

2.3 Social and Economic Settings

2.3.1 Socio-Economic Conditions

1) Economic Activities and Employment

The tourism sector has been the mainstay of the Phatthaya's economy providing job opportunities and bringing about income to the area.

According to a survey conducted in 1987 by DTCP, commercial and service establishments numbered 2,249 in total with the following types of establishments.

food and beverage	544
hotels	179
beauty parlor	174
clothes shop	159
beer gardens/bars	104
other/miscellaneous	1,089

Based on the DTCP survey in 1987, data obtained from Phatthaya City and some results of the tourism questionnaire survey conducted by the Study Team, the total number of employment in Phatthaya is estimated to be about 50,000 in 1989 with the following breakdown.

Service Industry	28,000
(Hotel)	(17,000)
(Other)	(11,000)
<u>Other Sector</u>	<u>22,000</u>
total	50,000

More detailed breakdown is shown in Table 2.3.1.

2) Revenue from Tourism Sector

Revenue generated by the Phatthaya's tourism sector contributes significantly to the foreign exchange earning of Thailand. It was estimated for 1987 using the results of the tourism questionnaire survey and the number of guest arrivals to Phatthaya as follows.

Thai Tourists

(700 Bahts/tourist/day × 405,000 tourists × 2.1 days)

+ (700 Bahts/tourist/day × 697,000 day-trippers)

= 1,083 Bahts × 10⁶

Foreign Tourists

2,300 Bahts/tourist/day × 1,012,000 tourists × 6.6 days

= 15,362 Bahts × 10⁶

In total, revenue accrued from the tourism sector was estimated to amount to 16,445 Bahts × 10⁶ in 1987. The revenue generated by foreign tourists, 15,362 Bahts × 10⁶, was equivalent to 31% of the total revenue from the tourism sector in Thailand or 5.1% of the total export value of Thailand.

3) Population

The official population registered in Phatthaya City numbers 53,454 in 1989. The population growth rate was 4.8% per year between 1982 and 1989. Table 2.3.2 shows the registered population in Phatthaya between 1982 and 1989 by sex.

During the first survey in Thailand (June-Aug. 1989), the Study Team was informed of the possibility that the real number of population far exceeds the registered population. Some unofficial sources indicated more than 100,000 or 200,000 as real population of Phatthaya. A number of categories of non-registered population are conceivable for non-registered population of such as follows.

- population settled in Phatthaya, but not registered at the City Office (e.g., workers in service industries)
- population living in Phatthaya for medium-term period like 1-2 years (e.g., construction workers)
- population living in Phatthaya for short period like 2-3 months only in peak periods (e.g., female workers in service industries).

Most of these types of population are likely to be young workers still single or workers living in Phatthaya away from their families. They are most likely not to be registered at the city office, since they have no necessity or incentive to do

so. They do not have to worry about securing utilities services or school registration of children, as far as they live on their own or apart from their family members renting rooms or houses.

Since there is no definite data to show the number of non-registered population, it should be estimated based on available data and information. The Study Team concluded that the total population in Phatthaya is about 100,000 in 1989 based on the estimated number of employment and the ratio of employed population to total population estimated by DTCP as follows.

$$50,000/0.493 = 101,410 \text{ or } 100,000$$

The employment figures of 50,000 is as presented in the preceding part. The employed population/total population ratio was derived from the general plan prepared by DTCP in 1987. DTCP estimated the employed population in Phatthaya to be 35,448 in 1987 which is equivalent to 49.3% of the total population of Phatthaya estimated by DTCP as 71,871. This estimate implies the non-registered population is about 47,000 currently.

Present population outside Phatthaya City is as follows.

- Tha Farang Bech Area
and Bang Sare : 19,164 (in 1988)
- Hinterland Area : 65,516 (in 1988)

In terms of administrative boundary, Tha Farang Beach Area roughly corresponds to Muban 1, 2, 3, 4, 8 and 9 of Tambon Jomtien and Bang Sare roughly corresponds to Muban 1, 2, 4, 5 and 8 of Tambon Bang Sare in Sattahip District. Hinterland Area corresponds to Bang Lamung District. The registered population of these areas above are considered to closely represent the total population of the areas.

2.3.2 Institutional, Financial and Legal Settings

1) Present Thai Administrative Framework

During the reign of King Rama V of the Ratanakosin era, several fundamental reforms were made by which decentralization was promoted and local administrations were strengthened in order to enhance democracy in the country. Since then, many administrative reforms have been made but basic structure remains the same.

Under the Government of Thailand, there are 13 ministries and several state enterprises. At the regional level, there are Provincial Administrative Organization (PAO). Each PAO consists of a Provincial Governor to be appointed by the Minister for Interior from among the senior officials of MOI and a Provincial Council whose members are selected by election. District is an administrative unit under PAO. District officers are appointed from within the Department of Local Administration (DOLA), MOI. Governors and District Officers are given authority to supervise the officials of agencies operating within their respective areas. They are also empowered to control local self-government units. Sanitation districts are administrative units established under the Sanitation District Act of 1952. Each sanitation district is governed a commissioned body consisting of government officials and elected persons.

Municipalities have separate executive and legislative bodies. Members of the legislative body are elected by the residents. Municipal executives are selected among the members of the council, leader being called as mayor. The municipalities are categorized into three types according to the population size and density; city municipality, urban municipality and sub district municipality. Communed and villages have their leaders selected by election.

There are two special forms of legal governments, i.e., Bangkok Metropolitan Administrative (BMA) and Phatthaya City. BMA has the status equivalent to a province. Council members are selected by election and the Governor is also by election of the residents.

Phatthaya City has the station equivalent to city municipality. The City has a council and a mayor like other municipalities but the mayor has no administrative power. City manager, instead, is hired by the council and act as the chief executive officer.

2) Institutional Framework

(1) Legislative and executive body and city manager system

Phatthaya City has a council as a legislative body which consists of 17 members. Out of 17 to 9 members are by election of residents and the rest of 8 members are by appointment of the Minister for Interior. All the members have the term of 4 years.

Among the 17, one member is selected as mayor. Mayor, different from the other municipalities, is not a chief executive officer but a chairman of the council and act as the representative and leader of Phatthaya City is various functions and ceremonies. The term of Mayor is 2 years.

By the Administration of Phatthaya City Act (APCA) B.E. 2521 (1978), city manager system was introduced to Phatthaya administration with a view to conducting efficient administration by well-experienced administrative expert based on the United States City manager system. APCA stipulates that the Phatthaya City Manager is the superior official equivalent to the Mayor of Muang municipality. He shall appoint up to 2 deputy city managers.

Mayor shall select at least 2 but not more than 3 candidates suited to the qualification stipulated in APCA and propose to the council for approval of appointment. In the employment of the City Manager, Mayor shall be a party acting on behalf of the Phatthaya City.

(2) Duties and organization of Phatthaya City administration

Duties of Phatthaya City are stipulated in APCA as follows:

- maintenance of public order;
- promotion and maintenance of the environment quality and natural resources;
- town planning and construction regulation;
- housing management and slums improvement;
- keeping of streets, pavements and public places tidy;

- refuse and waste disposal;
- providing supply of fresh water or water works;
- providing and regulating market places, piers and parking areas;
- supervision of hygiene in restaurants, theaters and other service providing establishments;
- regulation and promotion of tourism;
- other duties as prescribed by law to be the duties of a Muang municipality of Phatthaya City.

To carry out the duties, 410 civil servants are assigned and 238 permanent employers and 360 temporary employees are working within 9 divisions of the administration. Number of City Staff and organization of the administration are shown in Table 2.3.3 and Fig. 2.3.1, respectively.

As a special city, Phatthaya City is empowered with the followings by APCA besides these stipulated in the Municipality Act:

- i) City can carry out a commercial undertaking by enacting an ordinance;
- ii) City may join other persons in establishing of a juristic company;
- iii) A juristic person called "Union" can be established by consisting of Phatthaya City and Government units by enacting a Royal Decree.

(3) Organization involved in Phatthaya development

Many projects have been and are being implemented by various departments and authorities of the Central Government with the cooperation of the Phatthaya City Government, (PCG) in some cases. Certain facilities are operated, maintained and replaced also by Central Government organizations, treatments plants for water supply by PWA/PWD for instance. Under the current practices, park and solid waste disposal is the only fields for which PCG is solely responsible from planning up to construction and maintenance, the rest being either

carried out by the Central Government or jointly by PCG and Central Government. The responsibilities and power for infrastructure development and maintenance under current practices may be understood as shown in Table 2.3.4.

Besides infrastructure development, various organizations are concerned with Phatthaya area development. For town planning, Department of Town and Country Planning (DTCP) has its branch office in Phatthaya. The current General Plan for the Phatthaya City was prepared and revised by DTCP. Tourism Authority of Thailand (TAT) has its branch office in Phatthaya for further promoting tourism Phatthaya being the second largest city in terms of tourism. TAT has a plan for development of tourism resources of Phatthaya.

Several private organizations are involved in the development of Phatthaya, tourism sector in particular, including:

- Thai Hotels Association, Phatthaya Chapter
- Small Hotels Association, Phatthaya Chapter
- Restaurants and Food Shops Association of Phatthaya

A committee has been set up for promoting tourism by public/private joint efforts, through which TAT has been subsidizing 3 to 5 million bahts per annum. The Vice President of TAT serves as Chairman with members comprising of the chiefs of several government agencies and state enterprises in Chon Buri, representatives of the above-mentioned private organizations.

Organizations involved in the development of Phatthaya area is shown in Fig. 2.3.2.

(4) Relationship with the Central Government

Though PCG has autonomy at certain level, both legislative and executive bodies of the City are under the influence of the central Government as well as the Provincial Government as follows:

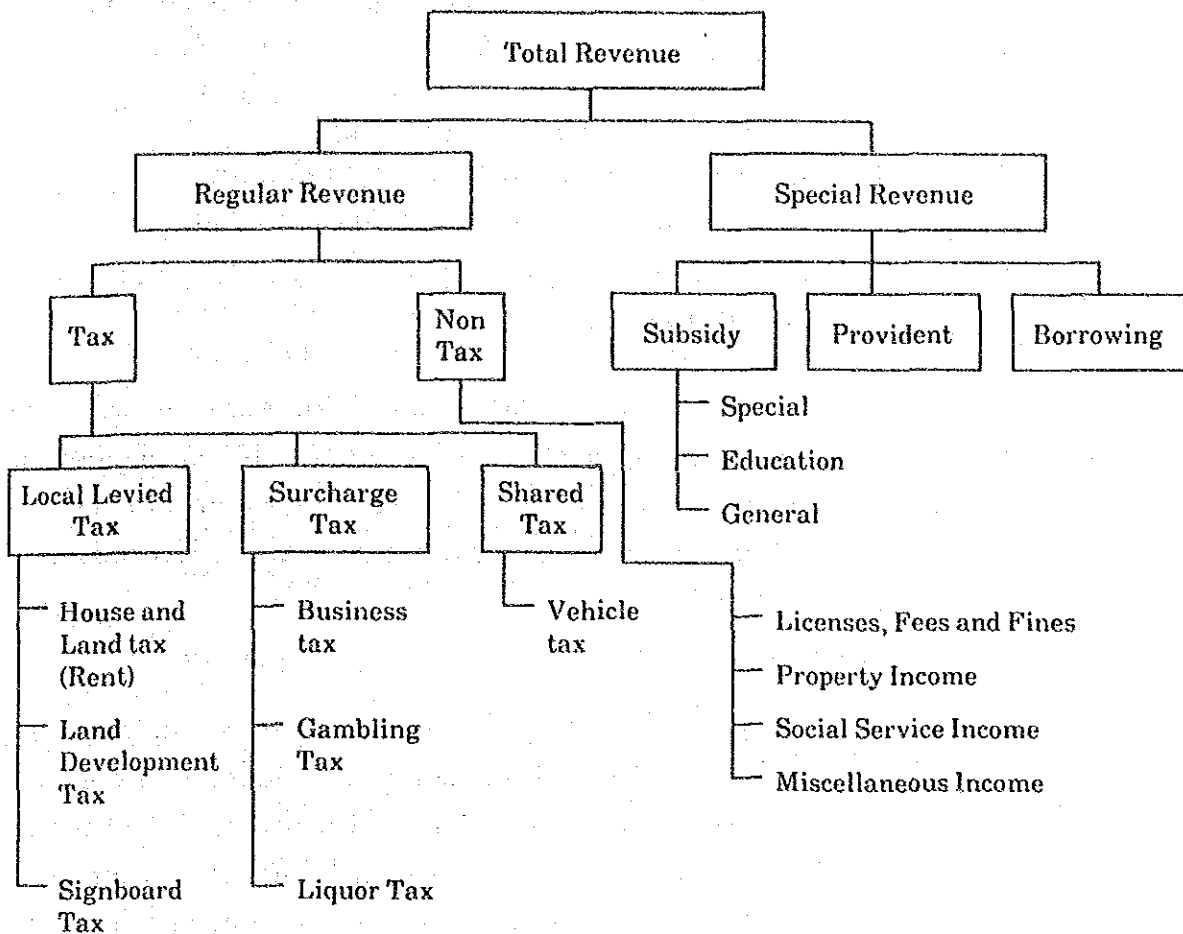
- i) The Minister for Interior (The Minister) shall appoint eight members of the Phatthaya City Council; four from different occupations and four from the representative of government units.

