

LINER SHIPPING ROUTE STUDY

PH 118011E

98040

FINAL REPORT

VOLUME X

**CEBU-CAMIGUIN LINER SHIPPING DEVELOPMENTAL
ROUTE REPORT**

November 1994

Submitted to
United States Agency for International Development
Manila, Philippines

Support for Development Program II:
Philippine Sea Transport Consultancy
Project No. 492-0450

Prepared by Nathan Associates Inc.
under Contract No. 492-0450-C-00-2157-00

FOREWORD

The Liner Shipping Route Study (LSRS) and the MARINA and SHIPPERCON STUDY (MARSH Study) were conducted, during 1993-1994, under the Philippine Sea Transport Consultancy (PSTC). The Final Report of the LSRS comprises 14 volumes and the Final Report of the MARSH Study comprises 5 volumes.

This technical assistance was made possible through the support provided by the Office of Program Economics, United States Agency for International Development (USAID) Mission in the Philippines. The views, expressions and opinions contained in this and other volumes of the LSRS Final Report are those of the authors and of Nathan Associates, and do not necessarily reflect the views of USAID.

TABLE OF CONTENTS

	<u>Page Number</u>
1. INTRODUCTION	1
Developmental Route Reports	1
Report Organization	2
2. MARKET ANALYSIS	3
Camiguin Characteristics, Economic Potential & Constraints to Development	3
Current Routes & Traffic	6
Points of Entry	6
Service Routes	7
Cebu-Maasin-Camiguin Route	7
Cebu-Cagayan de Oro-Balingoan- Camiguin Route	7
Cebu-Cagayan de Oro-Camiguin Route	9
Cebu-Jagna-Camiguin Route	10
Cebu-Camiguin Direct Route	10
Passenger Traffic	10
Cargo Traffic	13
Service Adequacy to Meet Market Demand	13
Cargo	13
Local Passenger Travel	17
Tourist Travel	18
Vessel and Service Options	18
Traffic Analysis & Projections	21
Diverted Traffic	21
Cebu-Maasin-Camiguin Passengers	21
Cebu-Cagayan de Oro Passengers	22
Cebu-Tagbilaran Passengers	23
Cebu-Tubigon Passengers	24
Converted Traffic	24
Cebu-Tagbilaran Air Passengers	25
Cebu-Cagayan de Oro Air Passengers	25
Generated Traffic	26
Base Year (1993) Traffic	27
Traffic Growth Prospects	28

3.	ECONOMIC ANALYSIS	31
4.	FINANCIAL ANALYSIS	33

ANNEXES

Annex A

Camiguin Island Economy & Trade

Annex B

Results of LSRS Surveys on Camiguin Island

Annex C

**Financial Analysis & Projections of a Fast Ferry Service
Operation between the Ports of Cebu and Balbagon,
Camiguin**

1. INTRODUCTION

Developmental Route Reports

The Liner Shipping Route Study (LSRS) was conducted during 1993-1994, with financing from the United States Agency for International Development (USAID). The LSRS Final Report is in 14 volumes, and includes a 4-volume subset which examines several possible liner shipping and ferry services, which were not being operated in 1993-1994. The objective of all of these "developmental route" investigations was to determine whether or not economically desirable and financially remunerative services might be operated on the several routes under examination, and, if so, to recommend that the Maritime Industry Authority (MARINA) proactively seek to induce shipping operators to apply for franchises to provide the services. The volumes of this developmental route subset are:

- Palawan Liner Shipping Developmental Routes Report (PALSDERR). This report examines current Palawan liner shipping services, and considers the possibilities for instituting new intraprovincial and interprovincial services.
- Cebu-Camiguin Liner Shipping Developmental Route Report (Camiguin Route Report). This report gives consideration to the possibility that fast ferry services linking Cebu and Camiguin Island might be desirable, perhaps with an intermediate call at the Bohol port of Tagbilaran.
- Romblon & Marinduque Developmental Routes Report (ROMDERR). This report gives consideration to possible ferry routes that would link Marinduque and the Romblon island of Tablas to Mindoro, as well as a possible ferry connection between Romblon Province and Marinduque, and a new Romblon intraprovincial route. The possible reestablishment of a direct Marinduque-Manila connection is also given consideration in the report.
- Batangas Liner Shipping Developmental Routes Report (BLISDERR). This report considers a wide variety of possible liner shipping connections to Batangas.

The objective of all of these reports is to identify whether or not there are desirable shipping routes not now served that should be franchised. Usually such new routes would provide more direct shipping services between two or three market areas than are currently available. The expectation is that the initiation of direct services would create diversion from less direct routes serving the same market areas, with the additional possibility that

there would be some modal conversion of traffic from air to sea transport. Finally, when a new service would serve better some portion of the transport demand market, and particularly the passenger travel market, than any service that previously existed, then there is a possibility of generating new traffic which otherwise would not come into being. Empirical evidence from around the world indicates that a new service must reduce travel costs (including passenger time value) by at least ten percent to generate any measurable new traffic, and sizable cost/time savings per passenger can generate incremental passenger volumes as high as 30-35 percent.

In line with the common objective of the LSRS developmental route reports, the objective of the Camiguin Route Report is to identify the desirability of instituting direct liner shipping services between the port of Cebu and a port of Camiguin Island, in the short to medium term.

The Cebu-Camiguin route was chosen by the LSRS for study because of the increasing importance of Cebu as a center of economic growth, including tourism, and the potential tourism attractions of Camiguin Island. Because the island of Bohol lies between Cebu and Camiguin, a sea transport connection between Cebu and Camiguin would not be a straight line. The intermediate location of Bohol, however, also suggests an alternative for a new service, viz., one that would call at Tagbilaran as an intermediate port-of-call; such a service could have important implications for tourism, since Panglao Island, a prime area for tourism, is in the vicinity of Tagbilaran. The route, therefore, would be connecting three of the six or seven prime areas for tourism of the Philippines.

Report Organization

This report presents, next, a discussion of the market for new shipping services between Cebu and Camiguin, and then discusses the economic and financial returns which might be expected to derive from the institution of new services. Annexes to this volume include a brief discussion of Camiguin's economy and domestic trade (Annex A), a description of interviews held by the LSRS on Camiguin Island (Annex B), and the financial evaluation of fast ferry services between Cebu and Camiguin (Annex C).

2. MARKET ANALYSIS

In the following paragraphs of this "market analysis" section, the LSRS examines, first, the island of Camiguin, identifying its characteristics and potentials, and its constraints to economic development. Current routes and services between Cebu and Camiguin are then discussed, with indications of the growth of Camiguin visitor traffic overall and on the existing, indirect Cebu-Camiguin routes. The adequacy of existing services to serve market demand is assessed, and options for new services are proposed, with suggestions of vessels that would be appropriate for performing the services, and that were available, in October 1993, for purchase on the world second-hand vessel market. The market analysis portion of this report closes with projections of traffic volumes which are anticipated for the proposed new services. The LSRS projections are based in part on current trends, but estimates of generated traffic volumes are based in part on discussions which the LSRS held with several very cooperative travel agencies in Manila.

Camiguin Characteristics, Economic Potential & Constraints to Development

The island province of Camiguin used to be a part of Misamis Oriental, but was declared a separate province in 1968. It is the smallest of seven provinces in Northern Mindanao, and comprises five municipalities, namely: Mambajao, Guinsiliban, Mahinog, Sagay and Catarman. It lies in the Mindanao Sea, approximately 90 kilometers north of Cagayan de Oro City, by road, and 12 nautical miles north of the nearest point of Misamis Oriental.

The province has a total land area of 292 square kilometers. Mambajao (the capital town), is the largest municipality, comprising nearly 50 percent of the island's land area. Of the total land area, 76 percent is devoted to agriculture, 9 percent is open grassland, 11 percent is timberland, and the remaining 4 percent comprises lagoons and barren rock. Despite the large portions of land devoted to agriculture, the province sources much of its rice and corn consumption requirements from Cebu and Cagayan de Oro. The Department of Trade and Industry (DTI) attributes rice and corn deficits to the intercropping of 74 percent of the total agricultural lands planted to coconut, with various crops, e.g., cocoa and bananas, with less than two percent of the total agricultural area being planted to palay.

In 1990, Camiguin had a population of 64,247, which was 12 percent above the 1980 population of 57,126. This represented an annual population growth rate of 1.2 percent over the 10-year period. The 1990 National Census and Statistics estimates show that approximately 50 percent of the working-age population

(15 years old and above) were employed, in 1990. Of this portion, 68 percent of the labor force were engaged in agriculture, while the remaining 32 percent were employed in the services, trade and industry sectors.

Since 1990, employment may be rising, however, because private sector construction activities for several tourism infrastructure projects were underway by 1993.

Camiguin is popularly known as the "Island Paradise of Northern Mindanao" because of its unspoiled natural wonders and scenic beauty. It has white beaches, sand islands, hot springs, mineral springs, tranquil lakes, majestic waterfalls, lagoons, old church ruins and a sunken cemetery. The famous Lanzones Festival is held every year during September-October. The island has an abundant supply of marine resources, e.g., tuna, snappers, and squid, but the volumes of fish catch per municipality have been kept at subsistence levels, as a result of primitive fishing methods.

An increasing awareness of the existence of the Camiguin tourist attractions has caused a renewed interest in the island by investors and tourism authorities. The Department of Tourism (DOT) has formulated a masterplan which envisions a boost to tourism and travel through an accelerated marketing package, complemented by efforts at upgrading existing areas and developing new ones. The DOT has identified priority areas under the so-called "tourism estate" scheme, which includes, among other areas, Samal Island and Pearl Farm near Davao, Panglao Island near Bohol and Camiguin Island.

There are, however, constraints to economic development. Camiguin lacks the infrastructure and technology to support activities that would accelerate economic development. Among the island's limitations are:

- ▶ Absence of farm to market roads. This a major setback to small farmers who are forced to sell their produce to traders/middlemen at lower than government-specified farmgate prices.
- ▶ Poor roads leading to tourist areas. Access roads connecting tourist destinations to the major thoroughfare (the Camiguin circumferential road) are unpaved, and the circumferential road itself has sections in poor condition in 1994.
- ▶ Lack of entrepreneurial skills. Those engaged in micro-businesses do not have the necessary skills to increase the scale of their business, and skills upgrading is therefore needed.

- ▶ Outdated fishing methods and lack of sophisticated fishing gear. Despite the abundance of marine resources in waters surrounding the island, municipal fish catch remains at subsistence levels in the absence of modern fishing technology.
- ▶ Inadequate facilities at the points of entry. The three Camiguin ports of Benoni, Guinsiliban and Balbagon do not have adequate port facilities for efficient cargo movement. In particular, Balbagon port has no lighting or RORO facilities, and has a limited berthing space which can accommodate only one vessel at a time. Lighting is also poor at the other two ports.
- ▶ Unserviceable landing strip. The Mambajao airport is no longer served by Philippine Airlines (PAL) due to a damaged portion of the runway. Reportedly, work was proceeding, during 1994, to rehabilitate the airport, but the LSRS was unable to learn the scope of this work or the anticipated completion date.
- ▶ Lack of a direct transport connection. The problem of Camiguin accessibility to other destinations, including tourist areas, is a constraint to additional traffic. Indirect connections involving more than one modal transfer are not attractive to either local or foreign tourists.
- ▶ Limited room capacity for tourist arrivals. Camiguin had nine establishments, in October 1993, with a combined total of 98 rooms, giving a maximum visitor accommodation of 392, based on four persons per room. Travel executives expressed the view to the LSRS that existing establishments were insufficient to accommodate the potential influx of tourists, especially during peak season. Further, the existing accommodations did not have the facilities, viz. telephones, airconditioned rooms, hot and cold showers, televisions, and other amenities which are requisite to meet tourism standards.
- ▶ Limited vessel capacity on the Cebu-Maasin-Camiguin route. The infrequency of services on this route was reportedly hindering cargo movement to and from Cebu. There was only one vessel plying the route, providing once-a-week service, with an intermediate call at the port of Maasin in each direction.

Initial efforts at improving the living standards of Camiguenos are clearly defined in the Provincial Trade and Industry Development Plan (1993-1998). The plan focuses on a development strategy towards tourism-agriculture-industry, with tourism as the market base. This strategy makes use of the island's potential as

a tourist destination to boost the economy, and to facilitate an equitable distribution of socio-economic gains, while attaining self-sufficiency in its basic food requirements. The Camiguin Provincial Government, in 1994, indicated that its priorities were to replant the extensive areas of ageing coconut palms and to encourage development of a cutflower industry on the island.

