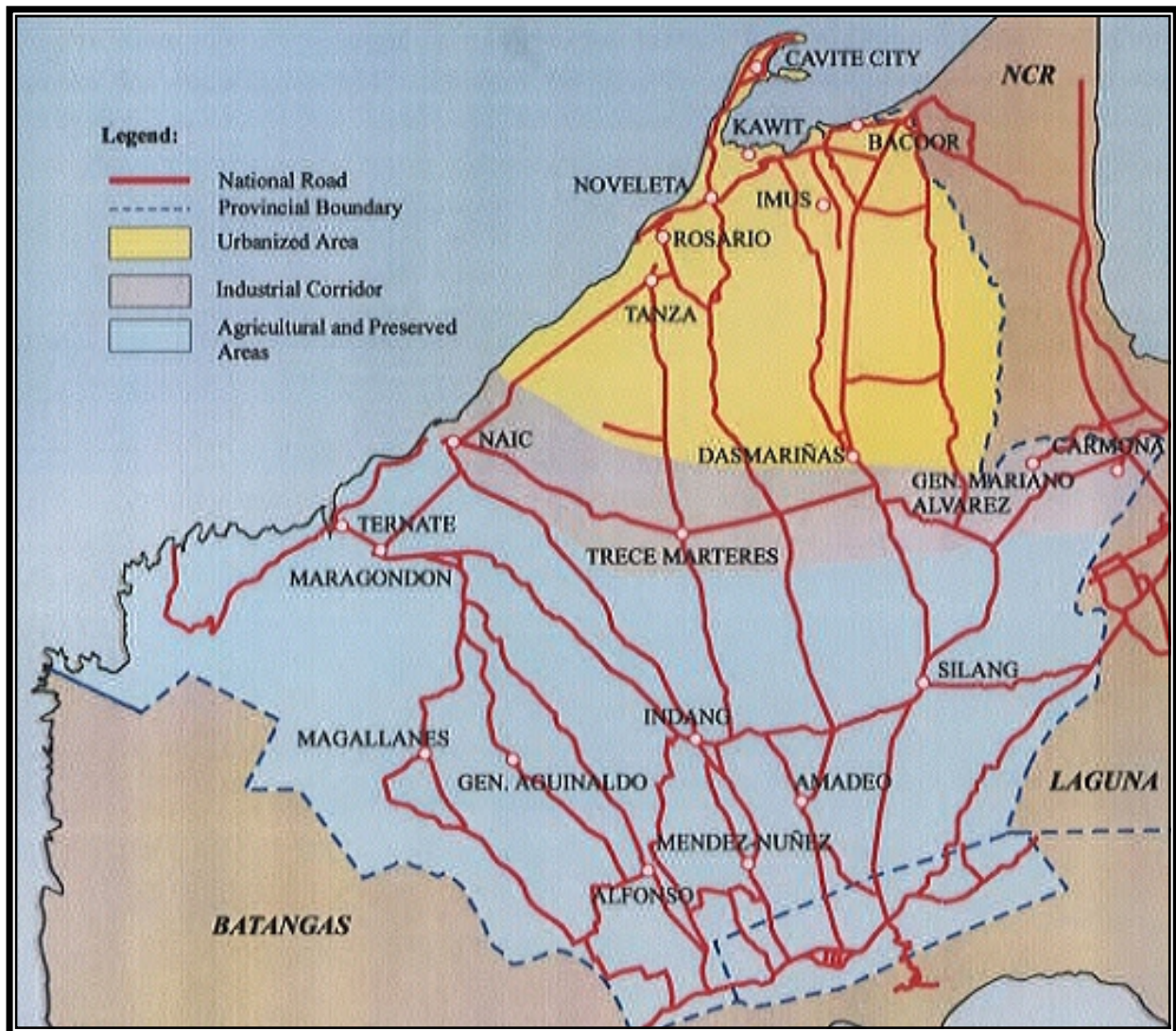
Governor's Drive from Carmona to Trece Martirez City up to Naic draws a line between urban land use and agricultural and natural land use. According to the Provincial Physical Framework Plan, the provincial government intends to continue industrialization in the designated industrial area along Governor's Drive within a 2-kilometer distance from both sides of the road. As an industrial corridor, this road has to be widened to increase its carrying capacity.