- ii) The Minister, upon advice of the Provincial Governor (The Governor), has the power to dissolve the Phatthaya City Council.
- iii) In the case where the membership of any member is alleged to have been terminated for any reason stipulated in APCA, the Governor shall appoint a committee to carry out inquiry. If the committee reports that it is terminated and the Governor concurs with the finding, he shall issue an order of dismissal.
- (iv) The Minister has the power to issue an order to dismiss the Mayor if Ministers opinion is that Mayor's conduct is detrimental to the dignity of office and duty.
- (v) After the concurrence of the City Council for any draft ordinance, City Manager shall refer it to the Governor for consideration. If the Governor disagree with it, City Manager shall refer it to the Council for reconsideration. If the Council does not reaffirm it with less than 11 votes, that draft ordinance shall lapse.
- (vi) The City Manager shall submit all matters which Phatthaya City is required to send to the Minister for Interior through the governor who shall give his opinion and submit it to the Minister.
- (vii) The Governor shall have the power and duties to control and supervise the operation and activities of the City.
- (viii) If the Governor is of the opinion that the performance of the City Manger may be detrimental to the City, the Governor shall submit a report to the Minister in order to consider and issue an order as he thinks fit. In the case of emergency, the Governor shall have the power to issue an order suspending the City Manager's performance.

3) Financial Framework

(1) Revenue

Revenue sources of PCG can be classified into five categories, i.e., taxes non-taxes, subsidies from the Central Government, Provident fund and borrowing as shown in following future. The major items are briefly explained hereunder.



Revenue Structure of Phatthaya City

i) Locally-Levied Taxes

Phatthaya City is authorized to collect under existing tax codes entirely for its own use the following types of taxes:

- House and land tax
- Land development tax
- Signboard tax
- Slaughter tax

ii) Surcharge taxes

Phatthaya City is legally authorized to add a surcharge of up to 10% percent to certain national taxes. They are collected by a local

representative of the Revenue and Excise Department, Ministry of Finance. Normally, the full 10 percent surcharge is applied with 5% deducted for collection costs, except for cement tax and petroleum and petroleum product taxes which are surcharged 2% and 1%, respectively. Surcharge taxes include:

- Business tax (including Entertainment tax)
- Gambling tax
- Liquor tax
- Excise taxes (including Cements, Petroleum and Petroleum products and Non-alcoholic tax)

The Ministry of Interior allocates these surcharges to local governments including Phatthaya City on the basis of specific formulas. The business tax is allocated based on the actual allocation in 1960. Excise and liquor taxes are allocated on a registered population base.

iii) Shared Taxes

Shared taxes are represented by the motor vehicle tax with the Police Department and Land Transportation Department as the collectors. Ministry of Interior, through its provincial office in Chonburi, allocates 50 percent of annual vehicle taxes to 6 municipalities including Phatthaya City, 25% to Sanitary Districts, and 25% to the Provincial Administration. Phatthaya City, therefore, receives only 8.33% of annual vehicle taxes collected in Chonburi province.

iv) Non-tax revenue

Non tax revenue consists of licences, fees and fines, city owned property income, social service and miscellaneous income.

Licenses are required for anyone who wishes to operate a business which affects, for instance, health of people, such as restaurants, barber shops, medical etc.

Income from fees and fines covers several activities, such as the collection of fees from slaughter houses, gambling establishments, and garbage fees, and the imposition of fines for violation of local ordinances.

Property income is derived from Phatthaya's own land and improved properties which can be leased to individuals or corporations, and interest income from bank deposits.

Social service revenues are mainly derived from the extension of public utilities, i.e., water supply and electricity.

Miscellaneous revenue include sale of property, funds donated by the public and fees for selling construction and drainage maps.

v) Subsidies

Subsidies include grants from the central government consisting of three categories, namely special grants, education grants and general grants.

Special grant is a fixed amount subsidy to be utilized for covering development expenditures.

Education grant, by the central government, is provided for the purpose of promoting primary education in Phatthaya. The amount is based on fixed and variable educational expenses of Phatthaya City. General grant is based on registered population with 60 bahts per capita.

vi) Provident fund

Provident fund is allocated from central government to Phatthaya City as the accumulation of leftover. Local government including Phatthaya City are required by law to have the current year's expenditures not to exceed 97% of the three-year average of previous revenues including Royal Thai Government grants.

vii) Borrowings

Borrowings are usually loans from central government and Municipality Trust Fund.

REVENUES OF PHATTHAYA CITY CLASSIFIED BY SOURCE
1986-1988

Revenue Item	1986	1987	1888
(1) Locally Levied Taxes			
House and Land Tax	19,122,278	18,787,042	25,101,051
Land Development Tax	2,405,423	2,301,226	2,491,053
Signboard Tax	1,518,643	1,748,176	2,476,220
Slaughter Tax*	92,578	1,748,176	111,551
Rice Tax	33,807		
(2) Surcharge Taxes			
Business tax	10,163,506	10,847,263	15,129,953
Gambling tax	73,872	31,350	28,652
Liquor tax	749,015	681,144	800,503
Excise tax	373,073	452,214	447,476
(3) Shared Tax			
Vehicle tax	9,905,134	11,919,290	10,275,624
(4) Licenses, Fees and Fines**	3,700,932	8,389,510	6,014,228
(5) Property Income	2,576,082	3,156,727	2,760,060
(6) Social Service Income***	192,384	155,009	162,637
(7) Miscellaneous Income	646,732	362,940	746,582
(8) Subsidy			
Special Grant	19,895,000	29,675,773	34,800,000
Educational/General Grant	11,948,034	13,180,285	45,379,614
(9) Provident Fund****	2,181,000	1,500,000	435,000
(10) Borrowing	-	45,700,000	-
Total	85,503,628	147,269,937	147,160,204

* Slaughter taxes include pork, cow, and buffalo slaughter taxes

** Licenses, fees and fines (excludes gambling tax)

*** Social service income is from pawn shops

**** Provident fund is called "accumulated money"

Although Phatthaya City is empowered to issue bonds, to borrow foreign loans or acquiring profits from the private firm of which Phatthaya City possesses in excess of 50% of the registered capital, she has not used these powers up to now.

Revenues of Phatthaya City is shown in the former table. Out of 147 million bahts in 1988, 39.9 million baht or 27.1% of the total is considered as "autonomous" revenue of PCG.

(2) Expenditures

Expenditures of Phatthaya City for 1987, 1988 are shown in following table. Out of the 97.2 million bahts, 51.9 million bahts or 53.4% of the total was development expenditure in 1987. In 1988, it was 90.9 million bahts or 60.6% of the total due to the construction of the new city hall.

EXPENDITURE OF PHATTHAYA CITY 1987-1988

Expenditure Item	1987	1888
(1) General Expenditure:		
Debt repayment	98,292	
Committed expenses	1,641,170	1,720,880
Reserves	49,697	1,114,770
(2) Expenditure of Divisions		
<u>Regular expenses:</u>		
Salaries and permanent wages	12,082,118	14,959,490
Temporary wages	5,336,360	7,281,730
Honorarium, sundry and materials	13,587,623	15,510,530
Public utilities	1,992,694	2,034,200
Subsidy expenses	65,087	171,000
Miscellaneous	969,854	2,564,256
<u>Expenses on investment:</u>		
Equipment, land and construction	11,929,799	13,819,730
(3) Specific Subsidy		
<u>Regular expenses:</u>		
Salary and permanent wages	11,261,670	12,607,880
Honorarium, sundry and material	115,774	56,170
Miscellaneous	638,065	959,789
<u>Expenses on investment:</u>		
Equipment, land and construction	39,573,000	29,893,000
(4) Expenses of Accumulated income		
<u>Expenses on investment:</u>		
Equipment, land construction	435,000	1,519,000
(5) Loan Repayments		
Equipment, land and construction (City Hall)	-	45,700,000
Total	97,223,208	149,912,423

(3) Balance

The balance of revenues and expenditures was 50.0 million bahts in 1987 and minus 2.8 million bahts in 1988. The large surplus in 1987 and small deficit in 1988 were due to the borrowing for the city hall construction. Normally, the balance should be surplus because of the

Municipality Act which requires the municipalities that the expenditures should not exceed 97% of the average revenue of three previous years.

4) Legal Framework

(1) General

Among the laws and Royal Decrees applied in Thailand, these which might affect the development of Phatthaya will be briefly described hereunder in the context of their relevancy with the development.

(2) Enhancement and Conservation of Natural Environmental Quality Act B.E. 2518/1985)

The Act gives the power to the National Environmental Board (NEB) within the Prime Minister's Office, to require government agencies, state enterprises and other entities to submit survey documents on the consequences affecting environmental quality related to their planned projects. Environmental Impact Assessment (EIA) reports are required to be prepared and submitted for certain types and sizes of the projects. Especially in relation to the development of Phatthaya, EIA are required for these hotels or resort facilities with more than 80 rooms.

(3) Town Planning Act, B.E. 2518

The Act provides for the designation of selected urban and rural areas for which either general plans or specific plans shall be made. In case of general plan, either Office of Town Planning or Local Officer, PCG for instance, may make the plan. The plan shall be submitted to the Board of Town Planning for consideration. After receiving and consideration to the requests in writing made by any affected persons, Board of Town Planning either approve, modify, alter or cancel the plan. If approved, the plan shall be submitted to the Minister for Interior in order that a Ministerial Regulation enforcing such General Plan may be issued. The Ministerial Regulation shall be in force for not more than 5 years.

In the area where a Ministerial Regulation enforcing General Plan has been in force, no person shall use the land differently from that prescribed in the General Plan nor act in contravention of the prescriptions of such General Plan. Any person who violates or fails to

comply with the General Plan shall be liable to imprisonment for a term not exceeding 6 months or to a fine not exceeding 10,000 bahts or both.

Specific Plan, which should contain more detailed information about the land use, property and projects, is to be prepared in the similar manner as General Plan. For enforcement, an Act shall be enacted which shall be in force for not more than 5 years. Penalty for violation is the same as that of General Plan.

(4) Administration of Phatthaya City Act, B.E. 2521

The Administration of Phatthaya City Act was enacted in 1978 for the establishment of the Phatthaya City. The Act stipulate the power and duties, administrative organization and income and expenditures of the City. The composition of the Act is given below:

- Chapter I Establishment of Phatthaya City
- Chapter II Administration of Phatthaya City
- Chapter III Organization of Phatthaya City
- Chapter IV Power and Duty of Phatthaya City
- Chapter V Ordinances
- Chapter VI Incomes and Expenditures
- Chapter VII Control

As mentioned in the previous sections, it should be noted that the Act first introduced city manager system to the country. Considering the characteristics of the City as a tourist resort, the Act includes the promotion of tourism among the duties of the City and in this context, it empowers the City to undertake commercial activities as well as to join a juristic company under certain conditions.

5) Results of Tourism Market Survey

A tourism market survey was conducted as part of the Study in the following manner.

- Method : questionnaire survey
- Period : July to August, 1989
- Place : Phatthaya and Bangkok

- Number of Samples Collected:

tourist	:	1,582
travel agent	:	26
hotel	:	59
total	:	1,667

(1) Major Findings

The questionnaire survey with tourists confirmed the attractiveness of Phatthaya as a resort. Most visiting Phatthaya, both Thai and foreign, were satisfied with Phatthaya and think they wish to return to Phatthaya in the future. Comparing with other major touristic sites in Thailand also, the majority of tourists think Phatthaya is more attractive or as attractive. The point to be noted, however, is that pollution of sea and beach disappointed about half the tourists visiting Phatthaya. This fact implies that though overall impression of Phatthaya is good, environmental deterioration has already reached the level recognizable by general tourists.

Hoteliers and travel agencies, who run business based on touristic resources in Phatthaya, are more sensitive to the problems facing Phatthaya and pessimistic about Phatthaya's future growth prospect. The majority of hoteliers and travel agencies think Phatthaya will remain stable or even decline as a resort in the future. This pessimistic view is probably the reflection of seriousness of the problems facing Phatthaya and their recognition of the international and domestic tourism environment in which Phatthaya is placed: exposure to more severe competition with other beach resorts in Thailand and abroad.

The following part presents the major findings of the tourism market survey for tourists, travel agencies and hotels.

(2) Tourists

The objectives of the market survey with tourists include the following.