Current Routes and Traffic

Points of Entry

Camiguin province is actually or potentially accessible through four main points of entry, namely: Benoni, Guinsiliban, and Balbagon ports and Mambajao airport.

- Benoni links Camiguin to Cagayan de Oro through the Misamis Oriental port of Balingoan (88 kms. northeast of Cagayan de Oro by road). Benoni is situated in the municipality of Mahinog, approximately 15 kilometers south of Mambajao, the capital town. The distance between Balingoan and Benoni is 9 nautical miles (n.m.). In 1994, three operators employing four ferry vessels were regularly serving the Benoni-Balingoan route. One of these operators was also employing a fifth vessel to provide Benoni with direct connections to both Cagayan de Oro and the Bohol Island port of Jagna.
- Guinsiliban links Camiguin to both Balingoan and directly to Cagayan de Oro City. The port is 7 kilometers northeast of Benoni and is 7 n.m. from Balingoan. It is equipped with a RORO facility. The M/V Yuhum, which is a RORO vessel, provides a direct service between Cagayan de Oro and Guinsiliban. This vessel also serves the route from Guinsiliban to Balingoan, and another vessel owned by another operator serves the Guinsiliban-Balingoan route on a full-time basis.
- Balbagon port is located 10 kilometers north of Benoni wharf and approximately 2 kilometers south of Mambajao. It is the only Camiguin port which, in 1993-1994, was accommodating shipping services between Camiguin and Cebu. These services included one direct link provided with a small vessel, and an indirect service via the Leyte port of Maasin.
- Mambajao airport was closed to traffic from early 1993, and the LSRS could not learn when the airport might again open to serve commercial aircraft. A portion of the landing strip was damaged by a strong typhoon. According to provincial government sources, rehabilitation work was

ongoing at the airport in 1994, but this was not confirmed to the LSRS by the Air Transportation Office (ATO), and it is unclear if the work underway is designed to allow the airport to again serve 36-seat and 50-seat turboprop aircraft.

Service Routes

Some of the transport service connections which the LSRS found existed in 1994 had not existed in 1993. Specifically, only one Camiguin port had had a direct service connection to Cagayan de Oro in the earlier year, and there had been no regular services operated to Jagna, Bohol. There had also been a direct Cebu-Camiguin shipping service instituted, albeit with a small vessel. The routes and the operators serving them are identified in the following paragraphs. Table 1 presents information on route lengths, and the travel times and fares of passenger services on each route.

Cebu-Maasin-Camiguin Route

The Cebu-Camiguin route via Maasin, Southern Leyte, is served by one operator, Cokaliong Shipping Lines. The vessel employed to serve the route, during 1993-1994, was the MV Filipinas Siargao, which is a 500 dwt conventional passenger/cargo type, with an estimated breakbulk cargo capacity of 425 tons, and a rated passenger capacity of 292 persons. It was providing one round-trip per week. The vessel departs Cebu enroute to Maasin port on one day, and arrives at the port of Balbagon the following day. There is a layover at the port of Maasin of 4 hours, before sailing to Balbagon. Total travel time is 15 hours with a distance of 123 n.m.

Prior to the initiation of Cokaliong services, in January 1992, two other shipping lines, viz. Georgia and Sto. Domingo, served the route, but with the advent of Cokaliong competition the other lines lost market shares, and they subsequently ceased to serve the route (in May and June 1992, respectively).

Cebu-Cagayan de Oro-Balingoan-Camiguin Route

Camiguin is linked to Cagayan de Oro through Guinsiliban and Benoni, as points of entry. The mode of transport from Cebu to Cagayan de Oro is either by sea or by air. PAL provides direct services with B737 aircraft from Cebu to Cagayan de Oro three times per week: Tuesdays, Wednesdays and Saturdays. Flight distance is 228 kilometers, and travel time is 40 minutes.

The direct Cebu-Cagayan de Oro connection by sea is served by three shipping companies, viz., Carlos Gothong Shipping Lines, Trans-Asia Shipping and Sulpicio Lines. Travel time is 12 hours

Table 1

Alternative Routes Between Cebu and Camiguin, 1993-1994

Route Category, Routes & Port Pairs	Distance (nautical miles)	Travel Times [*] (hours)	Passenger Fares (pesos)
Sea Routes			
Direct Route			
Cebu - Balbagon	119	10.5	140 **
Via Cagayan de Oro			
Cebu - Cagayan de Oro	135	12.0	145 - 295
Cagayan de Oro - Guinsiliban/Benoni	41	3.5	50 - 85
Total	176	15.5 **	195 - 380
Via Jagna			
Cebu - Jagna	92	9.0	120 **
Jagna - Benoni	41	3.5	60 **
Total	133	12.5	180 **
Via Maasin			
Cebu - Maasin	70	6.0	n. e.
Maasin - Balbagon	53	5.0	n. e.
Total	123	11.0	149
Sea, Road & Ferry Routes			
Via Cagayan de Oro			
Cagayan de Oro - Balingoan (road)	-	1.5	34
Balingoan - Benoni/Guinsiliban (ferry)	8.6 / 7.0	1.0	18
Via Jagna			
Cebu - Tagbilaran (ferry)	43	4.0	50 - 75
Tagbilaran - Jagna (road)	-	1.5 **	0.35 **
Air, Sea Route			
Via Cagayan de Oro			
Cebu - Cagayan de Oro (air)	-	1.0	800

n. e. = not estimated

* Travel times do not include modal transfer times and layover times. For example, the Cokalong vessel serving Balbagon has a 4-hour stopover at Maasin before proceeding to Balbagon or Cebu.

** LSRS estimates.

Sources: Trans-Asia, Gothong, Sulpicio and Cokalong booking offices in Cebu.

over a distance of 135 n.m. Passage rate, in October 1993, was P145/person for third class accommodation, P200-P225/person for second class and P250-P295/person for first or tourist class.

The Balingoan-Benoni route was being served by two operators, in 1993, but a third operator had joined the route by the time that the LSRS survey team returned to Camiguin in 1994. Hijos de Juan Corrales and R.P. Tamula Shipping Lines were serving the route in both years, and Oro Lines Shipping Corporation joined the route the following year. In 1994, there are four vessels regularly plying the route, with each of the vessels performing two round-trips daily. Before the advent of services by Oro Lines, the two R.P. Tamula vessels had been operating three round-trips daily.

The vessel of Hijos de Juan Corrales is the ML Hijos Uno, a vessel of 48 GRT. Voyage time ranged from 45 minutes to an hour. R.P. Tamula Shipping was regularly employing the ML Ruperto Jr., a vessel of 157 GRT, and the ML Charles Brown, a vessel of 94 GRT. At the time of the last visit of the LSRS to Camiguin, the Ruperto Jr. was temporarily out of service, and had been replaced by the ML Antonina, a vessel of 100 GRT.

The Balingoan-Guinsiliban route is regularly served by one operator, R.P. Tamula Shipping Lines, but the MV Yuhum of Philston Shipping Lines was alternating, during 1994, between serving this route and serving the direct Guinsiliban-Cagayan de Oro connection. The R.P. Tamula vessel, is the ML Anita, a wooden-hulled vessel of 39 GRT with a rated capacity for 120 passengers. In 1993, this vessel was plying the route six times per week, with two round-trips on Wednesdays and Fridays and one round-trip on Tuesdays and Thursdays. By 1994, it was operating two round-trips daily on the route. The MV Yuhum is a RORO vessel of 196 GRT, with a passenger capacity of 146 and a speed of 10-12 knots, and was operating each of its routes once a day.

From Cagayan de Oro, travelers can take a 1.5-hour bus ride to Balingoan port. At the port of Balingoan, passengers may avail of ferry boats that would take them to either Guinsiliban port or Benoni port, in under an hour. Total travel time for each Cagayan de Oro-Camiguin road/ferry route is about 2.5 hours.

Cebu-Cagayan de Oro-Camiguin Route

The Cebu-Cagayan de Oro-Guinsiliban route is entirely by sea or is air and sea. The former involves no modal transfer, but nevertheless requires a transfer between a liner and a ferry vessel. The Cagayan-Guinsiliban direct connection is served only by the MV Yuhum. The vessel plies the route once a day. Travel time between Cagayan de Oro and Guinsiliban is 3.5 hours. In October 1993, the passenger fares were P85/person for first class accommodation, P75/person for second class, and P50/person for third class. It is the only vessel providing airconditioned

accommodation between mainland Mindanao and Camiguin. The MV Ruperto Sr. of R.P. Tamula Shipping is a vessel of 229 GRT and 7-knot speed, and operates from both Balbagon and Benoni to Cagayan de Oro, providing service just once a week.

Cebu-Jagna-Camiguin Route

In 1994, Oro Lines Shipping is operating from Cagayan de Oro to Benoni and on to Jagna, Bohol, with the MV Camiguin Oro, a steel-hulled vessel of 196 GRT and 200 DWT, with a speed of 14.5 knots and a capacity for 421 passengers. The vessel was operating a one-way voyage per day.

Cebu-Camiguin Direct Route

LL Shipping Lines, in 1994, is providing direct service between Cebu and Camiguin, employing the ML Lutz, a steel-hulled vessel of 47 GRT. Service is just once per week.

Passenger Traffic

Of the total visitor arrivals in Cagayan de Oro, those traveling to Camiguin accounted for 11.2 percent in 1990, and 12 percent in 1991. On a regional scale, Camiguin accounted for 5.2 percent and 6.2 percent of visitor arrivals in the area, in 1990 and 1991, respectively. Comparisons of Region 10, Cagayan de Oro, and Camiguin visitor totals are presented in Table 2.

The table shows that visitor arrivals on Camiguin Island rose rapidly from 1987 to 1992; the 1990 total was 4 times the level three years earlier, and the numbers then proceeded to treble from 1990 to 1992. The highest one-year growth registered was 183 percent 1992, which exceeded the 114 percent in 1990. In 1992, domestic and foreign arrivals exhibited growth of 182 percent and 191 percent, respectively.

Table 3 shows the numbers of passengers accommodated at each of the three ports of Camiguin in 1992 and 1993. The totals for the ports of Guinsiliban and Balbagon were fairly minor in comparison to the traffic accommodated at Benoni Port.

Traffic volume at the port of Balbagon comprises passenger movement from the port of Cebu via Maasin in Southern Leyte. Based on the passenger manifest of Cokaliang Shipping Lines, nearly 50 percent of the total volume of passengers embarking on the Filipinas Siargao at the port of Cebu, disembark at the port of Maasin. During peak months (March to May and October to January), this percentage tends to increase.

Air traffic statistics available are limited to a 12-month period covering 1991 to 1992. PAL services were resumed in 1991,

Table 2

Region 10 Visitor Arrivals

	1987	1988	1989	1990	1991	1992
Region 10						
Domestic				345,710	345,892	
Foreign				9,158	12,970	
Total				354,868	358,862	
Cagayan de Oro						
Domestic				158,123	176,156	
Foreign				6,336	9,255	
Total				164,459	185,411	
Camiguin						
Domestic	4,330	5,945	6,744	16,633	20,533	57,838
Foreign	719	1,210	1,524	1,846	1,935	5,627
Total	5,049	7,155	8,268	18,479	22,468	63,465

Source: Department of Tourism
Regional Office, Cagayan de Oro

Table 3

Passenger Traffic at Camiguin Island Ports, 1992 - 1993

Port Area & Traffic Item	1992	1993	2-yr total
Benoni			
Passengers			
Embarking	192,617	212,940	405,557
Disembarking	197,271	226,182	423,453
"Total"	389,888	439,122	829,010
Balbagon			
Passengers			
Embarking	1,323	2,241	3,564
Disembarking	1,386	2,140	3,526
"Total"	2,709	4,381	7,090
Guinsiliban			
Passengers			
Embarking	3,315	6,734	10,049
Disembarking	2,596	8,772	11,368
"Total"	5,911	15,506	21,417
Camiguin Island Grand Total			
Passengers			
Embarking	197,255	221,915	419,170
Disembarking	201,253	237,094	438,347
"Total"	398,508	459,009	857,517

Note: Passenger traffic information is not available for 1991 and earlier years.

Source: PPA Annual Statistical Report, 1992 - 1993.