In the lowland areas of Cavite, rapid urbanization is going on in spite of its narrow and sparse road network. In view of this, the provincial government identified the following tasks for immediate implementation:

- improvement of road network system and construction of additional access routes to and from Cavite
- widening of road intersections and banning of commercial establishments near intersections, and
- organization of right-of-way team at all levels of LGUs to avoid delays in transport project implementation.

On the other hand, in the upland areas of Cavite, the decrease in employment in the primary sector will be minimized and precious natural and tourism resources will be maintained. Figure 1.6 shows the land use directions for the province.

FIGURE 1. 6
LAND USE DIRECTION, CAVITE



1.5 Batangas

1.5.1 Facts

Capital	:	Batangas City
Area	:	3,165.8 sq. km.
Population	:	1,476,783 (1990)
Cities	:	Batangas City, Lipa City
No. of Municipalities	:	32

1.5.2 Location

Batangas is located approximately 100km. south of Metro Manila or the southwestern part of Luzon. It is bounded in the north by the province of Cavite, on the east by Laguna and Quezon and on the west by the Verde Island Passage.

1.5.3 The Land

Some 50% of the province's terrain are generally rolling while the rest are mountainous and hilly. Its highest peak is Mt. Makulot, located at the central park of the province with an elevation of 1,145 meters above sea level.

One of the country's famous tourist destination, the Taal Volcano and Lake, is geographically part of Batangas although it is usually viewed from Cavite. In fact, the whole province of Batangas is believed to be the base of a huge volcano, and Taal Lake used to be its former crater.

A large part of the province is located along the coastal area. The irregular coastline is dotted with numerous coves, peninsulas, and bays. The Maricaban and Verde Islands along the Verde Island Passage are geographically part of Batangas.

1.5.4 Commerce and Industry

Agriculture is the province's main source of livelihood. Major crops are *palay*, sugarcane, coconut, coffee and cacao. Batangas is also a major source of cattle for Metro Manila and adjoining provinces.

A large number of residents depend on fishing for their livelihood, mainly due to its expansive coastal area. Taal Lake is also a major source of fresh water fish such as the tasty *maliputo* and *tawilis*.

The deep waters of Batangas Bay, with its flat and steep coastal lands, have been designated as the site for industrial development, specifically for industries such as oil refineries and shipyards. Caltex has its refinery complex in San Pascual, while shipyards dot the coastline of Bauan providing livelihood to majority of its residents. Table 1.9 shows the list of industrial estates in Batangas.

TABLE 1.9
LIST OF INDUSTRIAL ESTATES, BATANGAS

Name	Location	Land Area	Status
Batangas Provincial Industrial Estates	Asis, Bauan	350 has.	Operational
Batangas Regional Agro-Industrial Center	Pinamucan, Batangas City	1,404.38 has.	Proposed
Batangas City Industrial Estate	Batangas City	1257.24 has.	Proposed
Provincial Agro-Industrial Park	Sto. Tomas	1,546 has.	Proposed
Provincial Mini-Industrial Estate	Tanauan, Malvar, and Ibaan	20 has.	Proposed

Source: BOI

1.5.5 Urban Development

The population of Batangas has steadily increased in the past 15 years. However, its annual growth rate is lower than its neighboring provinces like Cavite (6.9%) and Laguna (3.5%). It is also sparsely populated with only 5.3 persons/ha. as compared to Cavite, with 12.5 persons/ha., and Laguna with 9.3 persons/ha.

The population trend of the province is shown below.