- to capture characteristics of tourists visiting Phatthaya
- to capture activities of tourists visiting Phatthaya
- to confirm the evaluation of Phatthaya from the eyes of tourists visiting Phatthaya

- to check the image of Phatthaya from the eyes of tourists not visiting Phatthaya.

Characteristics of Tourists visiting Phatthaya

- (a) Tourists visiting Phatthaya are mostly on vacation.

		<u>Thai</u>	<u>Foreign</u>
Tourists on vacation	(%)	88.4	94.2
Tourists for business/convention	(%)	11.6	5.8
Total	(%)	100.0	100.0

- (b) The majority of tourists visiting Phatthaya travel to Phatthaya on their own.

		<u>Thai</u>	<u>Foreign</u>
Independent tour	(%)	79.7	64.4
Group tour	(%)	20.3	35.6
Total	(%)	100.0	100.0

- (c) Tourists visiting Phatthaya could be classified into the following groups depending on average length of stay in Phatthaya.

(* Figures in () are average length of stay in days.)

Long stayer : Europe (9.5), Middle East (9.2)

Medium stayer : North America (5.1), Oceania (6.0)

Short stayer : Thai (2.1), East Asia (2.9), South Asia (3.2), Southeast Asia (4.0)

- (d) Repeaters account for most of Thai tourists and about half of foreign tourists visiting Phatthaya.

		<u>Thai</u>	<u>Foreign</u>
First comer	(%)	3.6	52.6
Repeater	(%)	96.4	47.4
Total	(%)	100.0	100.0

- (e) Foreign tourist's expenditure is more than three times a day than Thai tourists.

Foreign average : 2,485 bahts/day/person

Thai average : 741 bahts/day/person

Foreign tourists are classified into the following three groups depending on the budget per person per day.

(* Figures in () are budget/day/person in baht.)

High : North America (4,654)

Medium : East Asia (2,937), Southeast Asia (2,810)

Low : Africa (1,600), Europe (2,068), Oceania (1,893), South Asia (1,758), Middle East (2,228)

Activities of Tourists in and around Phatthaya

- (f) Foreign tourists tend to stay at accommodations in Phatthaya, while Thai tourists are more spread in choosing location of accommodation.

<u>Location of Accommodation</u>		<u>Thai</u>	<u>Foreign</u>
Phatthaya	(%)	58.6	84.0
Jomtien	(%)	34.2	13.6
other area	(%)	7.2	2.4
Total	(%)	100.0	100.0

- (g) In terms of activities of tourists visiting Phatthaya, "swimming and relaxing at beach" ranks first followed by other types of activities.

<u>Activities</u>		<u>Thai</u>	<u>Foreign</u>
Swimming/relaxing at beach	(%)	70.0	84.7
Sightseeing	(%)	58.1	58.7
Shopping	(%)	25.2	60.1
Enjoying night life	(%)	39.7	52.7

* Total percentage exceed 100.0 because tourists gave more than one answer.

- (h) In terms of places visited in and around Phatthaya, most tourists (83%), both Thai and foreign, go to Phatthaya beach. Other places are visited by the following proportions of tourists.

	($\%$)	
	<u>Thai</u>	<u>Foreign</u>
Phatthaya Beach	82.4	82.4
Ko Lan	26.2	31.8
Jomtien Beach	62.5	38.9
Bang Sare	16.9	6.5
Inland Attractions	32.1	48.7
Reyong/Ko Samet	26.2	12.6
Other	3.7	4.9

* Total percentage exceed 100.0 because tourists gave more than one answer.

Evaluation of Phatthaya

- (i) About two-thirds of foreign tourists think Phatthaya is more attractive than or as attractive as Chiang Mai and Phuket.

<u>Phatthaya is:</u>	($\%$)	
	<u>Chiang Mai</u>	<u>Phuket</u>
more attractive than	34.0	30.8
as attractive as	30.0	31.7
less attractive than	36.0	37.5
Total	100.0	100.0

- (j) Most tourists visiting Phatthaya think Phatthaya was satisfactory compared with the image they have had before visit.

	(%)		
	<u>Thai</u>	<u>Foreign</u>	<u>Total</u>
satisfactory	81.5	80.6	100.0
not satisfactory	18.5	-	100.0

- (k) Most tourists visiting Phatthaya think they wish to return to Phatthaya in the future.

	(%)	
	<u>Thai</u>	<u>Foreign</u>
wish to visit Phatthaya again	97.2	80.4
not wish to visit Phatthaya again	2.8	19.6
Total	100.0	100.0

- (l) The most popular attraction of Phatthaya is "beaches", followed by "seafood", "short distance from Bangkok", "night entertainment", "friendly locals etc".

	(%)	
<u>What tourists like about Phatthaya</u>	<u>Thai</u>	<u>Foreign</u>
Beaches	63.3	71.0
Seafood	38.6	51.2
Short distance from Bangkok	62.1	33.8
Night entertainment	35.9	45.1
Friendly locals	11.0	44.9

- * Total percentage exceed 100.0 because tourists gave more than one answer.

- (m) The most disappointing aspect of Phatthaya is “polluted beach/sea” followed by “too many bars”, “traffic congestion”, “too crowded” etc.

<u>Disappointments about Phatthaya</u>	<u>(%)</u>	
	<u>Thai</u>	<u>Foreign</u>
Polluted beach/sea	60.1	51.1
Too many bars/night clubs	30.5	32.4
Traffic congestion	30.8	22.8
Too crowded	32.9	20.7

Image of Phatthaya by Tourists not Visiting Phatthaya

- (n) The majority of foreign tourists not visiting Phatthaya did not visit Phatthaya because they had no time.

<u>Reason for not visiting Phatthaya</u>	<u>(%)</u>
no time	57.6
not interested	18.9
did not know about Phatthaya	13.9
no money	1.7
other	7.9
Total	100.0

- (o) The majority of foreign tourists not visiting Phatthaya think they wish to visit Phatthaya sometime.

<u>Asked if they wish to visit Phatthaya</u>	<u>(%)</u>
Yes	56.5
No	24.3
Maybe	13.8
No answer	5.4
Total	100.0

(3) Travel Agencies

The objectives of the questionnaire survey with travel agencies are the following.

- to capture recent trend of tourism in Thailand and Phatthaya
- to check problems of Phatthaya recognized by travel agencies
- to check the view of travel agencies on growth prospect of Phatthaya

The major findings of the survey with travel agencies are as follows.

- (a) Regarding recent growth trend of the major touristic sites in Thailand, Chiang Mai and Phuket are thought to be gaining popularity by 75% of travel agencies, while only about half of travel agencies regard Phatthaya as having been popular.

<u>Major touristic sites</u>	<u>Has been becoming more popular</u>	<u>Has been stable</u>	<u>Has been declining</u>	<u>Total</u>
Phatthaya (%)	52	36	12	100
Bangkok (%)	42	50	8	100
Chang Mai (%)	75	21	4	100
Phuket (%)	88	12	0	100

- (b) Regarding the number of tourists visiting Phatthaya in 1988 and 1989 in comparison with the previous years, larger number of travel agencies think the number of tourist were same as or lower for 1989 compared with 1988 than for 1988 compared with 1987.

	<u>(%)</u>			<u>Total</u>
	<u>Higher</u>	<u>Same</u>	<u>Lower</u>	
1988 compared with 1987	56	20	24	100
1989 compared with 1988	48	8	44	100

- (c) Travel agencies recognize the following aspects as the problems facing Phatthaya.

	<u>(% of travel agencies)</u>
Road condition and traffic congestion in Phatthaya	50
Traffic congestion	60
Beach and sea pollution	100
Defficient sewerage/drainage system	69

(d) Regarding the future growth prospect of Phatthaya, the majority of travel agencies think Phatthaya will remain stable or even decline as resort.

<u>Phatthaya will:</u>	<u>(%)</u>
Prosper more	32
Remain stable	36
Decline	32
Total	100

(4) Hotels

The objectives of the questionnaire survey with hotels are the following.

- to collect information relevant to the planning of the Study
- to capture recent trend of tourism in Phatthaya
- to check problems of Phatthaya recognized by hoteliers
- to check the view of hotelier on growth prospect of Phatthaya

The following are the major findings of the survey with hotels.

(a) Regarding the number of tourists visiting Phatthaya in 1988 and 1989 in comparison with the previous years, the majority of hotels think the number of tourists increased over the previous years both in 1988 and 1989.

	<u>Higher</u>	<u>Same</u>	<u>Lower</u>
1988 compared with 1987	59	27	14
1989 compared with 1988	51	20	29

- (b) Most hoteliers regard "polluted beach/sea" as the problem facing Phatthaya, followed by problems concerning deficient infrastructure system.

<u>Problems identified</u>	<u>(% of hoteliers)</u>
Polluted beach/seas	83
Shortage of tap water	71
Poor sewage/drainage system	66
Impure tap water	64
Too low water pressure	63
Traffic congestion	58

- (c) Regarding the future growth prospect of Phatthaya, the majority of hoteliers think that Phatthaya will remain stable or even decline as a resort.

<u>Phatthaya will:</u>	<u>(%)</u>
Prosper more	32
Remark in stable	36
Decline	32
Total	100

Table 2.3.1 ESTIMATED NUMBER OF EMPLOYMENT
IN PHATTHAYA CITY IN 1989

Sector	Employment
Service	28,000
hotel	17,000
other*	11,000
restaurant	2,600
beer bar	4,400
massage parlor	750
laundry	400
hair deresser/barber	600
gas station	120
movie theater	30
go-go bar	1,100
Other Sector*	22,000
professional	1,300
administrative	500
clerical	1,000
commercial	9,600
agriculture/fishery	1,200
transport	1,800
production process	6,600
TOTAL	50,000

Table 2.3.2 REGISTERED POPULATION OF
PHATTHAYA CITY

Year	Male	Female	Total	Increase (number)	Increase (%)
1982	19,553	18,972	38,525	-	-
1983	20,452	20,023	40,475	1,950	5.1
1984	21,102	20,907	42,009	1,534	3.8
1985	21,910	21,808	43,718	1,709	4.1
1986	23,091	22,985	46,076	2,358	5.4
1987	24,488	23,663	48,151	2,075	4.5
1988	26,097	25,241	51,338	3,187	6.6
1989	27,082	26,372	53,454	2,116	4.1
82 - 89 (%/yr)	4.8	4.8	4.5	-	-

Table 2.3.3 NUMBER OF PHATTHAYA CITY'S STAFF

Division	Civil Servants	Permanent Employees	Temporary Employees	Total
Undersecretary Office	48	60	29	137
Technical and Planning Division	13	-	-	13
Finance Division	30	4	11	45
Public Work Division	51	46	97	194
Public Health Division	28	109	223	360
Education Division*	231	19	-	250
Social Welfare Division	4	-	-	4
Koh Lan Sub-district	4	-	-	4
Inner-Inspection Unite	1	-	-	1
Total	410	238	360	1,008

Remark: Including primary school teachers and staff.

Table 2.3.4 RESPONSIBILITY AND POWER FOR PROJECTS

Kinds (Fields)	Planning	Design	Construction (Budget)	Operation & Maintenance
1. Water Supply				
1.1 Dam/Reservoir	RID	RID	RID	RID
1.2 Conveyance pipeline (Dam to treatment plant)	PWA/PWD	PWA/PWD	PWA/PWD	PWA/PWD
1.3 Treatment plant	PWA/PWD	PWA/PWD	PWA/PWD	PWA/PWD
1.4 Distribution pipeline	PWA/PWD	PWA/PWD	PWA/PWD	PWA/PWD
2. Sewerage	PWD/PCG	PWD/PCG	PWD/PCG	PCG
3. Drainage	PWD/PCG	PWD/PCG	PWD/PCG	PCG
4. Solid waste	PCG	PCG	PCG	PCG
5. Road in the City	PCG/DOH	PCG/DOH	PCG/DOH	PCG/DOH
6. Jetty	HP/PCG	PWD/HD	PWD	PWD/PCG
7. Electricity				
7.1 Power station	EGAT	EGAT	EGAT	EGAT
7.2 Transmission line (Power st. to sub-st.)	EGAT	EGAT	EGAT	EGAT
7.3 Sub-station	PEA	PEA	PEA	PEA
7.4 Distribution lines in the City	PEA	PEA	PEA	PEA
8. Telecommunication	TOT/CAT	TOT/CAT	TOT/CAT	TOT/CAT
9. Park				
10. Low cost housing	NHA	NHA	NHA	NHA