Table 4

1992 Direct Cebu-Camiguin Passenger Traffic, by Air

Type	PAL
Domestic	2,030
Foreign	1,278
"Total"	3,308

Source: Provincial Tourism Office
Mambajao, Camiguin

after a lengthy 19-year hiatus from cessation of air services in 1972. However, it ceased operations anew late in 1992, after a strong typhoon destroyed a portion of the runway of the Mambajao airport. Table 4 shows the volume of traffic for the direct Cebu-Camiguin route for a 12-month period.

Cargo Traffic

Table 5 presents the commodity flows which were recorded by the Philippine Ports Authority (PPA) at the three ports of Camiguin Island in 1992 and 1993. Whereas the port of Benoni accommodates much higher passenger traffic than the other two ports together, cargo traffic is more evenly divided among the three ports. Benoni and Guinsiliban, in fact, each accommodated slightly over 40 percent of the totals for the three ports during the 1992-1993 period. The combined copra outflows from the ports of Benoni and Guinsiliban was 15,000 tons over the two years, or approximately 7,500 tons per annum. Copra does not exit from Balbagon port in significant quantities because the coconut mill destinations are on the Mindanao mainland.

Service Adequacy to Meet Market Demand

To assess the adequacy of existing transport services to accommodate demand for passenger and cargo movement between Cebu and Camiguin, it is necessary to consider cargo, local passengers, and tourists separately. Each of these transport market segments is discussed below.

Cargo

Camiguin produces a variety of fruits and vegetables which are shipped in the outward direction, as well as a significant volume of copra destined for the Mindanao mainland. The Camiguin Provincial Government informed the LSRS that Camiguin traders of fruits, such as lanzones and pomelo, generally prefer shipping to Cebu rather than to Cagayan de Oro because higher prices are offered for these fruits in Cebu. Some Camiguin traders interviewed by the LSRS survey team indicated that Cokaliong's once-a-week service at Balbagon was not adequate for the accommodation of Camiguin cargoes, although Cokaliong was reserving approximately 30 percent of the cargo capacity of its vessel for the accommodation of cargoes to and from Camiguin (with the remainder of cargo capacity allocated to cargoes moving between Cebu and Southern Leyte).

In an LSRS interview with Cokaliong, the operator maintained that the existing (1993) Cebu-Camiguin transport demand did not

Table 5

Commodity Flows at Camiguin Island Ports, 1992-1993*

(In Metric Tons)

Commodity	Annual Totals		2-yr totals
	1992	1993	
Benoni			
DOMESTIC			
Inbound			
Bottled Cargo	1,592	615	2,207
Other Gen. Cargo	1,229	866	2,095
Palay & Rice	1,719	230	1,949
Ref. Petroleum & Prod.	466	1,262	1,728
Crude Petroleum	661	992	1,653
Transport Equipment	336	336	672
Live Animals	613	-	613
Animal Feeds	350	179	529
Copra	290	7	297
Cement	240	-	240
Other Commodities	819	475	1,294
"Total"	8,315	4,962	13,277
Outbound			
Copra	3,349	2,855	6,204
Other Gen. Cargo	464	409	873
Bottled Cargo	547	268	815
Fruits & Vegetables	489	84	573
Lumber	198	364	562
Transport Equipment	194	265	459
Manufactures of Metal	146	303	449
Live Animals	74	38	112
Mach. & Elect. Equipt.	25	3	28
Mineral Fuel	8	18	26
Other Commodities	15	79	94
"Total"	5,509	4,686	10,195
Balbagon			
DOMESTIC			
Inbound			
Cement	1,925	3,781	5,706
Bottled Cargo	922	2,112	3,034
Palay & Rice	151	2,161	2,312
Other Gen. Cargo	511	922	1,433
Iron & Steel	143	702	845
Animal Feeds	70	508	578
Sugar	58	135	193
Corn	21	149	170
Wheat		124	124
Fertilizer	67	30	97
Other Commodities	99	152	251
"Total"	3,967	10,776	14,743
Outbound			
Bottled Cargo	454	680	1,134
Other Gen. Cargo	341	654	995
Cement	462		462
Lumber	110	315	425
Fruits & Vegetables	125	214	339
Wheat	8	47	55
Copra	37	1	38
Live Animals	22	6	28
Palay & Rice	25		25
Iron & Steel	16		16
Other Commodities	11	11	22
"Total"	1,611	1,928	3,539

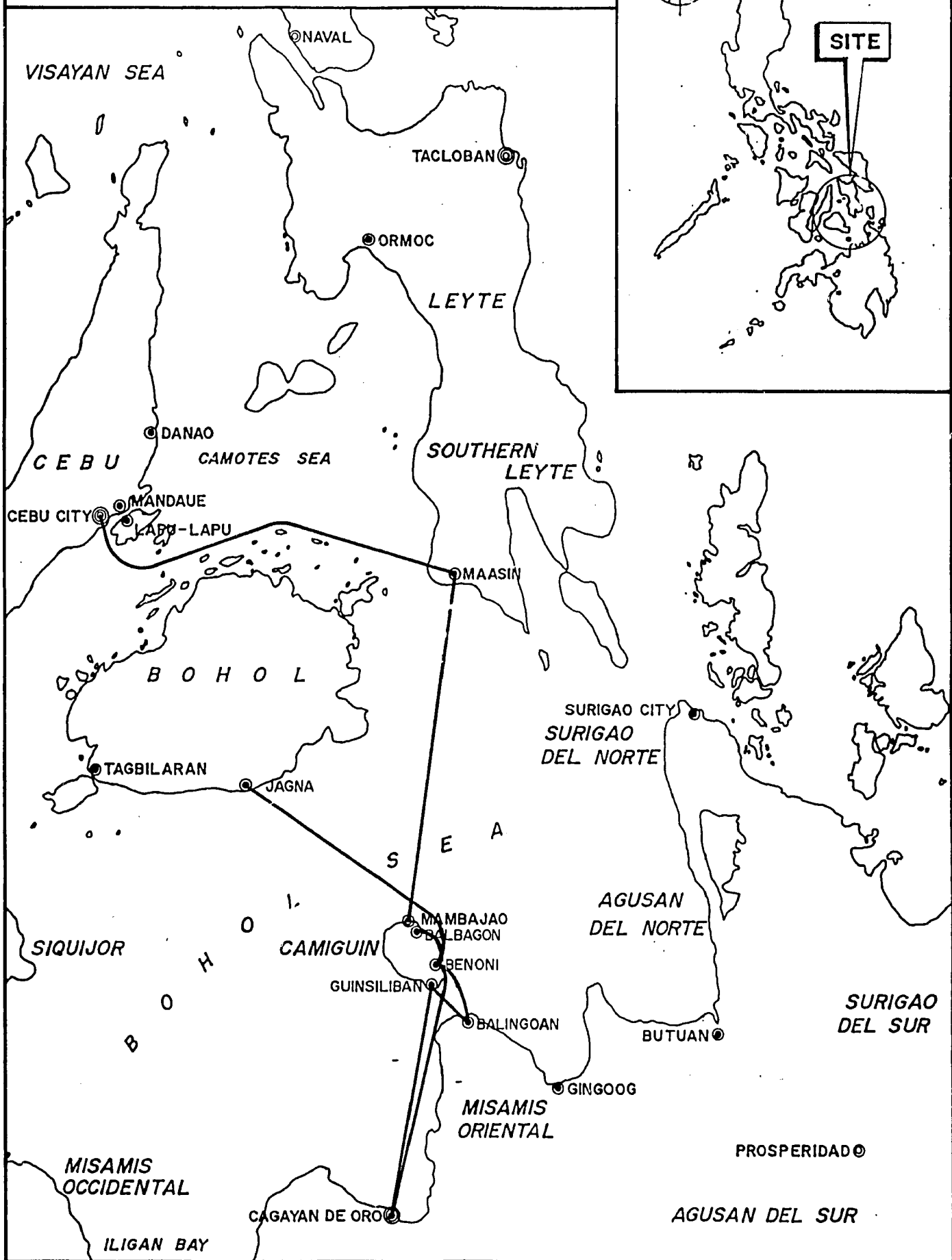
Table 5
(Continued)
Commodity Flows at Camiguin Island Ports, 1992-1993*
(In Metric Tons)

Commodity	Annual Totals		2-yr totals
	1992	1993	
GUINSILIBAN			
DOMESTIC			
Inbound			
Palay & Rice	608	1,562	2,170
Transport Equipment	159	1,566	1,725
Other Gen. Cargo	336	1,104	1,440
Animal Feeds	289	774	1,063
Iron & Steel	121	666	787
Bottled Cargo	171	573	744
Sugar	131	444	575
Wheat	70	458	528
Cement	210	279	489
Corn	103	380	483
Other Commodities	366	966	1,362
"Total"	2,596	8,772	11,368
Outbound			
Copra	2,431	2,038	4,469
Transport Equipment	133	1,890	2,023
Lumber	63	1,367	1,430
Fruits & Vegetables	275	516	791
Bottled Cargo	141	269	410
Palay & Rice	107	156	263
Other Gen. Cargo	29	194	223
Live Animals	30	133	183
Mach. Elect. Equipmt.	5	51	56
Iron & Steel	9	34	43
Other Commodities	72	86	158
"Total"	3,315	6,734	10,049
THREE-PORT TOTALS			
DOMESTIC			
Inbound			
Cement	2,375	4,060	6,435
Palay & Rice	2,478	3,933	6,431
Bottled Cargo	2,685	3,300	5,985
Other Gen. Cargo	2,076	2,892	4,968
Transport Equipment	495	1,902	2,397
Animal Feeds	709	1,461	2,170
Ref. Petroleum & Prod.	466	1,262	1,728
Crude Petroleum	661	992	1,653
Iron & Steel	264	1,368	1,632
Sugar	189	579	768
Other Commodities	2,480	2,741	5,221
"Total"	14,878	24,510	39,388
Outbound			
Copra	5,817	4,894	10,711
Transport Equipment	327	2,155	2,482
Lumber	371	2,046	2,417
Bottled Cargo	1,142	1,217	2,359
Other Gen. Cargo	834	1,257	2,091
Fruits & Vegetables	889	814	1,703
Cement	462		462
Manufactures of Metal	146	303	449
Live Animals	146	177	323
Palay & Rice	132	156	288
Other Commodities	169	329	498
"Total"	10,435	13,348	23,783

* Cargo is shipped to and from Camiguin as breakbulk cargo, except, that the ports of Guinsiliban and Benoni also accommodate some rolling cargo from RORO ferry operations.

SOURCE: PPA Annual Statistical Reports for 1992 and 1993.

FIGURE 1
 CAMIGUIN ISLAND LINER SHIPPING &
 FERRY SERVICES, 1994



justify increasing service frequency to twice a week. At least where cargo is concerned, this contention would seem to be borne out from the figures. The Cokaliong vessel serving the Cebu-Maasin-Balbagon route is not small, 500 dwt, and has an estimated cargo capacity of 425 mt. With a 30 percent space allocation, Camiguin shippers had capacity for shipping approximately 125 to 130 mt of cargo per week. In contrast, shippers shipped just 1,611 mt out of Balbagon, in 1992, an 1,928 tons in 1993, or a 2-year average of just 34 tons per week. This traffic outflow represented approximately a 25 percent utilization of the Cokaliong space allocation for Camiguin cargo shipments. In the inward direction, there was much better cargo space utilization, slightly better than 60 percent, in 1992, with an average weekly inflow of 78 tons of cargo. In 1993, the average weekly inflow jumped to 207 tons.

What is probably true is that the Camiguin fruit harvests are highly seasonal, and for some brief periods during the year, the Cokaliong service is not adequate to accommodate all demand. To correct such a situation, it would be useful to establish a cold storage facility on Camiguin, to permit harvested fruit to be shipped over a longer period. The cold storage facility would also be valuable for support of the tourism industry on Camiguin, since one tourist attraction, for all standards and types of tourists, is the availability of abundant local fruits and seafood. In fact, within a few years, the growth of tourism could end the outward shipment of all fruit from the island, as fruit is diverted to consumption by tourists.

Local Passenger Travel

Camiguinos, as with the large majority of Filipinos, generally seek the cheapest interisland passenger transport of acceptable standards. Passenger services are largely satisfactory between Cebu and Cagayan de Oro (see discussion of Volume VI of this LSRS report), and the Cokaliong services are also being operated to an acceptable standard. Cokaliong offered the lowest cost for third class passengers, in 1993, whereas going through Cagayan de Oro raised the cost for third class passengers by more than 30 percent, whichever option of travel is used to go from Cagayan de Oro to Camiguin (see Table 1 for comparison of travel times and costs.)