<u>Year</u>	<u>Population ('000)</u>	<u>Annual Growth Rate (%)</u>
1980	1,174	-
1990	1,477	2.3
1995	1,659	2.4

Today, industrial growth is creating a demand for new housing projects. Mass housing projects are being established on large portions of undeveloped land such as Tiera Verde in San Isidro, located south of Batangas City. This recently completed development offers a total of 1000 detached family housing for 5,500 people. Table 1.10 shows the lists of subdivision in the province.

These subdivisions occupy a total of 2,646,739 sq.m. with a 14,597 lots. These subdivisions are dispersed in 16 municipalities.

With the on-going upgrading of the Batangas Port to international standards, Batangas City will become a gateway of Metro Manila. In fact, the provincial government expects a rapid increase in population to the million mark from the existing 300,000 population. The provincial government shall encourage urban development along the South Luzon Expressway Extension and Batangas Bay. The flagship projects are illustrated in Figure 1.7. They are concentrated on the said areas except for those reserved for tourism and social welfare development. Accordingly, Figure 1.8 identifies the growth corridor of the province.

TABLE 1.10
LIST OF HOUSING SUBDIVISIONS, BATANGAS

Name	Location	Land Area (sq.m.)	No. of Lots
Baseview Homes II	Banay-banay, Lipa City		935
Villa Maria Subdivision	San Pascual		67
Bragado Homes	Mabalanoy, San Juan		105
Reaville Classic	Tanauan	30,000	193
Reaville Subdivision II	Bagong Bayan, Tanauan	7,066	65
Immaculate Conception	Mataas na Kahoy	15,590	102
Camellas Homes Batangas	San Pascual		
Evergreen Compound	Sto. Tomas	19,636	39
El Puerto Real Subdivision	Batangas City	35,849	171
Julie Ville Homes	Poblacion, Sto. Tomas	13,503	82
Sampaquita Country Homes	Batangas City		142
Sterling Heights Subdivision	Batangas City	75,175	389
Villa Soledad	Calit-calit, San Juan	39,682	118
South Valley Subdivision	Sabang, Lipa City	5,575	41
BCU Homes	Batangas City	32,839	185
Marcela Noble Et Al	Rosario	18,771	18
Canyon Wood Residential	Gregorio, Laurel		
Canyon Wood Residential Ph.II	Gregorio, Laurel		343
Las Villas de Aguila	Pob. Lemery		171
Calaca Greenfields	Bagong Tubig, Calaca	23,724	88
ACEACA hills Subdivision	Lipa City	53,189	134
GSIS Sto. Nino de Lipa	Maracuy, Lipa City	115,461	598
Ramonita Country Homes	Darasa, Tanauan	65,888	1,025
Sunrise Village IV	Bolbok, Lipa City	8,774	80
Mediatrix Ville	Kayumanggi, Lipa City	79,508	162
Residencia Hispanica Estate	Munting Tubig, Balayao	116,844	529
Las Palmas Village	Pob. III, San Tomas		197
Tahanan sa Family Haven Ph. I	San Juan	21,300	166
Skyview Ridge Subdivision	Gregorio, Laurel	61,167	50
HRA Compound	San. Roque, Bauan	8,794	50
Silver Wings	Brgy. Tambo, Lipa City	7,287	54
Roman Ville Malvar	Malvar		235
Roman Ville Tanauan	Bo. Darasa, Tanauan		193
Roman Ville Subdivision	Bo. Tanguay, Lipa City	30,000	119
Milflores villas Subdivision	Brgy. Caloocan, Balayan	11,920	422
Spring Homes-Tanauan	Brgy. Darasa, Tanauan		410
B.F. Town Lipa Village I	Lipa City	40,060,	177
Miracle Heights Subdivision	Kayumanggi, Lipa City	101,796	61
Miracle Heights II	Kayumanggi, Lipa City		421
Emerald Homes	Tambo Lipa City	32,180	112
R.K. Village II	Batangas City		131
San Pedro Village Ph. I	San Isidro, Batangas City	54,145	188
Mountain Ridge Subdivision	Brgy. Niyugan, Laurel	34,813	17
Glo-Mame Subdivision	Dominador East, Alitagtag	38,668	135
Don Bibiano Homes	San Rafael, Sto. Tomas	54,998	259
Villa Mercedes Natures Village	Karsada, Batangas City		193
St. James Village	Brgy. Pangao, Ibaan	22,682	137
Center Plain Subdivision	Labak, Batangas City		46
San Isidro Village Ph. II	San Isidro, Batangs City	162,630	830
Kriscel Village Subdivision	Bo. Darasa, Tanawan	14,968	89
Sampaguita Country Homes	Gulod Itaas, Batangas City	1,514	153
Villa San Roque Subdivision	Brgy. Quilib, Rosario	44,053	77