Remarks; PCG: Phatthaya City Government

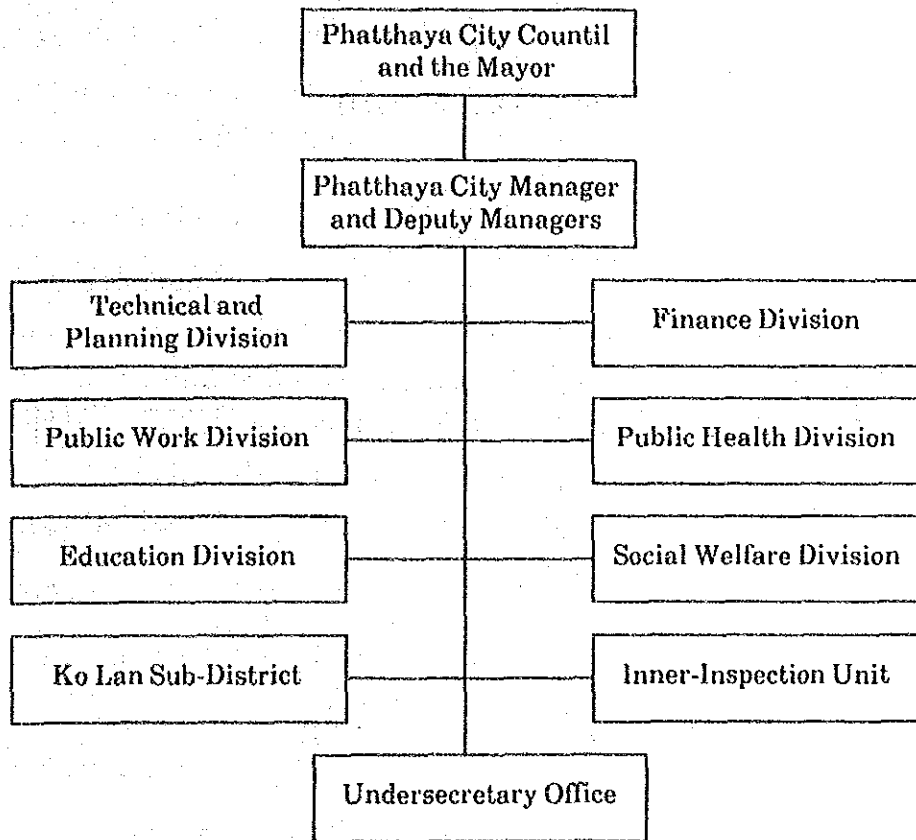
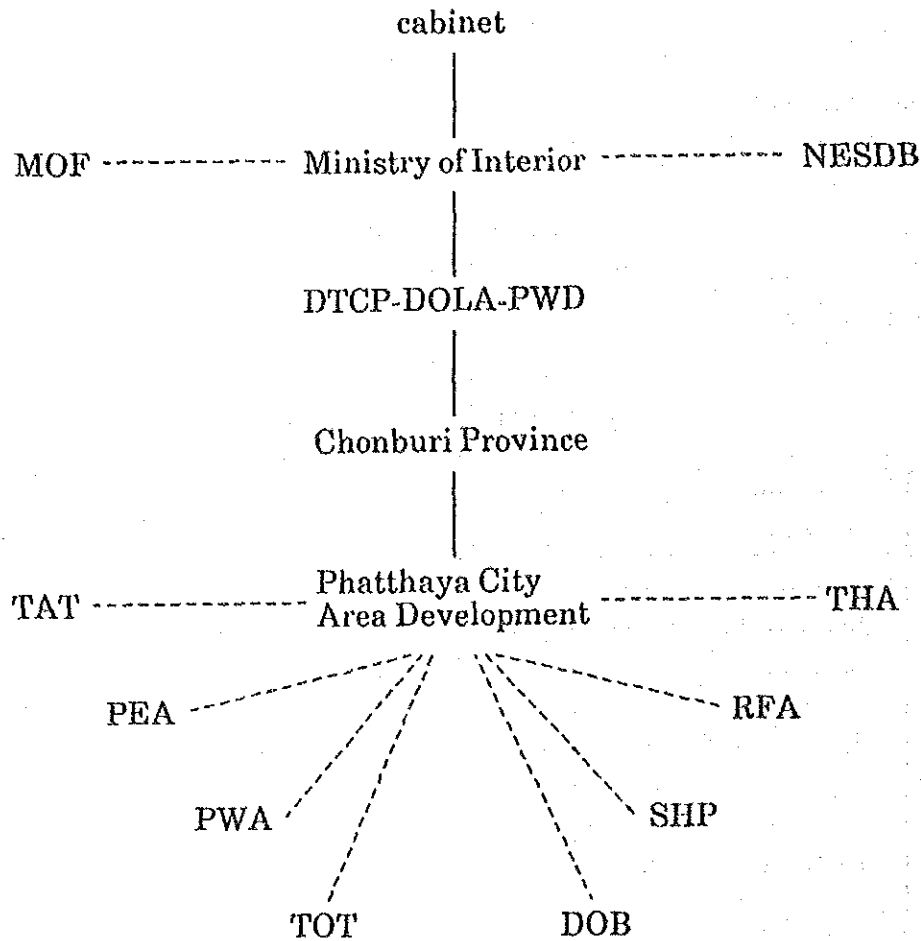


Fig. 2.3.1 Organization Chart of Phatthaya City



MOF	=	Ministry of Finance
NESDB	=	National Economic and Social Development Board
DTCP	=	Department of Town & Country Planning
DOLA	=	Department of Local Administration
PWD	=	Department of Public Works
TAT	=	Tourism Authority of Thailand
PEA	=	Provincial Electricity of Authority
PWA	=	Provincial Water Works Authority
TOT	=	Telephone Organization Thailand
DOB	=	District of Banglamung
THA	=	Thai Hotels Ass. Pattaya chapter
SHP	=	Small Hotels Ass. Pattaya Chapter
RFA	=	Restaurants and Food Shops Ass. of Pattaya
-	=	line command.
---	=	staff command

Fig. 2.3.2 Organizations involved in Area Development of Phatthaya City

2.4 Tourism

2.4.1 Tourism in Phatthaya

Thailand is one of the most famous tourist destinations in the world tourism market. Because of its characteristic culture and hospitable people, numerous tourists visit Thailand from almost all parts of the world. Especially, location of Bangkok is an advantage as a port of call on the main air transportation routes between Asia and Europe through Middle East.

1) Tourism in Thailand

Tourism is the top foreign currency earning industry in Thailand since 1982, and revenue by the tourism in 1987 was 50,026 million Baht. "The Sixth National Economic and Social Development Plan" sets targets for the growth rate of tourist arrivals at 7.2% per year and that of tourism revenue at 13.8% per year. TAT took actions to install new policies and organizations to activate the tourism industry in order to achieve the targets of the national plan.

Tourism in Thailand can be classified into three major categories:

- Urban tourism activities represented by Bangkok
- Inland tourism potentials represented by Chiang-mai, Sukhothai, Ayutthaya, etc.
- Marine tourism potentials represented by Phatthaya, Hua-hin, Cha-am, Phuket, Samui, etc.

The North-eastern region is not yet included in the national tourism development plan. But it is considered as a potential region for development due to its culture, history and nature park.

2) Tourism in Phatthaya

Phatthaya is the most important marine tourism destination in Thailand. In spite of the development of other marine resort areas such as Hua-hin, Cha-am, Phuket and Samui, the short distance from Bangkok, good access and variety of the activities of Phatthaya are the big advantages to keep it as the top beach resort area.

The Following statistics present the major features of tourism in Phatthaya.

Number of Tourists

(Unit: 103)

Year	Thai	Foreign	Total	Increase (%)
1982	150	450	600	-
1983	162	432	594	-1.0
1984	211	471	682	15.0
1985	234	562	796	16.7
1986	300	684	934	17.3
1987	405	1,012	1,417	51.8
82-87 (%/yr)	22.1	17.6	18.8	-

Source : TAT

Remarks : (a) Number of guest arrivals at accommodation facilities in Phatthaya

The Major trends are summarized as follows.

- Total number of total guest arrivals grew at 18.8% per year, which is fairly high. The increase was particularly high in 1987.
- Regions which contributed most to the 1987 jump were European countries such as W. Germany, UK, France and Austria and East Asian countries such as Hong Kong and Taiwan.
- The number of Thai guest arrivals kept increasing at a high rate of 22.1% per year on average.

Background to the rapid increase of guest arrivals, the following are pointed out as the factors contributing to the trend.

- Foreign tourists : - impact of "Visit Thailand Year" campaign in 1987
 - a result of political unrest in competing countries (e.g. Philippines, Sri Lanka)
- Thai tourists : - rise of income level
 - increasing interest in tourism

Fig. 2.4.1 presents number of guest arrivals to Phatthaya.

Day trip visitors to Phatthaya numbered 14×10^3 foreign and 697×10^3 Thai in 1987.

Average Length of Stay

During four year's period between 1983 and 1987, the length of stay in Phatthaya fluctuated only slightly around 4 days. The average length of stay of Phatthaya and Phuket is longer than those of other two places reflecting their sea-resort nature as follows.

Average Length of Stay of Guest Arrivals at Major Cities (in days)

Year	Phatthaya	Bangkok	Chiang Mai	Phuket
1983	3.99	2.71	2.96	3.58
1984	4.02	2.17	3.16	4.38
1985	4.10	2.46	3.10	3.55
1986	3.61	2.47	2.90	3.63
1987	4.02	n.a	n.a	n.a

Hotel Rooms

The number of hotel rooms in Phatthaya kept increasing at the annual rate of 8.1 percent from 7,642 in 1982 to 11,262 in 1987 following the increase of tourists visiting Phatthaya. Total hotel rooms are grouped into following five classes.

1st	:	1,062
2nd	:	4,103
3rd	:	3,318
4th	:	1,472
5th	:	1,307
Total	:	11,262

Occupancy Rate

The annual average occupancy rate of hotel rooms in Phatthaya ranged between 48 and 53% in 1982-85 period and rose to 62% in 1987 following the increase of tourists visiting Phatthaya.

Occupancy Rate of Accommodation Facilities in Phatthaya (in %)

Year	January (peak)	June (off-peak)	Annual
1982	68.22	38.00	53.23
1983	57.40	33.27	48.18
1984	65.32	37.63	50.92
1985	69.42	42.94	53.07
1986	69.05	42.91	55.22
1987	77.25	45.86	61.85

Visitors to Condominiums

Construction boom of condominiums has been the major trend characterizing recent growth pattern of the Study Area. The number of condominiums, both existing and under construction or given permit, in the Study Area are as follows.

Category	Number of Condominiums	Number of Rooms
Existing	15	1,468
Under construction/ Given permit	45	8,964
Total	60	10,432

According to sample interview survey, most owners of condominium units live in Bangkok and surrounding areas. They visit their condominium units on weekends and behave as tourists.

The annual numbers of visitors to existing condominiums and those to be completed are estimated to be about 191×10^3 and $1,374 \times 10^3$ respectively based on the following assumptions.

- 50% of rooms are full on every weekend.
- There are five people in one groups to visit one condominium unit.

3) Tourism Activities in Phatthaya

i) Phatthaya as a Tourism Sub-center

Because of the broad demand of the Tourists and difficulties of the accommodation and traffic conditions in Bangkok, the tourism

activities centered in Phatthaya has already been started. Regular bus transport services direct to Don Muang international airport is operated from Phatthaya. Major tour agents sell package tours to Chiang Mai, Chiangrai, Kanchanaburi, Sukhotai, Bangkok, Chantaburi, Rayon, Rhuket etc. Visits to Mini-Siam, Nong Nock Village, Crocodile Farm, Ancient city etc. are operated by local tour agents.

ii) Arts and Culture in Phatthaya

Arts and culture are a weak point of Phatthaya because of its history of vacation place for US military from a small fishing village. But since Phatthaya is an international beach resort city, arts and culture are attractions expected by foreign tourists.

Cabaret shows exist in Phatthaya, but they are still short quality performance. The cultural show in Nong Nock village and the performance in Ruen Thai restaurant can not be considered sufficient.

iii) Events and Conventions

A fair number of events have been held in Phatthaya. During 1987, the year of visit Thailand year, many events were held in Phatthaya, of which 9 were sponsored by Phatthaya City, 5 by jointly Phatthaya City and private sector, 1 by Chonbung Government, is by private associations, and 14 by private companies. There is a clear indication that the number and size of conventions held in Phatthaya are increasing.

iv) Development of Inland Area

Development of inland area is being undertaken by private sector along North, Central and South Phatthaya roads between Phatthaya 2 Road and Sukhumvit Highway for mostly commercial outlets.

New city hall will be constructed along the North Phatthaya Road.

The area beyond Sukhumvit Highway is being developed by private sector for golf links and resort villas. A general sports complex is being planned in this area.

Sukhumvit Highway and the Railway are the big barriers for the continuous expansion of development from sea side area.

v) Domestic Tourism

The growth of the domestic tourism market was predicted at more than 5% per year in the sixth National Economic and Social Development Plan. The number of domestic tourists stayed overnight in Thailand was 30 million in 1987, which was an increase of 20% compared to 1986.