A direct connection between Cebu and Balbagon, Camiguin would only be slightly shorter than the route via Maasin, and a stopover at Tagbilaran would eliminate any distance advantage of a new route. Translated into cost savings, the maximum passage cost reduction for third class passengers would be on the order of four percent. Thus, from the standpoint of most Camiguinos, a new service would offer little advantage over existing services, except that it would call at the port of Balbagon on a different day of the week (this would be essential since Balbagon can accommodate only one interisland vessel at a time). This additional call at

Balbagon would divert some traffic going through Cagayan de Oro, at an estimated passage cost savings of P52 and P54, in comparison with Cagayan de Oro travel options.

Tourist Travel

Where a portion of the tourism market is concerned, the air/sea and air/land/sea travel options between Cebu and Camiguin are probably more-or-less satisfactory, provided that there is good coordination at Cagayan de Oro between the Cebu-Cagayan de Oro airflights and the local bus and ferry transport service connections to Camiguin. The total transport cost (P852 or P885) is modest by foreign tour group standards, as well as for a segment of domestic tourism. A disadvantage of these options, however, is the necessity of modal transfers. Many tourists think of needs for transport service connections as opportunities for something to go wrong. There also seems to be widespread belief among tourists in "Murphy's Law" (If anything can go wrong, it will go wrong.).

The Cokaliang service avoids transfers, but has two things very wrong with it as far as many tourists are concerned, viz., a 4-hour layover enroute (necessary for the loading/unloading of breakbulk cargo), and operation only once a week.

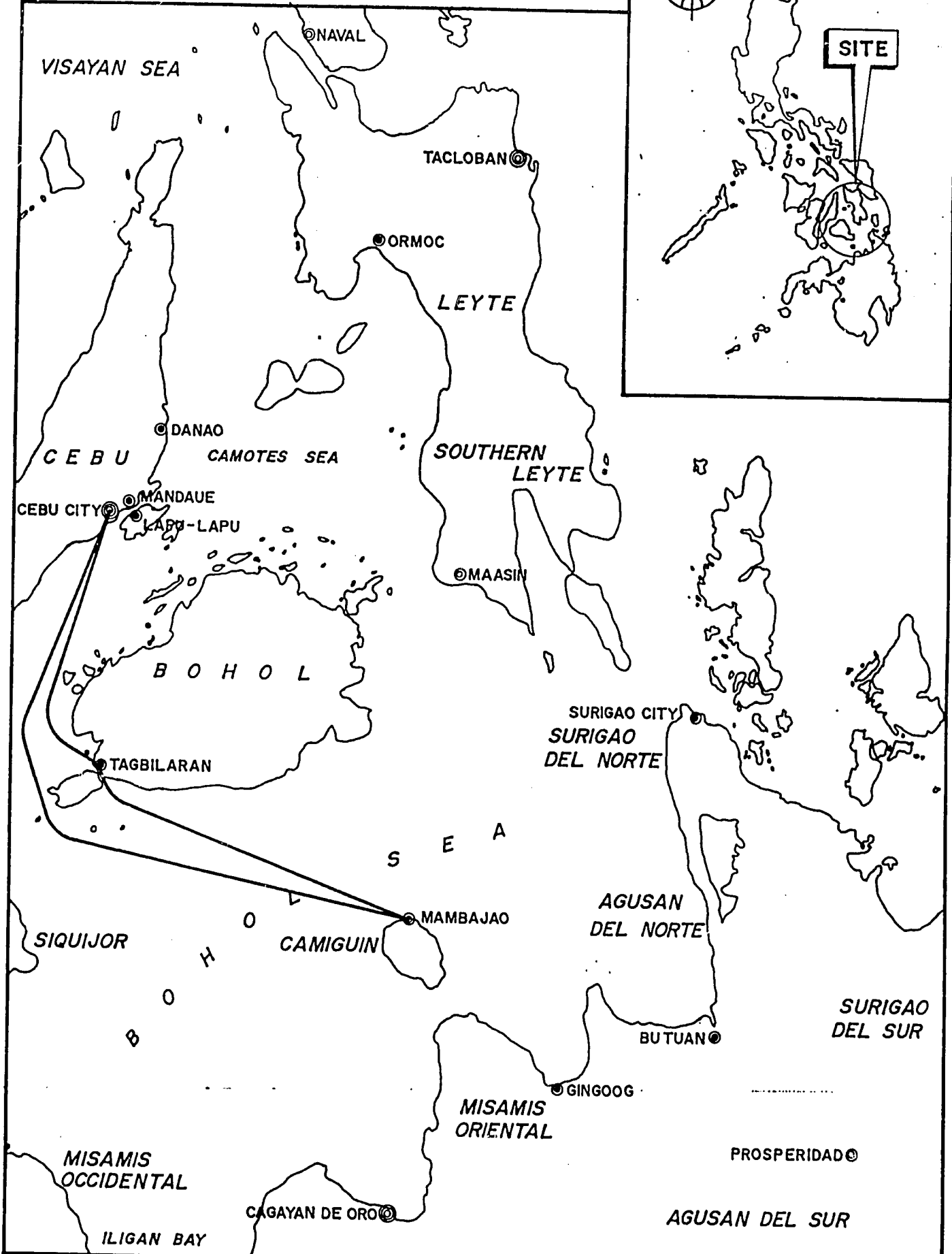
Vessel and Service Options

From the discussion of the preceding section, there does not appear to be a need for a new route to serve any significant volume of cargo traffic, although small volumes of breakbulk cargo might be accommodated on any type of vessel. A passenger vessel operating between Cebu and Camiguin could offer advantages in comparison to existing services, however. Three options initially suggested themselves to the LSRS team, but one of these was then ruled out for a combined technical/cost reason. The three options are:

- ▶ Direct Cebu-Camiguin service with a conventional passenger vessel.
- ▶ Direct Cebu-Camiguin service with a "fast ferry".
- ▶ Cebu-Camiguin service with an intermediate call at Tagbilaran, employing a fast ferry.

The second of these three options would constitute a long distance for a fast ferry in the open sea, and operation would be risky without a "motion dampening system", which would raise the cost of the vessel by around \$1.5 million. By "breaking" the voyage at Tagbilaran, the fast ferry could operate this leg, in

FIGURE 2
CAMIGUIN ISLAND PROPOSED FAST FERRY SERVICES



more protected waters, nearly every day of the year, and then could operate the Tagbilaran-Camiguin leg only when sea conditions were satisfactory; in that area of the Philippines, sea conditions are likely to be satisfactory somewhat more than 90 percent of the time. Because Panglao Island (near Tagbilaran) is also a principal tourist destination, many passengers would not mind the occasional day or two delay before proceeding to Camiguin, but the capacity of accommodation on Panglao will need to allow for such delays.

The intermediate call at Tagbilaran would have other advantages for a new service and for tourism development. Considering the latter first, there is not now a tourist-standard service being operated between Cebu and any port of Bohol Island, so a fast ferry would be advantageous for the rapid development of Panglao Island and other Bohol tourism. Also, in the tourism industry "the whole is greater than the sum of the parts"; in this case, the attractions of Bohol and Camiguin could reinforce each other, so that the "Bohol-Camiguin package" might generate greater volumes of tourists than if they were being promoted separately.

From the standpoint of the fast ferry service, it improves the chances of financial viability and tends to reduce risk if the ferry would be serving two prime tourism areas, rather than one only.

In October 1993, the Liang Chiang Express, a fast ferry, is for sale on the vessel second-hand market. The Liang Chiang has a cruising speed of 27 knots and a capacity for 350 passengers. The scheme for operation would be to have the vessel operate as a ferry, performing round-trips several days a week. This would require an operating day of 13 hours, with 10-11 hours at sea and 2-3 hours in ports (Tagbilaran twice and Balbagon once, each call lasting 30 to 60 minutes).

The number of days a week the vessel is scheduled to operate will depend, of course, on demand, but it must operate a sufficient number of days to satisfactorily serve tourists and to operate profitably. Should traffic levels appear to be insufficient to permit a fast ferry operator to attain profitable operations, then the fast ferry option might need to be deferred until the Camiguin tourism industry is at a later stage of development.

The following section of this report considers the Camiguin tourist and local passenger growth potentials between Cebu and Camiguin, and how these are likely to be allocated among routes and services, with and without a new sea transport connection between these two market areas.

Traffic Analysis & Projections

The traffic that the proposed Cebu-Bohol-Camiguin fast ferry service is anticipated to accommodate would include passengers diverted from other, existing sea transport services, passengers converted from air transport services, and generated passenger trips. These last will be trips that would not exist at all in the absence of fast ferry services, but would be brought into being by initiation of the higher-standard shipping services. These three sources of fast ferry service passenger traffic are discussed below, and the theoretical base year traffic, i.e., the traffic which the fast ferry would have accommodated in 1993, if the ferry had been in operation, is then estimated. Traffic growth prospects are then discussed, and projections are made of potential 1994-2003 fast ferry passenger volumes.

Diverted Traffic

Four existing shipping routes operating out of Cebu are foreseen to lose some portions of their passenger traffic to the proposed fast ferry service:

- ▶ Cebu-Maasin-Camiguin
- ▶ Cebu-Cagayan de Oro
- ▶ Cebu-Tagbilaran
- ▶ Cebu-Tubigon

In the cases of two of the above routes, Cebu-Cagayan de Oro and Cebu-Tubigon, traffic which might potentially be diverted to fast ferry service would be largely limited to those passengers traveling onward to Camiguin and Tagbilaran, respectively. The four routes are briefly discussed below.

Cebu-Maasin-Camiguin Passengers

As indicated in Table 3, there was a total of only slightly more than 4,000 passengers (combined embarking and disembarking) at the Camiguin port of Balbagon, in 1993, and not all of these necessarily had their other trip end at Cebu, i.e., a few may have been traveling between Leyte and Camiguin. As computed in the annex to this report, the fast ferry would need to charge P320 between Cebu and Camiguin, for the equivalent of first class service (the ferry would not provide any second or third class service). This fare would be P171 more than third class passengers were paying in 1993, to travel from Cebu to Camiguin, via Maasin. In order to induce diversion from the existing route via Maasin to the fast ferry service, some of the passengers will need to value the 10 hours to be saved plus the higher standard of accommodation at P171 or above. There is a third attraction of the fast ferry service, viz., that it would operate 6 or 7 days a week. The

existing service operates one day a week only, but it probably already accommodates only those passengers who find that schedule satisfactory, since they otherwise have the option to travel from Cebu to Cagayan de Oro any day of the week.

The majority of passengers are probably divertible from the existing route on at least an occasional basis, i.e., they will want to "try" the service, or they will take it when the vessel operating the existing route is fully-booked, or when individuals are "in a hurry", yet cannot contemplate the much higher air fare. Persons traveling on vacation are more likely to indulge themselves, with the aim of enjoying every moment of their travels. Although the LSRS cannot estimate the proportion of these volumes that can be expected to divert to the fast ferry, it seems likely that the proportion would be greater than 10 percent, yet would be unlikely to reach one-third of the passengers, simply because many would be unable to afford a P320 fare. As a conservative point within a reasonable range of expectations, the LSRS adopts 15 percent as a possible proportion of Cebu-Maasin-Camiguin traffic that would divert to the proposed higher-standard services. In 1993, this would have meant a monthly traffic diversion total of approximately 25 passengers in each direction.

Cebu-Cagayan de Oro Passengers

Traffic information that can be derived from shipping operator reports submitted to MARINA tends to understate total traffic, both because some operators do not report at all on the traffic they accommodated, and because even the operators who report sometimes tend to underreport traffic. From 1992 operator reports, it nevertheless appears that traffic on the Cebu-Cagayan de Oro route averaged at least 16,000 passengers per direction per month in that year. From Table 2 of this report, perhaps 5-10 percent of the Cebu-Cagayan de Oro traffic had a Camiguin trip end, which would mean somewhere in the range of 800-1600 passengers per direction per month. This estimate seems reasonable, also, from the standpoint of division of Cebu-Camiguin traffic between two routes, i.e., the Cebu-Camiguin, via Maasin, is operated just one day a week, and therefore probably takes no more than 10-15 percent of the traffic, with other passengers traveling between Cebu and Camiguin going via Cagayan de Oro. If the 150 passengers per direction per month accommodated on the route via Maasin represented 15 percent of the 1992 sea travel between Cebu and Camiguin, then approximately 1000 passengers per month were traveling in each direction via Cagayan de Oro.