TABLE 1.10
LIST OF SUBDIVISIONS, BATANGAS
(Continuation)

Name	Location	Land Area (sq. m.)	No. of Lots
El Sitio Subdivision Ph. I & II	Pumantay, Batangas City	81,663	667
Greenwoods South	Batangas City	389,700	1394
St. Paul House	Sta. Rita, Batangas City	35,000	165
First World Homes	Bo. Anilao, Lipa City	22,209	194
Adelina Homes-Lipa Ph. I	Mataas na Kahoy, Lipa City	16,895	89
Villa Adela Subdivision	Brgy. San Carlos, Rosario	27,245	175
Arlene Ville Subdivision	Bo. Butong, Taal	19,214	76
Villa & Villas	Brgy. Libjo, Batangas City	17,631	82
Peninsula de Punea	Brgy. Balaytique, Nasugbu	459,573	505
Tennessee Homes	San Pablo, Sto. Tomas	77,560	461

FIGURE 1.7
FLAGSHIP PROJECTS, BATANGAS

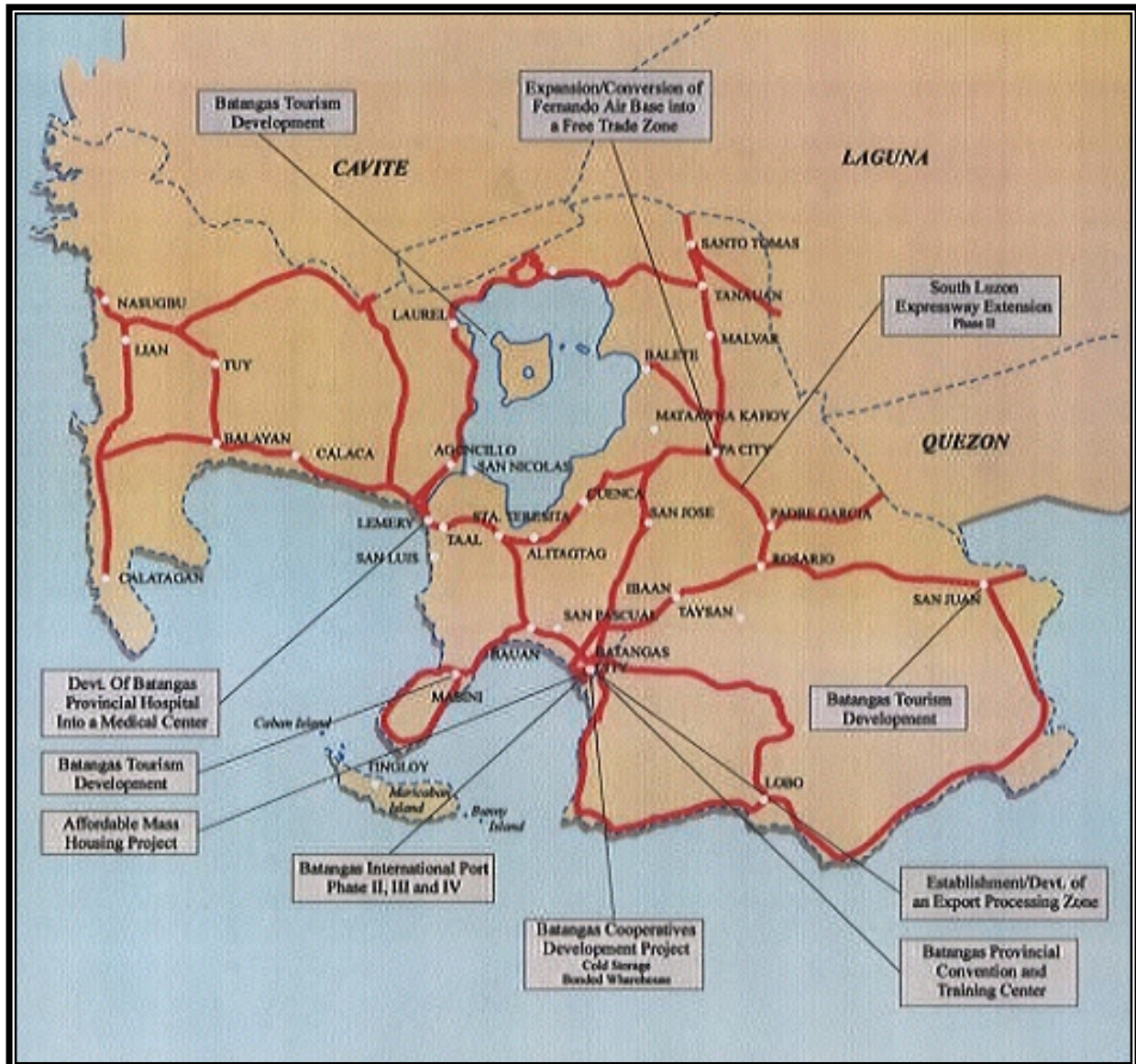
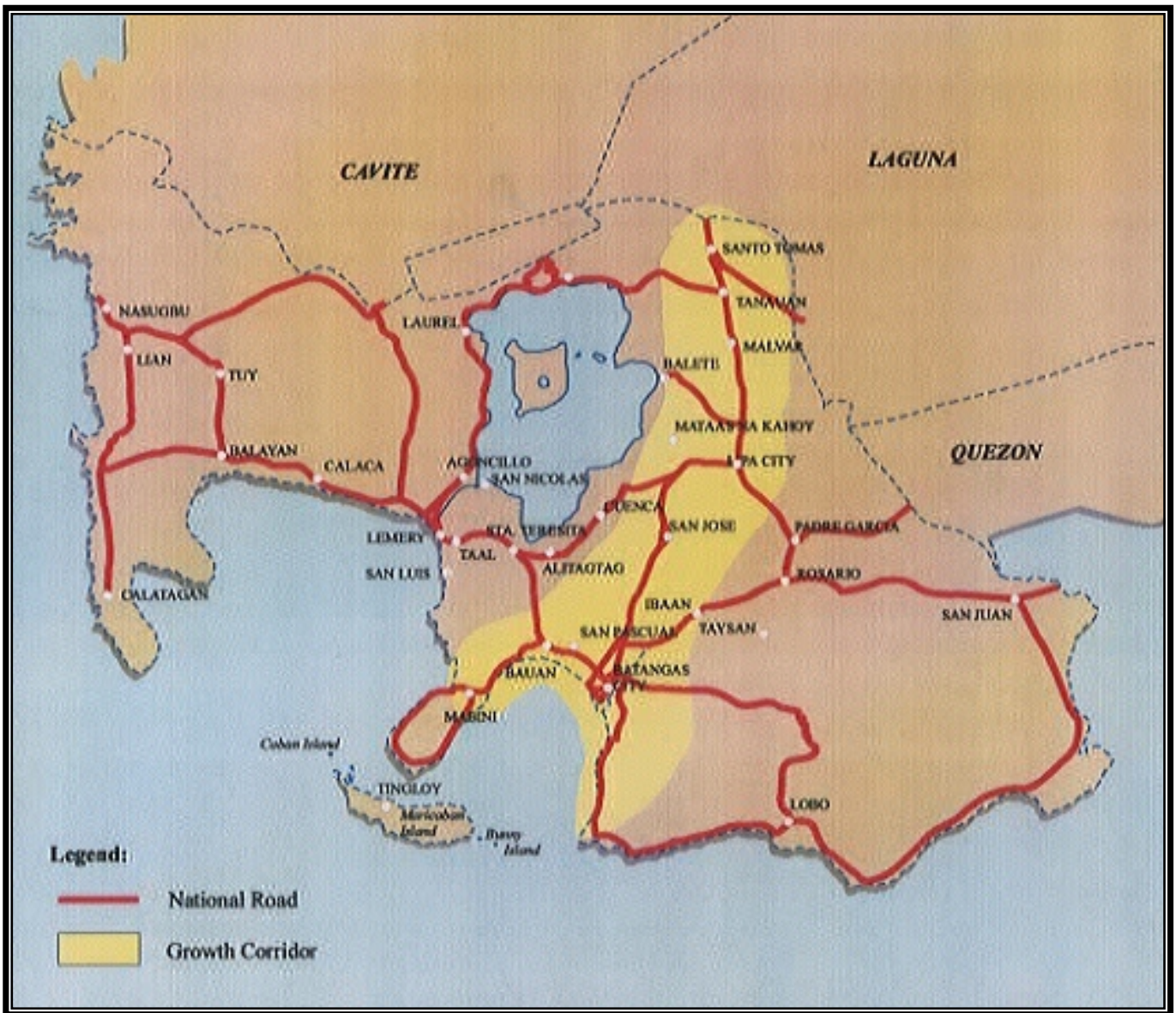