The most popular period of domestic tourism is during school holidays, weekends and special holidays. Seventy percent of the domestic tourists prefer traveling by their own program rather than in an organized tour, that makes it difficult to catch the actual number of behavior of domestic tourists. Major transportation modes of domestic tourists are bus and private car.

The most favorite attractions for domestic tourists are beaches and islands. The city sight-seeing is the second popular destination. Festivals and historic sites have not yet become popular.

The high growth rate of Thai economy during 1987-1988, about 11%, gave people more motivation for tourism. Expansion of the tourist agencies and tourism journals have accelerated domestic tourism. The government supported this tendency for the promotion of the local industries and improvement of the quality.

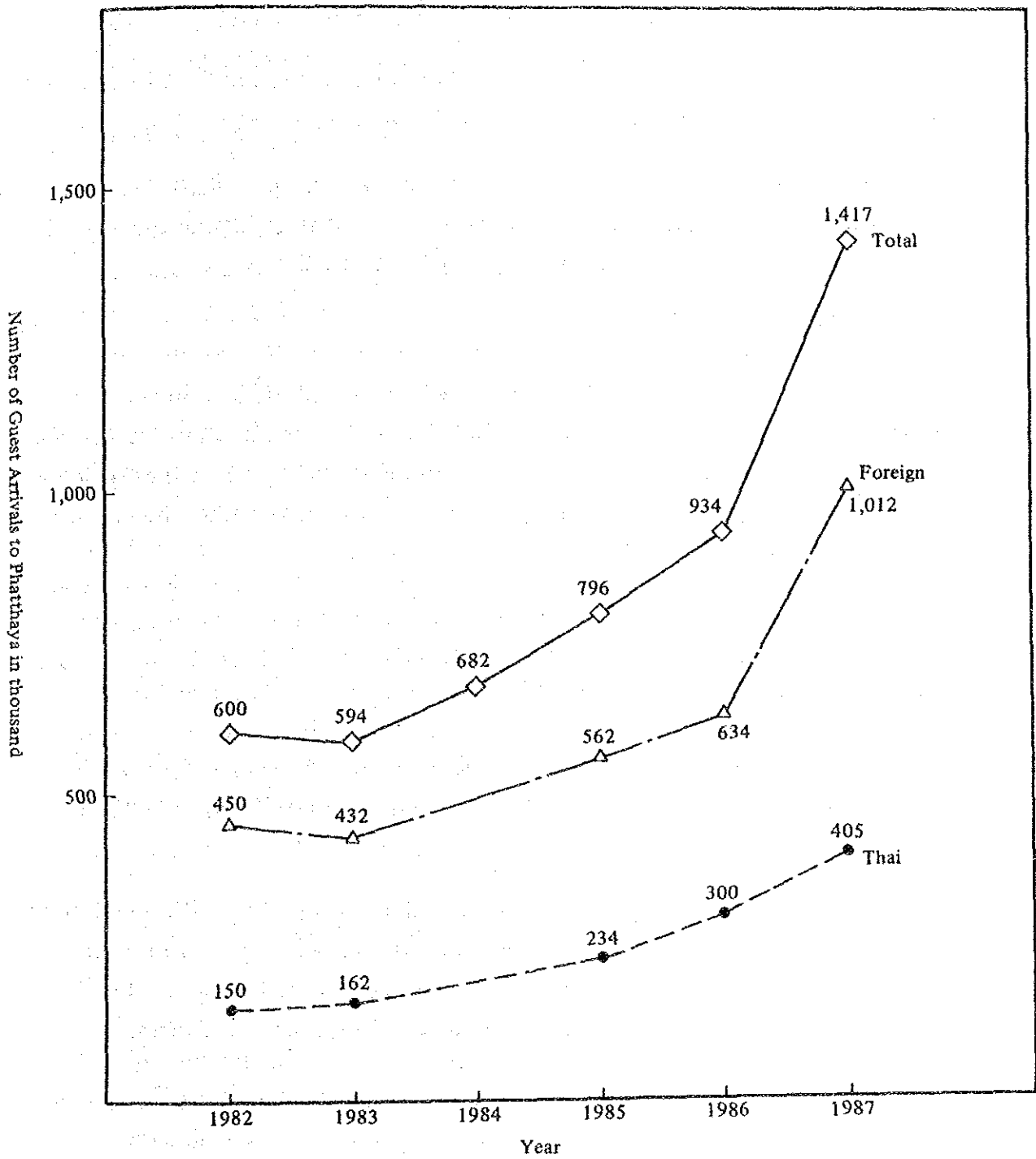


Fig. 2.4.1 Number of Guest Arrivals to Phatthaya

2.4.2 Tourism Facilities

1) Accommodation

Phatthaya City has numerous tourist accommodations, the first in number among major cities in Thailand as shown in Table 2.4.1.

Including small size hotel, 293 hotels and bungalows with 19,181 rooms and 15 condominiums with 1,468 units are currently existing in the Study Area in 1989 based on TAT information shown in Table 2.4.2 and 2.4.3.

2) Tourism Facility

Although sea bathing and marine sports are dominant activities in Phatthaya resort, sea water in Phatthaya Beach itself is not adequate quality for swimming and marine sports. Jomtien Beach and Ko Lan are now popular places for swimming, diving, wind surfing, parasailing and jet scooter boat riding instead of Phatthaya Beach.

Another attraction of Phatthaya resort is the entertainment complex which composes restaurants, shops and night entertainment facilities in south Phatthaya and other places.

A new amusement core development of 33 rai area with a culture show theater, a floating restaurant and others is on-going in north Phatthaya along the North Phatthaya road by private sector.

Some tourism spots scatter in hinterland such as Nong Noch village (similar to Rose Garden in Bangkok), a swimming pool complex with giant water sliders, Siam Country Club, Elephant Krall, Mini Siam (miniature village), a hill tribe village, a fishing center, a kart speedway, a horse riding course and other.

An aquarium, a golf course, and an open zoo can be seen in Bang Saen 40 km north of Phatthaya.

The quality of these tourism spots does not reach international level except Nong Noch village, Siam Country Club and a few other facilities at present.

Locations of tourism facilities are shown in Fig. 2.4.2.

3) Present Situation of Phatthaya Beach

Almost all accommodation facilities are concentrated between beach road and second beach road in Phatthaya beach as shown in Fig. 2.4.3.

Northern Area of Phatthaya Beach (From Na Klua to Central Phatthaya Road)

- High grade accommodation is dominant.
- Condominium development is rapidly in progress particularly in northern half that used to be preserved from the development because of rocky shore.
- Sea bathing is possible in northern parts near Wongamat hotel.
- Some tourism attractions scatter behind second beach road. However, they are not successful at present due to poor quality and inadequate size as well.
- A core development with culture, business, accommodation and other function is on going along North Phatthaya Road and Na Klua Road.

Southern Area of Phatthaya Beach (From Central Phatthaya Road to South Phatthaya, Siam Bay Shore Hotel)

- Low and middle class accommodation is dominant except Siam Bay Shore, Ocean View and Siam Bay View hotels.
- One hundred illegal constructed restaurants and shops occupying 800m long stretch discharge untreated waste water directly into the sea.
- Shop and restaurant development is sprawling toward Sukhumvit Road along South Phatthaya Road.

4) Problems in Tourism Facilities

Several problems are found based concerning tourism facilities.

- Water pollution and sea bed pollution in Phatthaya beach are serious due to the lack of adequate sewerage treatment, so that sea bathing and diving are no longer possible. According to a hotel managers it is causing some decrease of hotel occupancy rate among high class hotels.
- Confusion in sea use is observed in some beaches of the Study Area due to inadequate control over the demarcation (zoning) of different sea surface use, even though a demarcation program was already declared by Phatthaya City Government. More strict control shall be required to

secure the safety and pleasant silence in beach area especially for children and the aged people.

- Lack of piers for excursion boat in Phatthaya beach and Ko Lan discourages the excursion to Ko Lan beach. The people feel difficult to board on to the boat directly from the beach area especially during low tide.
- The sprawl of hotels and condominiums development along the beach toward the south in Jomtien beach and Tha Farang beach will be cause of disorderly land use and need more infrastructure development. Strict proper urban controls and restriction shall be imposed as soon as possible.
- Confusion in land use is seen especially in south Phatthaya. Present situation represented in mixed land use with school, temple and entertainment in south Phatthaya shall be improved for a better environment.
- Traffic-related problems such as exhaust gas, noise and accident in Beach Road and Second Beach Road is a restraint for tourist's stroll in the city. Traffic congestion is also serious during high season on Sukhumvit road that links the Metropolis and the Eastern Sea Board area. Sometimes it takes more than four hours drive between Bangkok and Phatthaya that negate the convenience of the access advantage of the Phatthaya resort.
- Although inland tourism facilities such as Nong Noch Village and Siam Golf Course are enjoyed by the foreign and domestic tourists, their quality and quantity are considered insufficient. More development of inland tourism destinations is required in order to enrich the tourism activities in Phatthaya resort.
- Water shortage which obliges some hotels to buy water from private sector is becoming a serious problem. The public sector must take an effective action immediately to avoid the deterioration of reputation of Phatthaya resort.

Table 2.4.1 PRESENT NUMBER OF ACCOMMODATION IN THAILAND

City	Year	Year				Annual growth rate ('83~'86)
		1983	1984	1985	1986	
Bangkok:	Establishments	73	82	94	97	12.1
	Rooms	16,006	18,906	20,968	22,576	
Chiang Mai:	Establishments	126	123	175	181	8.5
	Rooms	5,386	5,536	6,172	6,877	
Kanchanaburi /1:	Establishments	29	29	83	95	18.3
	Rooms	806	806	1,199	1,336	
Pattaya:	Establishments	152	170	195	193	7.6
	Rooms	8,647	9,720	10,504	10,764	
Phuket:	Establishments	96	104	116	141	18.2
	Rooms	2,878	3,443	4,072	4,754	
Hat Yai:	Establishments	60	64	64	68	8.5
	Rooms	4,078	4,460	4,713	5,212	
Sungai Kolok:	Establishments	44	47	48	49	13.3
	Rooms	1,098	1,319	1,596	1,598	

Remarks /1 Kanchanaburi 1983-1984: Only hotel data
1985-1986: All types of accommodation data

/2 Excluding small accommodation

Source: Annual Statistical Report on Tourism in Thailand 1986

Table 2.4.2 PRESENT ACCOMMODATION IN THE STUDY AREA
(HOTEL, GUESTHOUSE, BUNGALOW)
(Year 1989)

	Phatthaya	Na Klua	Khao Phatthaya	Jomtien	Sattahip (Tha Farang)	Other Area	Total
5 star	-	1 (500)	1 (757)	-	1 (2572)	-	3 (3,829)
4 star	11 (2,723)	2 (258)	1 (246)	1 (116)	1 (137)	-	16 (3,480)
3 star	17 (2,452)	4 (609)	4 (507)	5 (368)	-	-	30 (3,936)
1, 2 star	84 (4,096)	14 (677)	3 (208)	2 (140)	10 (330)	1 (28)	114 (5,479)
subtotal	113 (9,271)	20 (2,044)	9 (1,718)	8 (624)	12 (3,039)	1 (28)	163 (16,724)
Guesthouse (1.2 star)	71 (740)	5 (69)	1 (15)	8 (80)	-	1 (11)	86 (915)
Bungalow sub total	8 (399)	11 (391)	2 (106)	13 (372)	9 (257)	1 (17)	44 (1,542)
Total	192 (10,410)	36 (2,504)	12 (1,839)	29 (1,076)	21 (3,296)	3 (50)	293 (19,181)
(Reference: proposed project)	11 (1,601)	1	2 (425)	10 (2,779)	2 (1,360)	1 (500)	28 (6,665)

Remarks: /1 5star -- \geq 2,000 Baht / night /2 No. of hotels and no. of rooms
4 star--1,000 - 2,000
3 star-- 500 - 1,000
1,2 star-- 500 \leq