The passengers traveling via Cagayān de Oro would, on the average, save 10-11 hours by shifting to the fast ferry, and the passengers currently traveling first class would also save on fare, by avoiding the P52 or P85 for traveling between Cagayan de Oro by road/ferry or only by ferry, respectively. The transport cost saving for these passengers would be P27 or P60, and it is likely

that 100 percent would shift to the fast ferry service, since it would be saving them both time and money. Third class passengers, however, would incur a significant travel cost increment by opting for ferry service, viz., P123-125. It seems likely that most vacationers would be willing to pay that amount, to avoid an incremental half day in transit, with the uncertainties and hassles associated with modal transfer points. Third class passengers traveling with other trip purposes, however, may be reluctant to pay the significantly higher fast ferry fare on any regular basis. From LSRS survey samples, non-student vacationers generally represent 15-35 percent of voyage passengers, and the percentage for Camiguin should be toward the high end of that range. In the view of the LSRS, adopting 30 percent as the proportion of Cebu-Cagayan de Oro Camiguin-destined passengers that would divert to the proposed fast ferry is within a reasonable range of expectations, and even somewhat conservative. In 1992, this relationship of diverted to total traffic would have resulted in a conversion of approximately 300 passengers per direction per month.

Cebu-Tagbilaran Passengers

From annual operator reports submitted to MARINA, it appears that average monthly passenger movements between Cebu and Tagbilaran were nearly 19,000 in 1992 (combined total for two directions), which would mean that the flow represented less than half of the 494,000 passengers embarking and disembarking at Tagbilaran in 1992 (PPA figure). From LSRS surveys, the two principal vessels serving the route were charging P50 for third class service and P75 for higher class service. The fast ferry fare for this route leg would be P150, and about two hours travel time would be saved. Diversion to fast ferry service, however, would probably be due less to time savings than to current low service standards, which at least one travel agency deplored as being unsuitable for tourists.

Bohol, like Camiguin, is one of the prime tourist destinations of the Philippines, and it is likely that a significant proportion of travelers are vacationers. Of the 175 passengers in the LSRS survey of the Cebu-Tagbilaran route, 29 percent of the passengers were on vacation and another 10 percent were taking a brief holiday. Partly on the basis of the expressed enthusiasm of travel agencies for a high-standard shipping service between Cebu and Tagbilaran, the LSRS estimates that a minimum of one-quarter of vacationers can be expected to divert to the fast ferry service, and the conversion of other passenger traffic is put, conservatively, at just five percent. If vacationers, then, represent about 30 percent of total Cebu-Tagbilaran travelers by sea, then diversion of about 11 percent of total traffic would be diverted to the new service.

As a further indication that the fast ferry might have diverted around 2,000 passengers per month (two direction total)

from existing sea transport services, air transport already accommodated, in 1993, an estimated 1,300 passengers per month between Cebu and Tagbilaran, at a fare level that was nearly twice the fare being proposed for the fast ferry. Thus, a halving of the charge for superior/rapid service should divert considerable additional passengers from low/fair standard services, as well as reconvert much of the air transport traffic back to sea transport (this latter effect is discussed below).

Cebu-Tubigon Passengers

The three operators serving the Cebu-Tubigon route did not report any 1992 traffic information to MARINA for 1992. The connection to Cebu accounts for virtually all of the Tubigon traffic, however, and PPA statistics show that the port's 1992 two-direction passenger traffic reached 428,000. Not all of this traffic had Tagbilaran as its other trip end, but it is likely that a sizable proportion of the traffic originated from or was destined for Tagbilaran. Conservatively, the LSRS presumes that half of the Tubigon traffic has Cebu and Tagbilaran trip ends, and therefore is potentially divertible to a higher-standard service than any that exist currently. As indicated in the discussion of the Cebu-Tagbilaran route, however, the fare which the fast ferry will need to charge to Cebu-Tagbilaran passengers will be about double the current fare for first/second class services, which means that a large majority of the passengers are unlikely to divert to the fast ferry route/service. The LSRS has identified from its passenger survey (181 passengers) on the Cebu-Tubigon route that approximately one-quarter of the passengers are non-students on vacations and another 15 percent are traveling on holiday or to/from provincial fiestas. As in the case of the Cebu-Tagbilaran route, the LSRS estimates that, at a minimum, one-quarter of the vacationers and holiday-takers can be converted from low/fair standard services to high standard services, which cut the travel time in half, even though a considerably higher price needs to be paid. This would work out to about five percent of the total traffic, i.e., 50 percent share with a Tagbilaran trip end x 40 percent vacationers/holiday-takers x 25 percent share who would be willing to pay higher fare. This would have translated into 900 passengers per direction per month, had the fast ferry been in operation in 1992.

Converted Traffic

Whereas the proposed fast ferry service will likely divert only relatively small portions of sea traffic from existing routes, because of the higher fast ferry passenger fare, the fast ferry fares will be considerably lower than air transport fares, and sizable conversions from air to sea transport are likely. Conversion will be mainly from the Cebu-Cagayan de Oro and Cebu-Tagbilaran air routes, but the availability of the Cebu-Bohol-

Camiguin tour can be expected to also divert some foreigners and balikbayans from using Manila as the entry/exit point for the Philippines to using Cebu, and internal Manila-Tagbilaran and Manila-Cagayan de Oro flights will then be converted to travel between Cebu, Bohol, Camiguin, and Cagayan de Oro by sea, although probably most of these visitors will use the sea travel option in one direction only.

It is not possible for the LSRS to even guess at the extent to which the existence of a Cebu-Bohol-Camiguin fast ferry service will strengthen the trend already apparent of increased use by foreigners and balikbayans of Cebu's Mactan International Airport as a point of entry to and exit from the Philippines. More can be said, however, about the conversion of Cebu-Tagbilaran and Cebu-Cagayan de Oro air traffic to the proposed fast ferry services, and these possibilities are separately discussed below.

Cebu-Tagbilaran Air Passengers

This route is currently served by a PAL Fokker 50 (F-50) aircraft, with a capacity for 54 passengers. PAL is unwilling to provide statistics on passengers accommodated, but a 70 percent load factor is likely, or PAL would be inclined to reduce its trip frequency, which is currently four round-trips per week. On this basis, weekly travel on the route would be approximately 150 passengers per direction. The passenger fare was P296, in October 1993, or approximately double the P150 fare for fast ferry travel between Cebu and Tagbilaran. Whereas air travel time is less than one hour from Cebu to Tagbilaran, the time required to move from city center to city center would be 2-3 hours with an airflight, offering very little time savings in comparison to the fast ferry travel option; the fast ferry could even offer a small time advantage for tourists traveling to and from Panglao Island. Thus, the institution of fast ferry service would be likely to convert a sizable proportion of air traffic, perhaps even making air transport services unremunerative. The LSRS presumes that there will be 100 percent conversion of passengers traveling between the Cebu and Tagbilaran city centers, and between Cebu and Panglao island, but that these trips that are highly susceptible to conversion represent only one-half of air traffic, and that all of the other half of the traffic remains with the air transport mode. In terms of monthly ferry traffic, the traffic conversion would have added 325 passengers per direction on the Cebu-Tagbilaran leg, in 1993.

Cebu-Cagayan de Oro Air Passengers

Table 4 of this report identifies the arrivals at the Mambajao airport on the island of Camiguin, over a 12-month period of 1991-1992, when direct air services were being provided from Cebu. Services were being provided at that time twice a week, using an F-50 aircraft. The passenger fare was P745. With only two-day-a-

week service, it is likely that a significant proportion of Cebu-Camiguin potential demand for air transport service was being accommodated by Cebu-Cagayan de Oro air service and (probably) the airconditioned ferry between Cagayan de Oro and the Camiguin port of Guinsiliban. If the less desirable (indirect) air service accommodated lower volumes of Cebu-Camiguin traffic on a per-day basis, it might still have accommodated more than half of the total, because it was available seven days a week rather than two days only. The LSRS presumes that the indirect service was accommodating one-half of the potential weekly demand for Cebu-Camiguin air transport service, which would also mean that traffic per day (over 5 days) on the indirect route averaged just 40 percent of the direct route's traffic per day. On this basis, the total potential air traffic between Cebu and Camiguin, with daily service, would have been 6,600 passengers in 1992.

All of these passengers should be convertible to a fast ferry service in at least one direction. The fast ferry will approximately match the travel time of 5.0-5.5 hours, allowing for time delays at modal transfer points, and the passage by ferry would be P320, less than half of the air/ferry cost of P850-885. The anticipated conversion from air transport in at least one direction would have resulted in 275 passengers per direction in 1992.

Generated Traffic

Generated traffic results only when there is a marked improvement in transport service and/or a sizable reduction in the costs of transport. In the case of the proposed fast ferry, it would provide substantially better sea transport service than currently exists between Cebu and Tagbilaran and Cebu and Camiguin, but it will cost much more than current services, and, for this reason the LSRS has presumed only relatively small proportions of traffic diversion ranging from just two percent of Cebu-Cagayan de Oro traffic and five percent of Cebu-Tubigon traffic to 11 percent of Cebu-Tagbilaran traffic and 15 percent of Cebu-Camiguin traffic, via Maasin. Thus, in net service standard and cost terms, the fast ferry service would not represent a substantial improvement in sea transport services, and significant volumes of generated traffic are not likely to result from this net service/cost improvement.

The situation is very different where traffic being converted from air travel is concerned. The fast ferry will approximately match the speed and service standards of air travel, but at half the cost (Cebu-Tagbilaran) or at considerably less than half (about 36 percent) of the cost (Cebu-Cagayan de Oro-Camiguin). With such a degree of net improvement, significant generation of traffic can be expected to result, probably in the range of 10-20 percent. The LSRS adopts a 15 percent estimate, which would be applicable to the converted traffic estimates of 600 passengers per direction per

month on the Cebu-Tagbilaran leg and 275 passengers per month between Tagbilaran and Camiguin. Generated traffic volumes, then would have been (in 1992) 90 and 40 passengers per direction per month between Cebu and Tagbilaran and Tagbilaran and Camiguin, respectively.

Base Year (1993) Traffic

From PPA statistics for the first half of 1993, passenger traffic from Cebu to the port of Cagayan de Oro grew by 21.7 percent from the first half of 1992. That actually represents a moderation of growth, since the traffic growth from the first half of 1991 to the first half of 1992 had been 33 percent. Since growth of traffic at Camiguin has been even more rapid than the growth of visitor arrivals at Cagayan de Oro, it is probably conservative to presume that Cagayan de Oro air traffic is growing at a rate, in 1993, to match growth of traffic at the port.

Base year (1993) traffic for the proposed fast ferry is shown estimated in Table 6 below, based on 21 percent growth from 1992 to 1993 for traffic, which, in the absence of the ferry, passes through Cagayan de Oro, and 10 percent growth for other sea traffic.

Table 6

Estimated Base Year (1993) Monthly Single-Direction Fast Ferry Passenger Traffic

Traffic Source	Cebu-Tagbilaran Leg	Tagbilaran-Camiguin Leg
Diverted Traffic		
Cebu-Maasin-Camiguin	30	30
Cebu-Cagayan de Oro	375	375
Cebu-Tagbilaran	1150	-
Cebu-Tubigon	990	-
Converted Traffic		
Cebu-Tagbilaran	325	-
Cebu-Cagayan de Oro	335	335
Generated Traffic	100	50
Total Monthly Traffic	3305	790

Traffic Growth Prospects

Two of the most rapidly developing areas of the Philippines, Cebu and Cagayan de Oro, happen to have between them two of the prime areas of the Philippines for the development of tourism, Bohol and Camiguin. Both of these are now under development to relieve constraints to tourism growth, but it will only be possible to fully relieve these constraints over a period of years. If Bohol and Camiguin had the infrastructure, accommodations, and leisure facilities to support 20 or 25 percent growth from 1993, then the fast ferry service might represent the final essential element to ensure and support such growth. Recent growth, however, is placing severe strains on the ability of Camiguin to accept and accommodate even one more year of very rapid visitor growth.

Whatever constraints there are on the two islands, however, it is unlikely that they will hold visitor growth below ten percent in 1994, and, by 1995, with the fast ferry and other ongoing and planned improvements, visitor growth can comfortably begin to accelerate. Visitor growth in both Bohol and Camiguin is very likely to average 15-20 percent per annum from 1996 to the year 2000, with gradual moderation thereafter.