FIGURE 1.8
GROWTH CORRIDOR, BATANGAS



2. ROAD AND ROAD TRAFFIC

2.1 Road Inventory

Bulacan

There are three (3) trunklines connecting Bulacan and the rest of central Luzon with Metro Manila. These are:

- The North Luzon Expressway (NLE) is a toll road with 4-lane carriageway. Presently, the NLE is being widened in the Balintawak-Tabing section under a BOT scheme.
- Another trunkline is the Manila North Road or the national Route No. 3, most commonly referred to as MacArthur Highway. This road has good alignment in parallel with NLE but its width is only seven (7) meters.
- The third trunkline is the Don Maharlika Road or the National Route No. 5, also known as the Philippine-Japan Friendship Highway. It connects Sta.Rita with Cagayan Valley, traversing Cabanatuan City. In the province, the road diverges from the National Route No.3 and passes through mountainous areas in line with the abandoned PNR Cabanatuan line. The road is narrow (6meters wide) and badly paved.

Other roads in the province are narrow and not yet well maintained, including the so-called Bulacan Circumferential Road (Malolos-Plaridel-Bustos-Angat-Sta.Maria-Balagtas). Figure 2.1 shows the road map of Batangas province.

Rizal

Several major roads provide access to the province of Rizal. These are:

- Sumulong highway is by far the major road connecting Rizal to Metro Manila. It has the widest carriageway at 8.8 meters. It runs from Marcos highway in Marikina to Antipolo town proper.
- Marcos highway is the longest stretch of road that connects Rizal with Metro Manila. Its total length is 40.5 m. though its carriageway measures only 7 meters.
- Other roads that lead to Rizal are Taytay National Highway and Cainta National Road. Both roads connect the province with Metro Manila via Ortigas Extension.

Roads within the province are generally narrower than the major access roads previously mentioned. However, several roads are noticeably wider. The most important road in terms of carriageway is E. Rodriguez with a 4-lane carriageway measuring 13.4 meters. The road is rough and is made up mainly of asphalt.

Other roads with wide carriageway are the Circumferential Road (Sumulong to Antipolo National Road) and Baras National Road (Teresa to Jala-Jala). Both roads are paved with concrete and in good condition. Figure 2.2 shows the road map of Rizal.