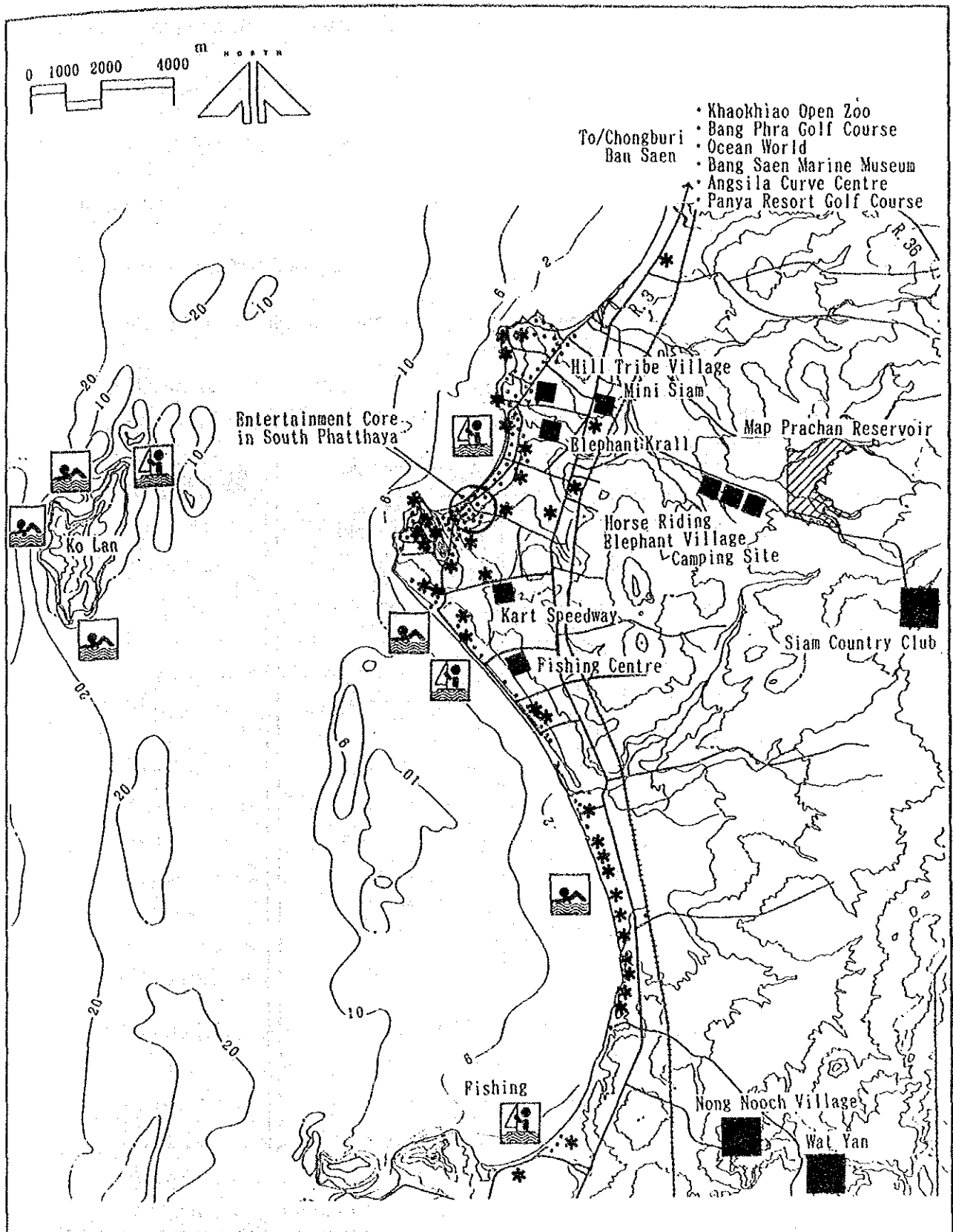
Source: TAT Phatthaya and Phatthaya City Hall

Table 2.4.3 DISTRIBUTIONS OF CONDOMINIUMS
(No. of Condominiums and No. of Units)

	Phatthaya	Na Klua	Khao Phatthaya	Jomtien	Sattahip (Tha Farang)	Total
Present Project /1	1 (69)	5 (361)	3 (639)	3 (194)	3 (205)	15 (1,468)
Future Project	14 (2,969)	5 (1,007)	11 (2,671)	5 (1,478)	10 /2 (958)	45 (9,083)
Total	15 (3,038)	10 (1,368)	14 (3,310)	8 (1,672)	13 (1,163)	60 (10,551)

Remarks: /1 Only 15 projects with 1,468 units are officially registered in land office. The others are under construction, and/or planning stage.
/2 Two of 10 in Sattahip projects are planning stage.

Source: TAT Phatthaya



- Khaokhiao Open Zoo
- Bang Phra Golf Course
- Ocean World
- Bang Saen Marine Museum
- Angsila Curve Centre
- Panya Resort Golf Course

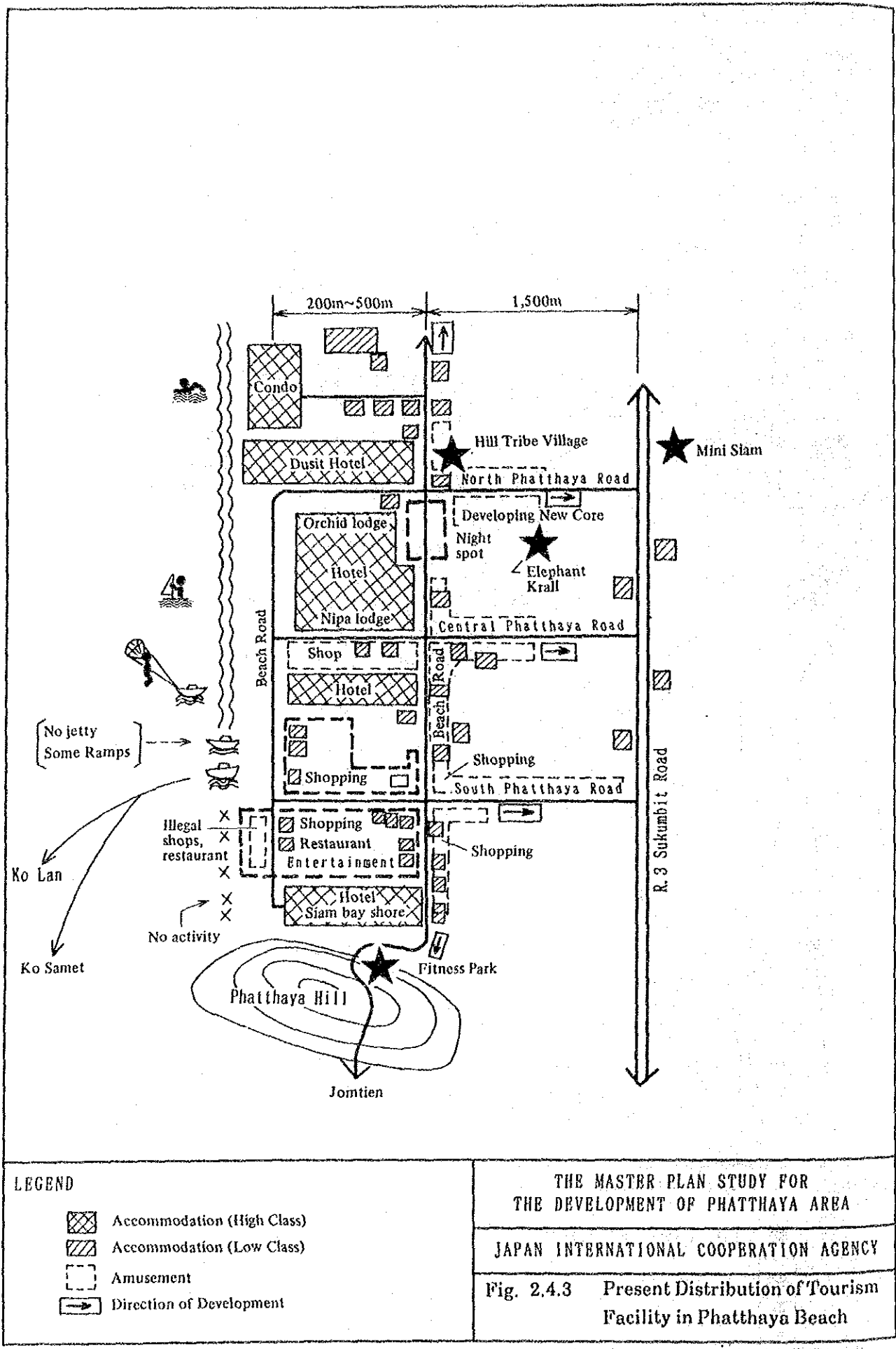
LEGEND	•	Accommodation(Hotel)
	*	Resort- (Condo)
	■	Inland Tourism Facility
		Sea bathing
		Marine Sports

THE MASTER PLAN STUDY FOR
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Fig. 2.4.2

Present Distribution of Tourism Facility



2.5 Infrastructures and Urban Services

2.5.1 Transportation

1) Land and Air Transportation

(1) Road Network

(i) Regional Highways

Existing Network

Existing road access to the Study Area from other parts of the country is limited to a national highway, Route 3. Together with Route 34 west of Chonburi, which has recently been upgraded and made into a toll road, Route 3 provides divided four high standard traffic lanes to vehicular traffic between Bangkok and Phatthaya. Route 3 also provides road access to areas south of Phatthaya in the form of a two lane highway. To Rayong and beyond in the south a shorter route is available by means of Route 36, which turns off Route 3 at a short distance north of Phatthaya in southeastern direction. The existing network of regional trunk highways is shown in Fig. 2.5.1 together with volumes of traffic on them.

Traffic on regional highways are already heavy as shown in Fig. 2.5.1. Traffic volumes shown in the figure do not fully indicate actual situation as they represent annual averages. It is not uncommon on the regional highways linking Bangkok and Phatthaya to see severe traffic congestion in weekends.

Planned Improvements

In anticipation of a considerable increase in traffic in the corridor between Bangkok and Phatthaya and beyond due to the implementation of the Eastern Seaboard Program, a number of highway projects have been planned and are at various stages of implementation. Fig. 2.5.2 shows such highway improvement plans. Notable among them in terms of the development of Phatthaya are;

- a. Widening of Chonburi Bypass;
- b. Construction of New Chonburi-Phatthaya Highway;
- c. Construction of New Bangkok-Chonburi Highway;
- d. Construction of Route 34 Additional Roadways; and
- e. Widening of Route 3 south of Phatthaya.

Access to these Northern and Northeastern Regions is also planned to be improved by means of a series of respective highway improvements, although it would have a lesser impact on the development of Phatthaya.

(ii) Local Roads

Inventory of Existing Network

A detailed road inventory within the Phatthaya area was taken by the Department of Town and Country Planning in 1987 in its effort to prepare the General Plan for Phatthaya. The Study Team updated the data in August 1989. The results are shown in Fig. 2.5.3 excluding minor roads and sois.

In an attempt to avoid a traffic chaos in the middle of this tourist resort town the city government instituted oneway system for the major portion of Beach Road and the southern portion of Phatthaya 2 Road. At present the oneway system can claim qualified success under the given constraints.

Traffic

The Department of Highways has been taking traffic counts on Route 3 at several locations north and south of Phatthaya and on Route 36. The DTCP made detailed traffic counts at more than 120 locations in Phatthaya in 1987. The Study Team carried out supplementary traffic surveys in August 1989.

Composition of traffic in terms of vehicles type seems to be different by the area. In terms of the percentage of passenger cars Jomtien areas takes the top position whereas Bang Sare is top in terms of the percentage of pickups and light trucks. Within Phatthaya and Na Klua motorcycles occupy one half of vehicles in traffic whereas in Jomtien and Bang Sare motorcycles are one third of traffic.

At present, the highest traffic volume can be found at the intersection of South Phatthaya Road and Beach Road. Its level already has reached the full capacity of the intersection.

Increase in traffic volume in Phatthaya has been considerable, particularly in recent years. Growth in traffic in the period from 1987 to 1989 was determined by comparison among the Study Team's surveys, the Dolt's routine counts and the DTCP's 1987 surveys. The results are shown in the table below in ratios of traffic volumes in 1987 and 1989 for, the three major subareas of Phatthaya, i.e., Na Klua, Phatthaya Beach, and Jomtien.

ASSUMED RATIOS OF TRAFFIC 1989/1987

Vehicle Type	Area 1	Area 2	Area 3
MC	1.40	1.60	1.30
CAR	1.40	1.50	2.60
MBUS	1.00	2.20	1.70
BUS	1.10	1.40	1.80
MTRUCK	1.40	1.00	3.50
TRUCK	1.00	1.00	1.00

Peak hour traffic volumes for each of road sections in Phatthaya in 1989 were estimated by means of the above growth ratios with the DTCP surveyed 1987 counts as the basis. Fig. 2.5.4 shows 1989 peak hour volumes in terms of total number of vehicles expressed in passenger car units on each road link.

(2) Road Transport

Road transport in and around Phatthaya is under the supervision of the Phatthaya branch office of the Land Transport Department, Ministry of Transport and Communications. The Phatthaya branch office is responsible for transport activities of land vehicles registered in Changwat Chonburi except railways and operated in the three Amphoes of Bang Lamung, Sri Racha and Sattahip.

There are basically two kinds of public road transport services in this area; long distance scheduled bus and irregular tour bus services and short distance Baht bus (converted pickup) services. The latter is called Song Taew in Thai literally meaning "two rows" indicating the two benches longitudinally set on the deck of each pickup-converted bus.