Fast ferry traffic will not grow quite so quickly, especially between Cebu and Tagbilaran, because significant proportions of traffic will be local resident traffic, which is likely to grow much less rapidly than visitor traffic volumes. Nevertheless, the greater proportion of fast ferry traffic will comprise foreign and domestic visitors/tourists, and this proportion will increase as time goes by. Thus, the growth rate of fast ferry traffic may continue to rise toward the growth rate of visitors, and, under this scenario, will peak in the year 2000. Table 7 gives the projected monthly, single-direction traffic of the fast ferry, during 1994-2003.

Table 7
Projected Monthly Single-Direction Fast Ferry
Passenger Traffic, 1994-2003

Year	Cebu-Tagbilaran Leg	Tagbilaran-Camiguin Leg
1994	3570	870
1995	3870	960
1996	4220	1070
1997	4620	1200
1998	5060	1380
1999	5570	1600
2000	6150	1870
2001	6770	2170
2002	7380	2500
2003	8000	2800

3. ECONOMIC ANALYSIS

It is quite possible that tourism will grow more rapidly in both Bohol and Camiguin if they can be marketed as a tour "package", which the fast ferry service would make possible. The LSRS cannot quantify what such an increment of tourism development might be, however. Benefits that are possible to estimate are the fare savings to converted air transport passengers and the benefits to generated traffic.

The traffic converted from Cebu-Tagbilaran air service would save P146 per person. The traffic converted from Cebu-Cagayan de Oro air service would save P565 per converted passenger, based on the assumption that most of these passengers would take the air-conditioned ferry from Cagayan de Oro to Camiguin, in the absence of fast ferry service between Cebu and Camiguin. Generated traffic benefits would be, on the average, equivalent to one-half of these savings on a per passenger basis, or approximately P170 per passenger. To project these economic benefits, converted Cebu-Tagbilaran traffic is assumed to remain at ten percent of fast ferry traffic on the Cebu-Tagbilaran leg (see Table 6) and converted Cebu-Cagayan de Oro air traffic to continue to represent approximately 42 percent of ferry traffic on the Tagbilaran-Camiguin leg. Generated traffic is equivalent to 15 percent of converted traffic, and benefits average one-half of the latter on a per-passenger basis, so that generated traffic benefits are equivalent each year to 7.5 percent of the combined benefits of converted traffic. Table 8 projects these benefits deriving from the institution of fast ferry services.

Table 8

**Projected Annual Economic benefits from Initiation
of Cebu-Bohol-Camiguin Fast Ferry Service
(Pesos thousands)**

Year	Converted Traffic *			Generated Traffic	Total Benefits
	Cebu-Tagbilaran	Cebu-Cagayan	Subtotal		
1993	1,139	4,543	5,682	426	6,108
1994	1,251	4,955	6,206	465	6,671
1995	1,356	5,467	6,823	512	7,335
1996	1,479	6,094	7,573	568	8,141
1997	1,619	6,834	8,453	634	9,087
1998	1,773	7,859	9,632	722	10,354
1999	1,952	9,112	11,064	830	11,894
2000	2,155	10,650	12,805	960	13,765
2001	2,372	12,359	14,731	1,105	15,836
2002	2,586	14,238	16,824	1,262	18,086
2003	2,803	15,947	18,750	1,406	20,156

* Savings = Table 6 and 7 traffic x 2 (directions) x 12 (months) x proportion converted traffic represents of total traffic, in 1993, by voyage leg x savings per passenger.

4. FINANCIAL ANALYSIS

A complete financial analysis is presented in the annex to this report. That analysis, however, identifies the traffic and revenue that is required to make the proposed fast ferry services a financially viable operation. It is left to this section of the main text to identify the revenues that would be generated in line with the traffic projections of Table 7. The projections of revenue are based on fares of P150 for travel between Cebu and Tagbilaran, and a fare of P320 for travel between Cebu and Camiguin. These revenue projections are shown in Table 9.

Table 9

**Projected Fast Ferry Passenger Revenues, 1994-2003
(Pesos thousands)**

Year	Cebu-Tagbilaran Passenger Revenue*	Cebu-Camiguin Passenger Revenue	Total Revenue
1994	9720	6682	16402
1995	10476	7373	17849
1996	11340	8218	19558
1997	12312	9216	21528
1998	13248	10598	23846
1999	14292	12288	26580
2000	15408	14362	29770
2001	16560	16666	33226
2002	17568	19200	36768
2003	18720	21504	40224

* Revenue = Table 7 projections of passengers on Cebu-Tagbilaran leg minus through passengers (Cebu-Camiguin) x P150 x 2 (directions) x 12 (months).

From the revenue projections of Table 9, the revenue requirements identified in the annex of the report may not be attainable until the first decade of the Twenty-first Century. LSRS traffic projections are on the conservative side, however, and, in particular, the LSRS did not presume any diversion of foreign and balikbayan visitors from Manila to Cebu, despite the study's expectation that this will increasingly happen after the Cebu-Bohol-Camiguin fast ferry service is instituted, and Bohol-Camiguin "package" tours are developed.

Even with the Table 7 traffic projections, however, revenue could probably be increased by raising the passenger fare for the Tagbilaran-Camiguin leg. Thus, a fare of P400, instead of P320, for service from Cebu to Camiguin would not substantially affect

the level of traffic because of the large savings (P565) accruing to converted passengers from air travel. Such an adjustment would probably raise 1995 revenue from passenger traffic to the level of P19 million, and, allowing for both baggage revenue and common carrier tax, the 1995 net revenue could reach a level of P20 million.

With lower traffic levels than presumed in the annex, 7-day operation would not be merited, yet services could not be reduced to fewer than 5 days per week without having significant adverse effects on traffic levels, and 6-day operation probably should be the target schedule. With operation of 6 round-trips per week, in 1995, and a fare of P400 for Cebu-Camiguin travel, there would be a negative contribution to overhead of approximately P1 million. By 1996, however, the contribution is likely to become positive.

The fast ferry service is clearly financially marginal for start-up in 1995, but the medium-term prospects for viability are good.

ANNEX A

CAMIGUIN ISLAND

ECONOMY AND TRADE

ANNEX A

CAMIGUIN ISLAND ECONOMY & TRADE

Land Area & Population

There is a disagreement among sources as to the exact area of Camiguin Island, with estimates ranging from approximately 23,000 hectares to more than 29,000 hectares, as shown in Tables A.1 and A.2, including a footnote to the former table. Table A.1 indicates that the island is comprised of five municipalities, and had an estimated 1984 population of 57,000 persons.

Table A.2 indicates that a sizable portion of the island is planted in coconut palms, although, once again, there is a wide range of estimates, as indicated in a footnote to the table. Other areas used for agriculture on the island, included, in 1992, more than 1,000 hectares of bananas, 300 hectares of fruit trees, 450 hectares of irrigated rice, and slightly less than 450 hectares of "other agriculture".

Table A.3 presents information on the production of the principal crops of Camiguin Island, during 1984-1986. The table indicates that the island obtained a low average yield from its coconuts, in 1986, i.e., just 0.6 tons of copra per hectare. In tonnage terms, bananas represented the principal crop of the island in the mid-1980s, and the island also produced about 10,000 tons of rootcrops per annum.

Table A.4 presents data on the livestock and poultry populations of Camiguin, during the 1980-1992 period. On a per capita basis, the poultry population of Camiguin is roughly twice the national average, and the growth of the island's chicken population from 1990 to 1992 is the most significant trend shown in the table.

The port of Balbagon is on the island's north coast and serves Camiguin's capital town of Mambajao. Table A.5 identifies the cargo inflows to this port, during 1991-1993. Most inflows arrived from Cebu and Cagayan de Oro ports, but the two largest single-commodity flows were more than 6,000 tons of cement being shipped directly from the private wharf of Iligan Cement Corporation, and more than 5,500 tons of beer being shipped from the Cebu Island private wharf of San Miguel Corporation (SMC). Commodities received from Cebu Port included three-year totals of 300 tons of rice, 160 tons of animal feeds, and about the same amount of basic iron and steel products. During the same period, shipments from Cagayan de Oro included 1,300 tons of rice, 840 tons of animal feeds, and 250 tons of corn grits. In 1993, the Pacific Cement Corporation shipped 1,700 tons of cement to Camiguin, mainly from

its own wharf, but also from the port of Surigao.

Table A.6 identifies the inbound cargoes at the port of Benoni during 1991-1993. The reduction in commodity flows from 1991 to 1993 probably results from a modal shift, as cargoes once moved directly by sea from Cagayan de Oro to Benoni are instead moved by road to Balingoan and then by RORO ferry to the port of Guinsiliban. Major commodity flows identified in the table were all from Cagayan de Oro, and included nearly 2,400 tons of cement, 1,600 tons of rice, 1,300 tons of bottled beverages, and more than 500 tons of animal feeds.

Table A.1

Camiguin Island Land Area, Population & Density, 1984

Municipality	Land Area (hectares)	Population	Population Density (persons/ha.)
Catarman	7,442	12,422	1.7
Guinsiliban	2,978	4,254	1.4
Mahinog	3,872	9,993	2.6
Mambajao	10,483	21,337	2.0
Sagay	4,412	9,120	2.1
Island totals	29,187 *	57,126	2.0

* The National Mapping and Resource Information Authority of the Department of Environmental and Natural Resources (DENR) estimates the Camiguin Island area at only 22,980 hectares and the DENR Region X office provides an estimates of 25,265 hectares. The last is used in Table A.2.

Table A.2

Camiguin Island Land Classification & Use, 1990*

Classification & Use	Areas (hectares)	% of Island Area
Island Total	25,265 **	100.0
Protection forest above 1,000 meters	1,250	4.9
Mossy forest area	1,000	4.0
Tree plantation	778	3.1
Grassland & brushland	1,119	4.4
Coconut areas	11,101 ***	43.9
Bananas areas	1,033	4.1
Fruit trees	303	1.2
Irrigated rice	451	1.8
Other agriculture	438	1.7
Other land area	7,792	30.8

* Agricultural areas are as of 1992.

** Other sources give significantly different estimates of the Island's area.
See footnote to Table A.1.

*** The Philippine Coconut Authority uses a figure of 19,513 hectares as
the total coconut area of Camiguin Island in 1991.

Sources: Department of Environmental Natural Resources, Region X (land classification)
and Department of Agriculture (agricultural land use).

Table A.3

Camiguin Island Production of Major Crops, 1984 - 1986

Crop & Item	1984	1985	1986
Coconuts			
Planted Area (hectares)	-	-	12,136
Production (m.t.)	-	-	6,860
Yield (m.t./ha.)	-	-	0.6
Bananas			
Planted Area (hectares)	2,514	2,202	1,905
Production (m.t.)	29,099	27,896	21,748
Yield (m.t./ha.)	11.6	12.7	11.4
Cassava			
Planted Area (hectares)	455	584	580
Production (m.t.)	4,909	7,288	8,743
Yield (m.t./ha.)	10.8	12.5	15.1
Camote			
Planted Area (hectares)	333	349	315
Production (m.t.)	3,325	2,417	2,434
Yield (m.t./ha.)	10.0	6.9	7.7
Lanzones			
Planted Area (hectares)	367	221	238
Production (m.t.)	2,268	2,873	470
Yield (m.t./ha.)	6.2	13.0	2.0
Mango			
Planted Area (hectares)	52	54	57
Production (m.t.)	479	667	225
Yield (m.t./ha.)	9.2	12.4	3.9
Corn			
Planted Area (hectares)	340	610	680
Production (m.t.)	330	690	805
Yield (m.t./ha.)	1.0	1.1	1.2

SOURCE: Bureau of Agricultural Statistics

Table A.4

Camiguin Island Livestock & Poultry Populations, 1980 - 1992

(number of head)