FIGURE 2.1
BULACAN ROAD MAP

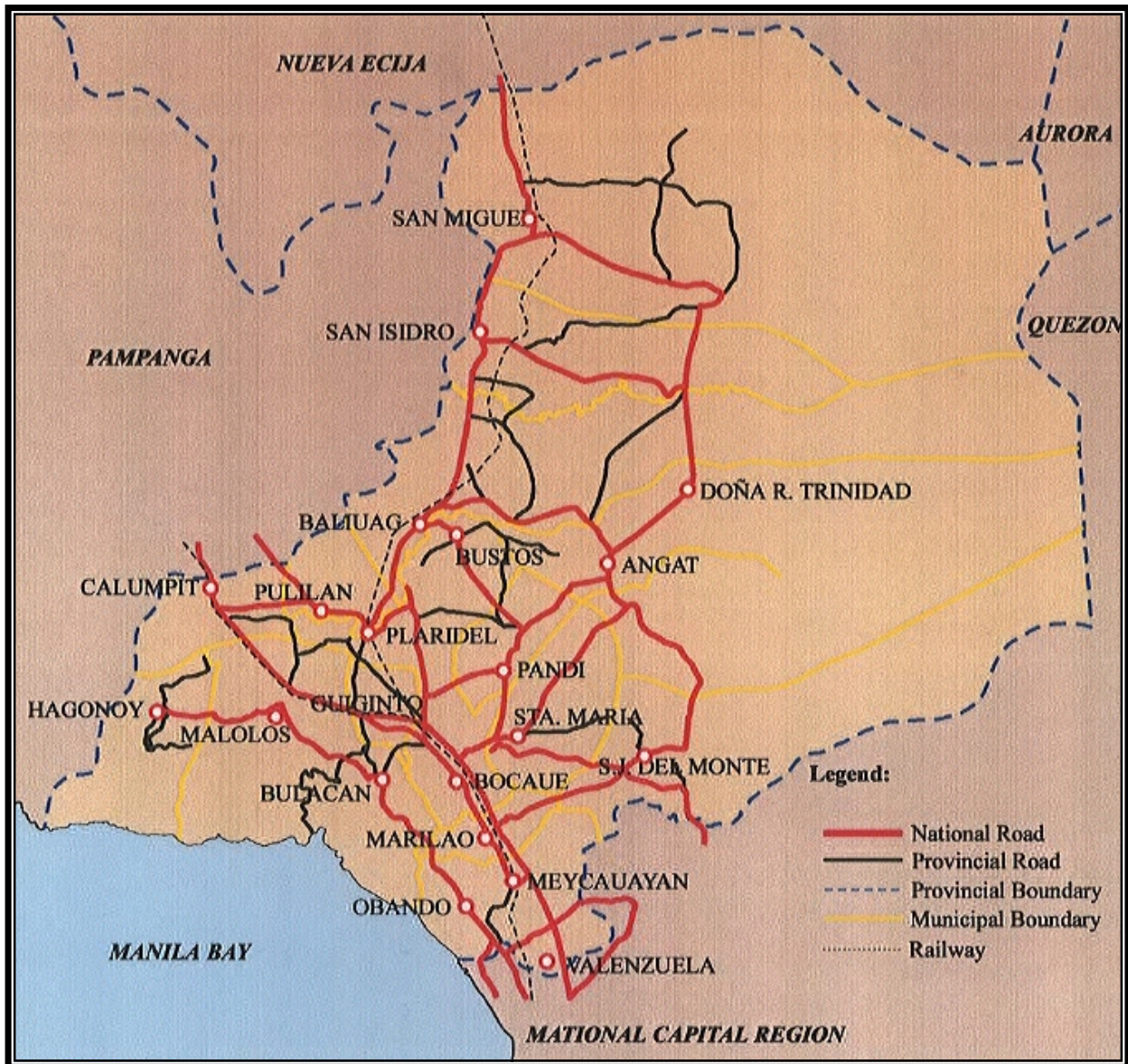


FIGURE 2.2
RIZAL ROAD MAP