Two regular public bus services exist connecting the area directly with Bangkok. One is the airconditioned bus service with the Eastern Bus Terminal at Sukhumvit Road Soi 63 or the Northern Bus Terminal on Pabolyathin Road in Bangkok as one end and the other end at a space off on Beach Road in front of the Regent Marina Hotel in Phatthaya. There is a non-airconditioned service starting at the Bangkok Eastern Bus Terminal, releasing passengers within Phatthaya along Beach Road and ending at the corner of Jomtien Beach Road and Chaiyaruk Road in Phatthaya. Both services are provided at every 30 minutes during virtually whole day.

Operation of Song Taew is regulated. The issuance of Song Taew operating permit is subject to consideration by the Provincial Land Transport Committee in Chonburi. Decisions are made taking into account passenger demand, route, existing number of operators, etc. Operation of each Song Taew is restricted within the area specified in each permit and no Song Taew is allowed to take passengers beyond specified area. In actual practice, however, compliance with the optional restrictions is lax except on Phatthaya Beach Road.

At present four areas are delineated and assigned to separate groups of Song Taew. First one is within the city limits of Phatthaya, the second between Amphoe Sattahip and Na Klua, the third between Amphoe Sri Racha and Na Klua, and the fourth in the rural areas such as between Huai Yai and Na Klua and between Tambon Khao Mae Kaew and Na Klua. Each of the four groups is differentiated by distinctive vehicle body color as well as markings painted on the side of each vehicle. The third group belongs entirely to Sukhumvit Transport Company, whereas the first is run by a cooperative.

Song Taews within Phatthaya number 680 in total and they are being operated under an elaborate system of routing and scheduling. Four routes are currently established and every month a monthly schedule is drawn up by which each Song Taew is assigned to different routes on a

daily basis in such a way that each of Song Taews is assigned to all four routes, taking turns.

Administration of this elaborate system is being carried out by the Phatthaya Transport Cooperative, which was established in 1976. It is said that there were about 2,000 Song Taews in Phatthaya before the establishment of the Cooperative, including many out-of-the-area vehicles. Concerted effort by the Cooperative resulted in the reduction of the number to the current 680, consisting mainly of local Song Taews. It is generally felt, however, that the total number is still too high. Some claim that 300 - 400 should be sufficient for the existing demand. Current policy of the Cooperative as well as the Land Transport Department, therefore, is not to increase the number of Song Taews for the foreseeable future.

Behavior of some of Song Taew drivers has become a major public concern caused at least partly by the over-supply of Song Taew in Phatthaya. Some charge exorbitant fare to tourists despite the fact that they must post a printed fixed fare schedule at all times (The schedule is invariably posted inside the passenger deck). Their driving manner is often called dangerous as they compete each other to catch customers. A stricter control is from time to time proposed by means of prominent display of driver identity card, for example.

Another hazardous road traffic often cited by concerned people in Phatthaya is motorcycles and jeeps rented to tourists with little restrictions. Drivers of such rented vehicles, who mostly can not read and follow traffic signs in Thai, may cause accidents. These vehicles proliferated in recent years as well as consequent accidents.

(3) Railways

A single track railway branching off the Eastern Line of the State Railway of Thailand at Chachoengsao and ending at the deep sea port of Sattahip was constructed in anticipation of the Eastern Seaboard Program and was completed in 1985. The line was primarily intended for transporting goods for the industry and ports to be located within the Eastern Seaboard, and therefore was made with a higher load carrying capacity than other lines of the SRT. But no investment was made to make the line compatible with passenger transport which calls for

relatively high speed, although basic infrastructure such as a station was constructed at Phatthaya.

The SRT has been offering jointly with two private tour operators a week-end only round trip service to Phatthaya from Hua Lampong since 1986. The special train starts Bangkok at 6.20 a.m., arriving in Phatthaya at 10.25 a.m. The return train leaves Phatthaya at 16.20 p.m. and arrives in Bangkok at 19.25 p.m. Travel time is three hours (Out bound train stops at Chachoengsao for one hour of sight-seeing). The train consists of two diesel cars with a capacity of 148 passengers. The two private operators market package tours inclusive of train fares. The tour includes destinations such as Ko Lan, Non Noch Village and Phatthaya Park and have been marketed primarily to local and Hong Kong and Taiwan tourists. Advance booking is necessary and train operation may be canceled if few customers are available. Past records of SRT's officials think that the service is not viable. It is likely to be discontinued in the near future.

MONTHS RECORDS OF SRT PHATTHAYA SERVICE RIDERSHIP

	1987			1988							
	10	11	12	1	2	3	4	5	6	7	8
Ko Lan	128	189	96	276	189	126	152	80	-	-	-
Non Noch Village	239	121	231	349	131	73	161	198	42	145	138
Phatthaya Park	182	49	15	60	89	16	186	142	22	49	43

	1988				1989				
	9	10	11	12	1	2	3	4	5
Ko Lan	-	-	-	-	-	-	26	277	313
Non Noch Village	72	119	22	253	55	223	41	94	76
Phatthaya Park	-	37	26	26	17	57	53	124	44

A significant amount of investment is needed to make this line compatible with a high speed operation needed to serve passengers,

including moving barriers and warning devices at numerous road crossings. At this stage indications are no such action will be taken in the near future.

(4) Air Transport

U-Tapao Airport lies about 45 km south of Phatthaya and directly accessible by Route 3. It was constructed by the U.S. military during the Vietnam war but has been under the jurisdiction of the Royal Thai Navy since. Currently it is being used as an alternative landing strip for Dong Muang for emergency and by a few chartered flights and regional airlines such as Dragon Air of Hong Kong and Tradewinds of Singapore. Thai International Airways is contracted to do handling work in the airport. The airport requires major expansion of ground facilities and upgrading of runway if it is to be made an airport accepting a major portion of visitors to Phatthaya. Existing ground facilities can now handle only about 50,000 passengers per year.

2) Marine Transport

(1) Introduction

In the context of Phatthaya, marine transportation is taken to include all boats ranging from small single-man pleasure boats to the larger excursion vessels which can carry up to 200 passengers. Other larger vessels such as cruise ships or ships of the U.S. Navy call only on an infrequent basis and there are no regular scheduled sea services.

Coupled with the rapid growth in the number of visitors to Phatthaya there has also been an increase in the number of privately owned boats and an increase in size of excursion vessels. A limited survey of boat owners was carried out in August 1989 by the Study Team, which provided data on boat dimensions and operational details for planning purposes. An analysis of the results is included in (3).

There are at present no regular scheduled sea services connecting Phatthaya to Bangkok and other destinations. Severe road traffic congestion occurs at peak periods on the Bangkok - Phatthaya highway and travel times are uncertain, varying between 2-4 hours. A quick and efficient marine service would provide a useful alternative for passengers. Commercial operators have expressed interest in such

services in recent years, and a proposal by one operator has recently been approved by the Harbour Department.

(2) Boat Ownership and Usage at Phatthaya

The sea off the Phatthaya coast is used by passenger vessels and also by boats for water sport. The boats are privately owned except for a few vessels operated by the Marine Police and Coast Guard. Sporting boats of all types - with engines or sails - are either owned by their users or obtained on hire. Passenger transport to nearby islands is provided by many commercial operators who serve hotel and tour company groups and also individuals. The passenger vessels are of timber construction with one or two passenger decks. Most of the vessels are locally built, either converted fishing boats (older vessels) or purpose - built for passenger transport (newer vessels).

All boats are required to be registered with the Harbour Department. Total registrations for the last three years for Chonburi Province (data obtained from the Regional Harbour Office at Chachoengsao) are:

Length	<u>Passenger Boat</u>			<u>Sport Boat</u>		
	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
<4 m	7	7	7	1064	1153	1168
4-8 m	41	41	41	261	307	315
8-14 m	158	161	163	25	30	30
14-18 m	41	42	43	2	4	4
18-25 m	26	36	36	-	-	-
>25 m	1	3	3	-	-	-
Total	274	290	293	1352	1494	1517

The totals for each year are obtained by adding new registrations to the previous year's total. As there is no record of older boats withdrawn from service, the total of registered boats is probably too high in relation to registered boats currently in use, but may be used for preliminary planning purposes (since an allowance has to be made for unregistered boats).

No breakdown of these figures for boats at Phatthaya and other locations is available at present. In 1978 (JICA Feasibility Study) Phatthaya boats were estimated as 180 excursion boats and 250 other boats (all types). In 1986 the reported number of registered boats at Phatthaya were 145 passenger boats and 283 other boats. From the details of total registrations for Chonburi and the above Phatthaya data, an approximate estimate of current totals is:

Passenger boats 180 ~ 200

Other boats (all types) 350 ~ 500

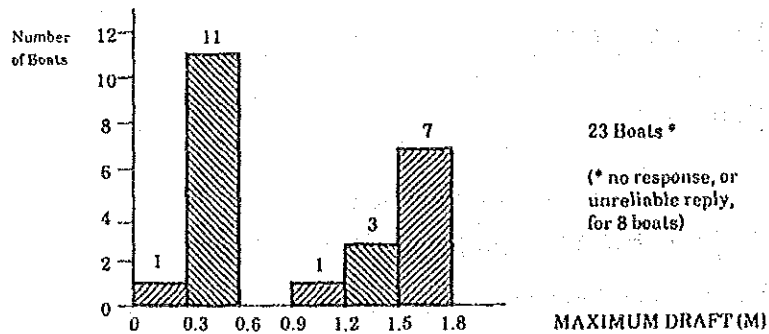
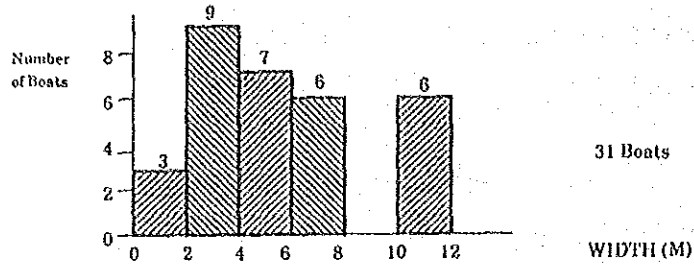
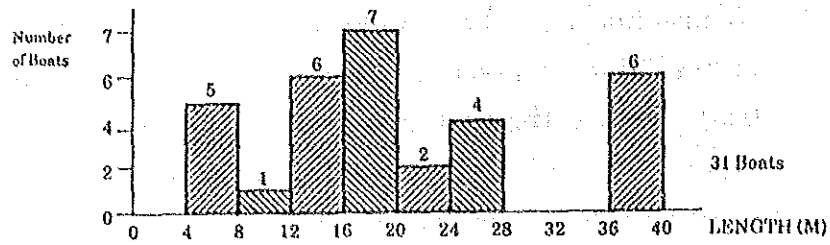
Passenger boats generally carry excursion passengers to Ko Lan (which is the most popular destination) and also other islands - Ko Phai, Ko Sak and Ko Lin. The maximum distance (one way) is about 22 km or 12 nautical miles. Sporting boats generally stay close to shore, either near Phatthaya or around Ko Lan.

(3) Boat Operators' Survey

A questionnaire survey of excursion boat operators was carried out in August 1989 by the Study Team. Thirty-one operators were questioned regarding boat size, type, passenger capacity, year of building, original and present cost, usual destination, embarkation and disembarkation method, mooring location, number of round trips, usual departure and arrival times, fares, etc. Incomplete responses were received, but questions on boat size, type, passenger capacity, usual destination, embarkation and disembarkation method and number of round trips per day were usually answered.

The results are summarized below.

Boat size : The figure below shows the distribution of length, width and maximum draft. Average dimensions are 20.5 m long, 5.2 m wide and 0.9 m draft. The larger boats are up to 40 m long, 12 m wide and 1.7 m draft.



Passenger capacity : Maximum capacity varies from 15 ~ 200, usual number of passengers carried from 3 ~ 90 (average 35)

Usual destination : Ko Lan is the usual destination of all the boats. 25% also go to Ko Phai. Trips to Ko Sak and Ko Rin are very infrequent.

Embarkation/ disembarkation : The most common method is the use of a small boat (long-tailed boat) to transfer passengers between the beach and the excursion boat. The smaller passenger boats are boarded directly from the beach using a boat ladder or stepping over the side.