Farm Type and Livestock & Poultry Kind	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Backyard Farms													
Cattle	5,370	4,150	4,870	5,360	5,810	4,710	6,100	4,460	3,850	4,160	4,920	6,267	5,873
Carabao	1,750	1,540	1,790	1,900	2,240	1,520	1,590	1,970	1,440	1,440	1,410	1,552	1,849
Hogs	23,110	22,780	22,480	21,600	21,100	19,230	16,600	14,050	15,170	18,390	18,990	23,784	21,350
Goats	-	-	-	2,120	2,900	1,680	1,980	1,620	1,990	2,250	2,470	1,152	2,218
Chickens	55,660	84,350	91,360	73,460	86,500	84,710	84,670	73,390	88,830	89,300	90,110	108,430	124,786
Ducks	870	1,820	2,930	2,850	1,520	430	810	420	360	380	310	230	678
Commercial Farms													
Cattle	3,640	2,540	2,180	2,600	1,540	-	-	-	-	-	-	-	-
Carabao	-	310	300	300	-	-	-	-	-	-	-	-	-
Hogs	930	370	370	-	-	-	-	-	-	-	-	-	-
Goats	-	-	-	10	-	-	-	-	-	-	-	-	-
Chickens	7,370	20,120	2,480	-	-	-	-	-	-	-	-	-	-
Ducks	-	-	-	-	-	-	-	-	-	-	-	-	-
All Farms													
Cattle	9,010	6,690	7,050	7,960	7,350	4,710	6,100	4,460	3,850	4,160	4,920	6,267	5,873
Carabao	1,750	1,850	2,090	2,200	2,240	1,520	1,590	1,970	1,440	1,440	1,410	1,552	1,849
Hogs	24,040	23,150	22,850	21,600	21,100	19,230	16,600	14,050	15,170	18,390	18,990	23,784	21,350
Goats	-	-	-	2,130	2,900	1,680	1,980	1,620	1,990	2,250	2,470	1,152	2,218
Chickens	63,030	104,470	93,840	73,460	86,500	84,710	84,670	73,390	88,830	89,300	90,110	108,430	124,786
Ducks	870	1,820	2,930	2,850	1,520	430	810	420	360	380	310	230	678

TABLE A.5
BALBAGON PORT, MAMBAJAO, CAMIGIITN INBOUND DOMESTIC
CARGO FLOWS BY SEA, 1991-1993

ORIGIN	COMMODITY	CARGO (MT)		
		1991	1992	1993
CULASI, ROXAS CITY, CAPIZ				
	Minor flows			0
CEBU CITY				
	Minor flows	15	53	24
000	All other commodity	50	66	3
132	Milled rice	25	71	205
221	Flour & related products from grain	11	29	20
224	Sugar	33	57	18
226	Other food preparations	4	11	8
227	Animal Feeds	40	102	22
233	Mineral water & aerated beverages			15
235	Other alcoholic beverages	18	34	22
412	Salt	1	23	
618	Other fertilizers	1	13	2
724	Veneer & plywood	17	39	8
811	Cements		118	12
819	Glass bottles	2	1	10
821	Iron & steel basic products	25	199	39
MANDAUE, MANDAUE CITY				
234	Beer		543	134
SAN MIGUEL RECLAMATION QUANO RECLAMATION				
234	Beer	3,073	1,542	961
819	Glass bottles	70	141	
ILIGAN CEMENT CORPORATION, KIWALAN, ILIGAN CITY				
811	Cements	2,980	2,260	1,420
ILIGAN COCONUT INDUSTRIES, STA. FILOMENA, ILIGAN CITY				
811	Cements	640		
COTABATO, COTABATO CITY, MAGUINDANAO				
	Minor flows			4
132	Milled rice			24
172	Copra			755
618	Other fertilizers			68
MANILA (FIRST DISTRICT) NORTH HARBOR				
	Minor flows	2		
916	Special purpose road vehicles	55		
CAGAYAN DE ORO				
	Minor flows		73	7
000	All other commodity		139	48
132	Milled rice		434	870
134	Corn grits & meal		158	93
181	Abaca		21	
221	Flour & related products from grain		119	32
224	Sugar		55	14
227	Animal Feeds		599	241
233	Mineral water & aerated beverages		308	324
235	Other alcoholic beverages		100	1
412	Salt		19	4
413	Sands & gravel		13	
615	Urea		14	
618	Other fertilizers		53	68
724	Veneer & plywood		24	4
725	Wood & cork products		13	
811	Cements		110	71
821	Iron & steel basic products		72	1
915	Road transport equipment		80	11
DUMAGUETE CITY				
	Minor flows			5
MAASIN, SOUTHERN LEYTE				
	Minor flows	38	5	
172	Copra	10		

42

TABLE A.5
BALBAGON PORT, MAMBAIAO, CAMIGUIN INBOUND DOMESTIC
CARGO FLOWS BY SEA, 1991-1993
(Continued)

ORIGIN	COMMODITY	CARGO (MT)		
		1991	1992	1993
224	Sugar	12	1	
226	Other food preparations	17	4	
227	Animal Feeds	21	8	
313	Wood charcoal	10		
821	Iron & steel basic products	12	9	
SURIGAO CITY, SURIGAO DEL NORTE				
811	Cements			248
PACIFIC CEMENT CORPORATION BARANGAY QUEZON, SURIGAO CITY				
811	Cements		28	1,452
** TOTAL **		7,179	7,760	7,264

TABLE A.6
BENONI PIER, MAHINOG, CAMIGUIN INBOUND DOMESTIC
CARGO FLOWS BY SEA, 1991-1993

ORIGIN	COMMODITY	CARGO (MT)		
		1991	1992	1993
NASIPIT GOV'T. (R.C.) WHARF, NASIPIT				
418	Petroleum	60		
CEBU CITY				
	Minor flows	53		0
000	All other commodity	72		0
132	Milled rice	154		
142	Peas & beans	16		
197	Other agricultural commodities (n.e.s.)	30		
213	Eggs	22		
221	Flour & related products from grain	95		3
224	Sugar	57		
226	Other food preparations	58		0
227	Animal Feeds	20		1
234	Beer	38		
235	Other alcoholic beverages	95		2
412	Salt	32		
715	Pest control products	14		
722	Tires	10		
724	Veneer & plywood	36		
735	Household utensils	15		
811	Cements	30		
821	Iron & steel basic products	91		
825	Metal building parts	13		
915	Road transport equipment	18		
SAN MIGUEL RECLAMATION QUANO RECLAMATION				
234	Beer			119
ILIGAN CEMENT CORPORATION, KI WALAN, ILIGAN CITY				
811	Cements			500
CAGAYAN DE ORO				
	Minor flows	15	45	3
000	All other commodity	320	90	0
131	Palay	13		
132	Milled rice	703	889	25
134	Corn grits & meal	115	95	7
221	Flour & related products from grain	10	33	3
226	Other food preparations	16	10	
227	Animal Feeds	227	309	7
233	Mineral water & aerated beverages	852	479	9
235	Other alcoholic beverages	56	19	
311	Unprocessed wood (excluding firewood)	4		278
412	Salt	10	16	
611	Organic chemicals	24		
618	Other fertilizers	130	5	9
725	Wood & cork products	20		
811	Cements	1,987	386	
819	Glass bottles		20	
821	Iron & steel basic products	30	28	
915	Road transport equipment	7	15	
FLORO CEMENT CORPORATION LUGAIT, MISAMIS ORIENTAL				
811	Cements	856		
	** TOTAL **	6,424	2,438	964

- 44

ANNEX B

RESULTS OF LSRS SURVEYS ON CAMIGUIN ISLAND

ANNEX B

LSRS SURVEYS ON CAMIGUIN ISLAND, 1994

Introduction

The LSRS conducted surveys on the island of Camiguin, in 1993, for the preparation of a draft report which was submitted in December 1993. In an effort to upgrade the draft report, the LSRS returned to the island in 1994, and conducted a number of interviews with port operators and government officials. These respondents included:

Port Operators

Mr. Vicente Pesucan	PPA Officer, Benoni, Camiguin
Mr. Felipe Tumimbo	PPA Officer, Benoni, Camiguin

Government Officials

Mr. Jesus de Pakuribot	Mayor, Mahinog, Camiguin
Mr. Michael Philip Kho	Vice Mayor, Mahinog, Camiguin
Ms. Mercy Jajalla	Municipal Planning and Development Coordinator, Office of the Mayor, Mahinog, Camiguin
Mr. Alex Vicente	Project Development Officer, Office of the Mayor, Mahinog, Camiguin
Mr. Rudy Tabalba	Mayor, Guinsiliban, Camiguin
Mr. Zosimo Baros	Mayor, Catarman, Camiguin
Mr. Luisito Ucad	Municipal Planning and Development Coordinator, Office of the Mayor, Mambajao, Camiguin
Mr. Gil Pabe	Municipal Planning and Development Coordinator, Office of the Mayor, Mambajao, Camiguin
Engr. Jaime P. Mabolo	Municipal Planning and Development Coordinator, Office of the Mayor, Sagay, Camiguin
Mr. Felipe Kho	Provincial Administrator, Office of the Governor, Camiguin
Mr. Romeo Aranas	Provincial Planning and Development Coordinator, Office of the Governor, Camiguin
Mr. Catalino Chan	Provincial Human Resource and Tourism Development Officer, Office of the Governor, Camiguin

Survey Results

1. There are five municipalities and three ports on Camiguin island, namely:

<u>Name of Municipality</u>	<u>Name of Port</u>
Catarman	none
Guinsiliban	Guinsiliban Port
Mahinog	Benoni Port
Mambajao	Balbagon Port
Sagay	none

2. There are five ferry/shipping operators serving Camiguin. The names of operators by port of call are as follows:

a) **Benoni Port**

- i) Hijos de Juan Corales Shipping Lines
- ii) RP Tamula Shipping Lines
- iii) Oro Lines Shipping Corporation

b) **Guinsiliban Port**

- i) RP Tamula Shipping Lines
- ii) Philston Shipping Lines

c) **Balbagon Port**

- i) Cokaliong Shipping Lines
- ii) RP Tamula Shipping Lines

3. The home location of Hijos de Juan Corales Shipping Lines is in Cagayan de Oro City. Its ticket personnel at the port of Benoni declined to be interviewed since they were not in the position to provide details concerning port operation assessment, company plans/intentions, and port policies/law. However, they commented that they had no problems with PPA or PCG and they were satisfied with Benoni Port's operation/management system. They were operating one motor launch at the port of Benoni.

4. The home location of Philston Shipping Lines is in Cagayan de Oro City. It was operating one RORO vessel to the port of Guinsiliban. Its personnel who were interviewed at the port of Guinsiliban commented that they had no problems as regards operations at Guinsiliban Port. They were satisfied with the RORO landing facility at that port.

They mentioned that there were arrastre services at the port, but there were no cargo-handling facilities or equipment at the port of Guinsiliban. They were having no problems as regards shipment security at the port but they suggested that the port should be provided with security guards. They also commented that the port was newly developed but they noticed that there was only one lamp post in the vicinity of the pier. This lamp post is near the warehouse but far from the side of the RORO ramp, i.e., diagonally at the opposite side.

They were having no problems as regards vessel clearances and charges. Although they had no complaints regarding the performance of PPA, they suggested that it would be desirable if the port would be provided with a permanent PPA station/office to cater to port user needs.

5. The home location of Cokaliang Shipping Lines is in Cebu. It was operating one passenger/cargo vessel to the port of Balbagon in 1993-94. The LSRS did not have the chance to interview any Cokaliang personnel on Camiguin Island.
6. The home location of Oro Lines Shipping Corporation is in Cagayan de Oro City. It was operating two ferry boats from the port of Benoni. This shipping company had no office on Camiguin. Tickets were being issued only when their vessels arrived at the port of Benoni. The ticket personnel stayed on board their vessels during voyages. Except for the lack/absence of cargo-handling facilities/equipment and security guards, they commented that they were satisfied with the way PPA was operating/managing the port of Benoni. They had no complaints in regard to clearances, fees or charges. They mentioned that they had no problems with PFA or PCG.
7. The home location of RP Tamula Shipping Lines is in Kolambugan (Lanao del Norte). This shipping company was operating two passenger/cargo motor launches from the port of Benoni, one passenger/cargo motor launch from the port of Guinsiliban, and one cargo vessel from the port of Balbagon.

The manager of RP Tamula Shipping Lines at the port of Benoni emphasized that all of the three ports of Camiguin where their motor launches/vessels were operating had the same, or common problems, namely;

- ▶ Berthing fender pile problems (dilapidated).
- ▶ No cargo-handling facilities/equipment.
- ▶ No security guards.
- ▶ Problem as regards lighting facilities. In the case of Guinsiliban Port there was only one lamp post;

in the case of Balbagon Port the lights were always switched-off; and in the case of Benoni Port the lights were disconnected.

The manager always found the PPA port operation/management to be satisfactory. There were no complaints made concerning clearances, fees or charges. As regards any desired changes concerning port system/operation, the same official commented "just status quo". The manager disclosed that their priority was to expand their operations. In the case of port sector policy and law, the manager favored reduced economic regulation, improved safety & environmental regulation, as well as increased cargo-handling competition. The manager added that they just hoped these changes would ensure efficiency of operation.