Number of round trips : Usually one round trip per day on weekdays and two per day at weekends

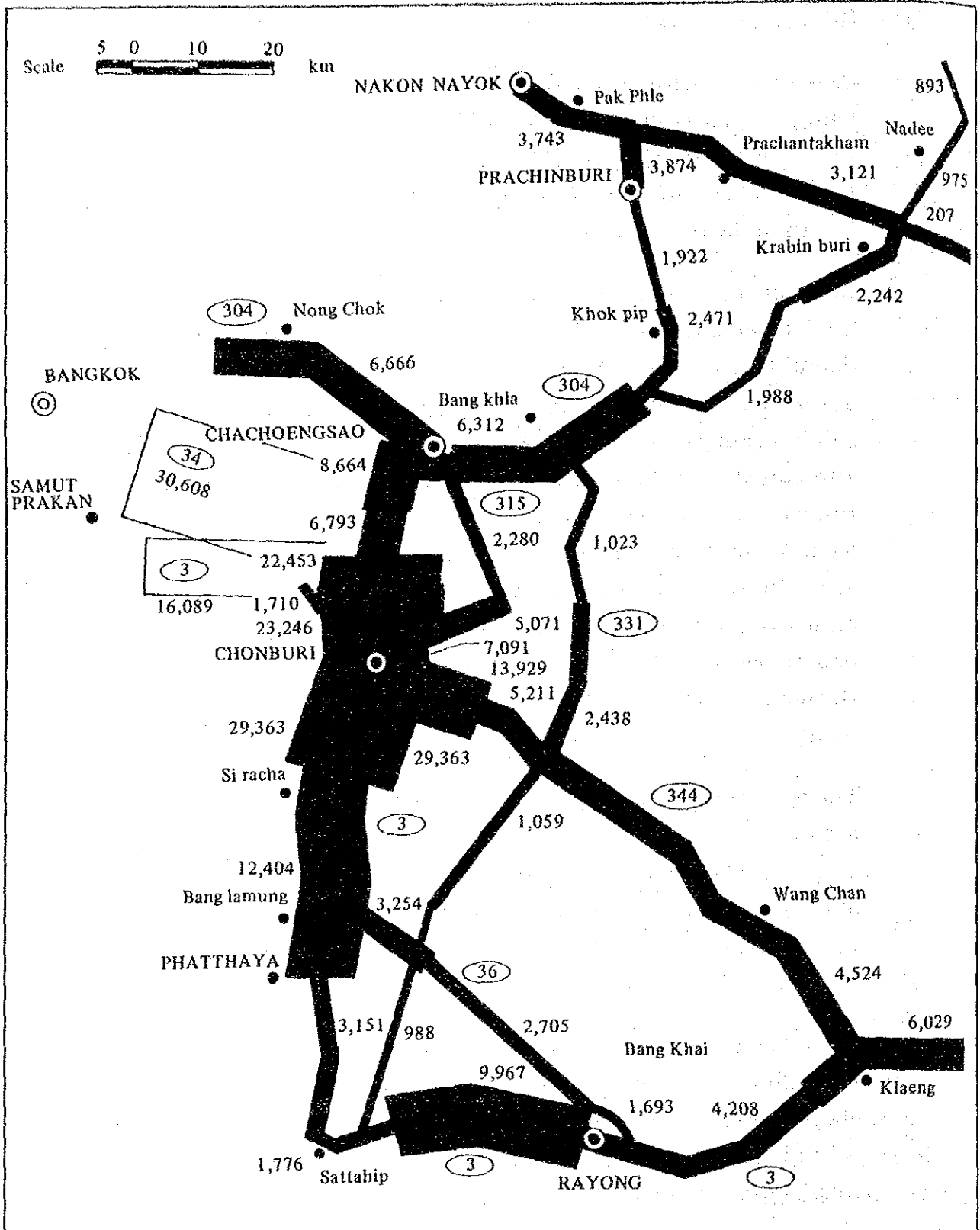
(4) Scheduled services from Bangkok

Scheduled services from Bangkok (Chao Phraya River) to Phatthaya, using high speed craft such as jetfoils, hydrofoils or hovercraft, have been proposed occasionally in recent years but as yet no such service exists. Bangkok to Phatthaya by sea is about 100 km (55 nautical miles), 40 km less than the road journey.


An application was recently submitted to the Harbour Department by Thai Inter-transport (1989) Co. to operate a Bangkok-Phatthaya-Ko Samui Island hydrofoil service, and it is reported that approval has been granted. Press reports state that the company has purchased six ocean-going passenger hydrofoils from the Soviet Union. Earlier reports had also stated that the company would use a location off the Wong Amat Hotel (on the beach just north of the north headland of Phatthaya bay) as a temporary terminal, and it would be replaced later by its own terminal at an (unspecified) location at Jomtien. The company's current plans regarding terminal location at Phatthaya are not known. It is understood that the vessels were to be surveyed by officials of the Harbour Department in January 1990 and the service would commence soon.

The operating draft of hydrofoils is about $3\frac{1}{2}$ m ~ 4 m, which means that a minimum water depth of 4 ~ $4\frac{1}{2}$ m is required. At low water this is available about 500 m from shore at Wong Amat beach and about 400 - 500 m at Jomtien beach. Presumably, at the temporary location, passengers would be transferred from the hydrofoil to the beach by small boat.

Both locations are exposed to southwesterly and westerly waves. Hydrofoils are sensitive to wave action and the service may be unable to operate regularly during the southwest monsoon. Breakwater protection is likely to be necessary for the proposed permanent berth on the Jomtien coast, unless it is operated as a fairweather facility only.



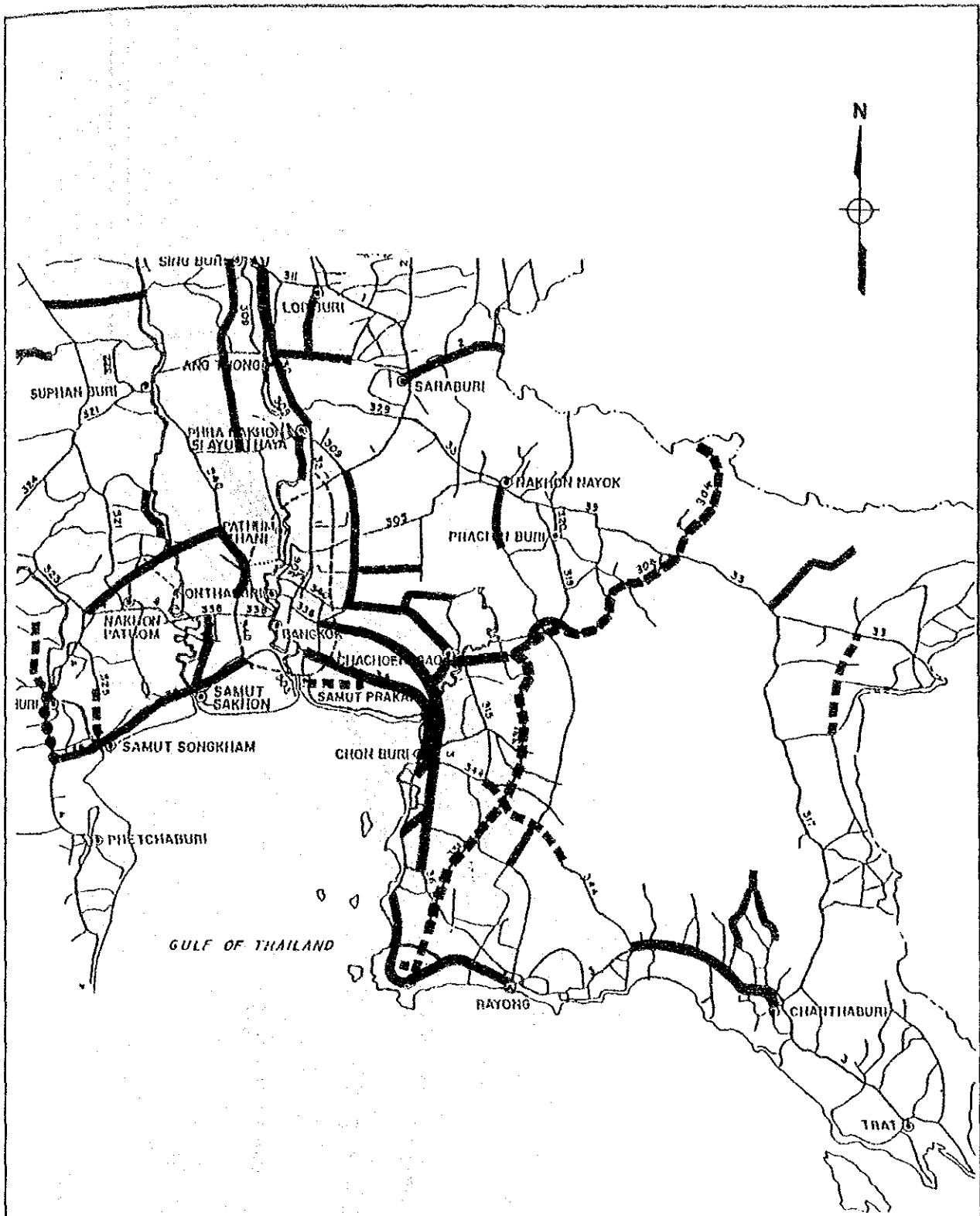
Source: Dept. of Highways

LEGEND  ANNUAL AVERAGE DAILY TRAFFIC NATIONAL HIGHWAYS 1987	vehicle/day 5,000	(3) Route No. (34)

THE MASTER PLAN STUDY FOR
 THE DEVELOPMENT OF PHATTHAYA AREA






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Fig. 2.5.1
 Regional Trunk Highways Network



10 0 10 30 50 70 90 KM.

LEGEND

-  **WIDEN OR NEW CONSTRUCTION**
-  **REHABILITATION**
-  **NATIONAL HIGHWAYS**
-  **PROVINCIAL HIGHWAYS**
-  **CHANGWAT**

THE MASTER PLAN STUDY FOR
THE DEVELOPMENT OF PHATTHAYA AREA

JAPAN INTERNATIONAL COOPERATION AGENCY

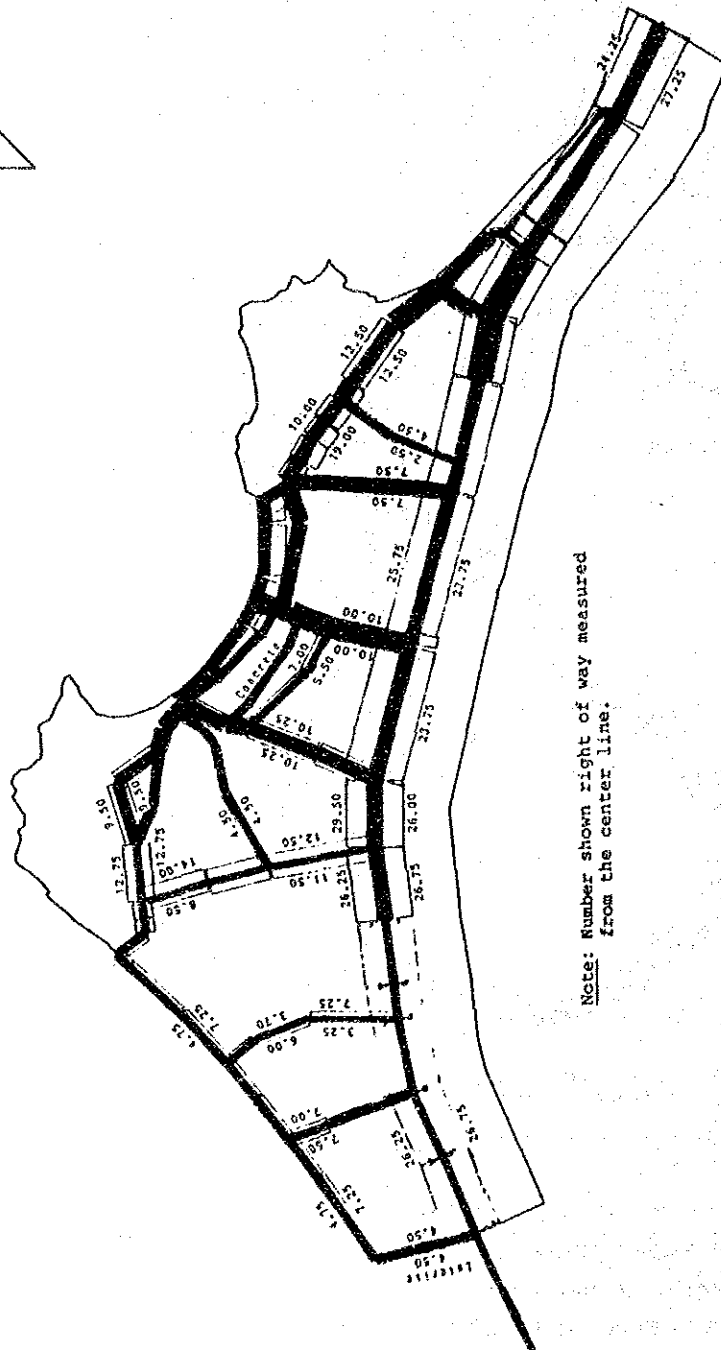
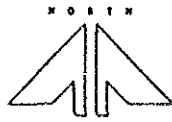
Fig. 2.5.2

Highway Improvement Plans

DN3237

Right of Ways

Asphalt



Note: Number shown right of way measured from the center line.

Scale:
1" = 40' 5"

THE MASTER PLAN STUDY FOR
THE DEVELOPMENT OF PRATHAYA AREA

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Fig. 2.5.3

Existing Road Inventory

LEGEND

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Fig. 2.5.4
Traffic Volume 1989 Peak Hour