8. The port of Benoni was catering to the following vessels in 1994:

M/L Hijos Uno (Hijos de Juan Corales Shipping Lines)
 Make/Type : Steel hull/passenger-cargo
 GRT : 47.65
 DWT : NA
 NRT : 45.25
 Pass. Cap. : NA
 Speed : NA
 Route : Benoni-Balingoan (Misamis Oriental)
 Route Length : 9.0 n.m. (approx.)
 Travel Time : Around 45 min. to one hour
 Passage Rate : ₱ 18.00/pax.
 Trip Frequency : 2 trips daily
 First Trip : 0600 hrs (from Benoni)
 Last Trip : 1100 hrs (from Benoni)

M/L Ruperto Jr. (RP Tamula Shipping Lines)
 Make/Type : Steel hull/passenger-cargo
 GRT : 156.77
 DWT : NA
 NRT : 74.76
 Pass. Cap. : NA
 Speed : NA
 Route : Benoni-Balingoan
 Trip Frequency : 2 trips daily
 First Trip : 0700 hrs (from Benoni)
 Last Trip : 1200 hrs (from Benoni)

M/L Antonina (RP Tamula Shipping Lines)
 Make/Type : Steel hull/passenger-cargo
 GRT : 99.91
 DWT : NA
 NRT : NA
 Pass. Cap. : NA

Speed : NA
 Route : Benoni-Balingoan
 Trip Frequency : 2 trips daily
 First Trip : 0700 hrs (from Benoni)
 Last Trip : 1200 hrs (from Benoni)

Note: This vessel was a replacement for the M/L Ruperto Jr. at the time of the LSRS survey.

M/L Charles Brown (RP Tamula Shipping Lines)
 Make/Type : Steel hull/passenger-cargo
 GRT : 93.60
 DWT : NA
 NRT : 49.60
 Pass. Cap. : NA
 Speed : NA
 Route : Benoni-Balingoan
 Trip Frequency : 2 trips daily
 First Trip : 0900 hrs (from Benoni)
 Last Trip : 1400 hrs (from Benoni)

M/V Jagna Oro (Oro Lines Shipping Corporation)
 Make/Type : Steel hull/passenger-cargo
 GRT : 136.76
 DWT : NA
 NRT : 89.63
 Pass. Cap. : 319
 Speed : 12 knots
 Route : Benoni-Balingoan
 Trip Frequency : 2 trips daily
 First Trip : 0800 hrs (from Benoni)
 Last Trip : 1300 hrs (from Benoni)

M/V Camiguin Oro (Oro Lines Shipping Corporation)
 Make/Type : Steel hull/passenger-cargo
 GRT : 196.06
 DWT : 200.00
 NRT : 100.16
 Pass. Cap. : 421
 Speed : 14.5 knots
 Route : Cagayan de Oro-Benoni-Jagna
 Trip Frequency : 1 trip daily
 Benoni arrival : 1200 hrs
 Benoni departure: 1300 hrs

M/V Filipinas Siargao (Cokaliong Shipping Lines)
 Make/Type : Steel hull/passenger-cargo
 GRT : 326.38
 DWT : 350.00
 NRT : 181.46
 Pass. Cap. : 292

5

Speed : NA
Route : Maasin-Cebu-Camiguin
Trip Frequency : Once a week

9. The port of Benoni, in 1994, is a port terminus of three regular routes, i.e., Benoni-Balingoan, Benoni-Cagayan de Oro, and Benoni-Jagna (Bohol). The travel time from Benoni to Jagna is around three hours and thirty minutes, from Benoni to Cagayan de Oro is three hours and thirty minutes, and from Benoni to Balingoan is forty-five minutes to one hour.
10. The outbound products from the port of Benoni are usually fish, copra, coco lumber, empty drums, lanzones, mangoes and bananas. The inbound cargoes are groceries, construction materials, and oil/gasoline-filled drums.
11. The copra that is being shipped out from the port, of Benoni is usually transported via Balingoan port then to Cagayan de Oro or to Gingoog City. At the time of LSRS fieldwork, around 400-600 sacks of copra were being shipped out from Benoni port every day by 4 to 6 shippers. Each sack contained 50 kilograms of copra. The freight rate being charged by Hijos Shipping Lines was ₱2/sack of copra from Benoni to Balingoan. The freight rate being charged by the RP Tamula Shipping Lines was ₱ 4/sack.
12. There were 3 or 4 shippers who were shipping out fish from Benoni Port every day. The size of fish shipment ranged from 4 to 5 boxes/day at 40 kilograms/box. Vegetables, poultry and livestock were not usually being shipped out since these commodities are usually for local consumption. Lanzones were also being shipped out from this port but these are seasonal.
13. The inbound products at the port of Benoni, like rice, groceries and softdrinks, usually come from Cagayan de Oro. Beer and other liquors mostly come from Cebu.
14. The port of Benoni was being operated/managed by PPA. This is the only Camiguin port with a PPA/PCG office. The PPA started operating on the island of Camiguin in December, 1990. There was an on-going repair and pier extension works at the port of Benoni, during the time of LSRS survey. This port is concrete paved. It has no RORO facilities nor warehouses, but there is a passenger terminal. There were no cargo-handling facilities or equipment at the time of the survey. The arrastre (Mahinog Port Integrated Service Cooperative) was providing manual services. The port has lighting facilities; however, at the time of the survey, the electricity had been disconnected for almost four months. The PPA disclosed that the one responsible for the payment of the electric bills of the port was the arrastre contractor, but the contractor could not pay, so the electricity had been disconnected.

15. Benoni port had seven available berthing spaces that were being utilized. There was also a 9-meter berthing space at the edge of the pier which was not being utilized, i.e., this was the pier edge that was to be extended further to the sea.
16. The vessels calling at the port of Guinsiliban are as follows:
- a) M/L Anita (RP Tamula Shipping Lines)
- | | | |
|----------------|---|-----------------------------|
| Make/Type | : | Wooden hull/passenger-cargo |
| GRT | : | 39.42 |
| DWT | : | NA |
| NRT | : | 36.15 |
| Pass. Cap. | : | 120 |
| Speed | : | NA |
| Route | : | Guinsiliban-Balingoan |
| Route Length | : | 6.8 nautical miles |
| Travel Time | : | 35-40 minutes |
| Trip Frequency | : | 2 trips daily |
| First Trip | : | 0700 hrs (from Guinsiliban) |
| Last Trip | : | 1100 hrs (from Guinsiliban) |
- b) M/V Yuhum (Phiiston Shipping Lines)
- | | | |
|---------------------------------|---|---|
| Make/Type | : | Steel hull/passenger-cargo |
| GRT | : | 195.64 |
| DWT | : | NA |
| NRT | : | 86.20 |
| Pass. Cap. | : | 146 |
| Speed | : | 10-12 knots |
| Route | : | Cagayan-Guinsiliban-Balingoan |
| Route Length | : | 43.8 nautical miles
(Cagayan-Guinsiliban: 37.00 n.m. and
Guinsiliban-Balingoan: 6.8 n.m.) |
| Trip Frequency | : | Once a Day |
| Departure Time from Guinsiliban | : | Around 1300 hrs |
17. The outgoing products from the port of Guinsiliban are usually coco lumber, bananas, copra, charcoal, empty bottles, and rolling cargoes. The incoming products are usually groceries, construction materials, rice, cement, bottled cargoes, and rolling cargoes. The freight rates for empty bottle shipment from Guinsiliban to Cagayan de Oro were as follows:
- ▶ ₱ 2/case, for a 24-bottle case
 - ▶ ₱ 8/sack, at 50 kilograms/sack
 - ▶ ₱ 6/sack, if <50 kilograms/sack
18. The port of Guinsiliban is concrete paved with lighting facilities. It has also a RORO ramp. The port had no cargo-handling equipment or facilities at the time of the LSRS survey. The arrastre services were being done manually. The arrastre was being operated by the Guinsiliban

Arrastre/Stevedoring Service. It had its own office at the pier that was also being utilized for warehousing purposes. The warehouse is owned by the municipal government of Guinsiliban. At the time of the survey, a passenger terminal was being constructed at the port. This was a project of the local government and not of the PPA. The water depth at the berth for RORO vessels (RORO ramp side) was around two fathoms. The water depths at berths for other conventional vessel range from 2 to 4 fathoms during low tide.

19. The vessels calling at the port of Balbagon are as follows:

- a) M/V Filipinas Siargao (Cokaliang Shipping Lines)
 - Make/Type : Steel hull/passenger-cargo
 - GRT : 326.38
 - DWT : 350.00
 - NRT : 181.46
 - Pass. Cap. : 292
 - Speed : NA
 - Route : Maasin-Cebu-Balbagon
 - Trip Frequency : Once a week

- b) M/L Lutz (LL Shipping Lines)
 - Make/Type : Steel hull/passenger-cargo
 - GRT : 47.30
 - DWT : NA
 - NRT : 33.17
 - Speed : NA
 - Route : Balbagon-Cebu
 - Trip Frequency : Once a week

- c) M/V Ruperto Sr. (RP Tamula Shipping Lines)
 - Make/Type : Steel hull/passenger-cargo
 - GRT : 229.34
 - DWT : 200.00
 - NRT : 167.95
 - Speed : 7 knots
 - Route : Balbagon-Benoni-Cagayan de Oro,
 - Travel Time : Around 6 hours
 - Tip Frequency : Once a week

20. The port of Balbagon is concrete paved. It has lighting facilities but these were seldom being utilized. The port had no handling facilities, i.e., the arrastre services were being done manually at the time of the survey. The arrastre services were being provided by the Romualdo Arrastre/Stevedoring Services. The port water depth at berth is more or less five fathoms.

21. The outbound products from the port of Balbagon are coco shells, copras, empty bottles, fish, dried starfish (for feeds/fertilizers), bananas and coco lumber. Sometimes there

are a few hog shipments (infrequent) but no poultry products. The inbound products are construction materials, bottled cargoes, rice and groceries.

22. There is no PPA office at either Balbagon Port or Guinsiliban Port, but only at Benoni Port. The system being practiced by PPA was as follows:

- A PPA officer was commuting daily to the ports of Balbagon and Guinsiliban for clearance, port charges and fees of vessels departing from/arriving at these ports.
- In case the PPA officer had not yet arrived at the ports of Balbagon and Guinsiliban, the departing vessels from these ports then had no choice but to pass by Benoni Port for PPA clearance, fees and charges, before proceeding to their destinations.
- The PPA officer also was conducting house to house visits to various shippers utilizing the ports of Balbagon and Guinsiliban for collection of charges and fees. The same approach was being used in the case of the shippers using the port of Benoni as the entry/exit point of their shipments.

23. The three ports on Camiguin Island (i.e., Guinsiliban, Balbagon and Benoni) were being operated/managed by PPA according to the interviewees. However, only the port of Benoni had been awarded to PPA by the government in 1991. The ports of Guinsiliban and Balbagon were not yet awarded to PPA. It was disclosed that the passenger terminal at the port of Benoni had been provided/constructed by the local government and not by PPA. The PPA office (approximately 2.5 meters x 2.5 meters) was also being provided free of charge (according to one PPA official) by the local government. The PPA personnel at the port of Benoni also commented that in the absence of sleeping quarters and personal hygiene facilities, they had to sleep/attend to their personal necessities on board any vessel or motor launch staying overnight at the port of Benoni.

24. The Mayor of Mahinog indicated their willingness to operate/managed the port of Benoni. They believed that such responsibility could be very well handed by the municipal government, i.e., more so if there would be financial and technical support at the initial stage. The same official mentioned that the priority of their municipal government was to develop cutflower production.

25. The Mayor of Guinsiliban mentioned that PPA had spent nothing in the construction/development of the port of Guinsiliban. There was an expression of interest in taking over the

operation/management of this port from the PPA. The same official disclosed that the port was constructed by the local government through the "Countryside Development Fund (CDF)" of their Congressman. The concrete paving of the port was completed in 1970's (first lane) and 1990's (second lane). The pier was extended toward the sea in 1991 and the RORO ramp was constructed in 1992. At the time of the interview, the port's passenger terminal was being constructed at the entrance of the pier, i.e., not financed by PPA. The port has also a warehouse owned by the municipal government.

The Mayor complained and was critical of PPA for collecting dues/fees from the arrastre operating at the port of Guinsiliban. He revealed that the municipal government (Office of the Mayor) had been asking for regulatory fee from the shipping lines and arrastre that were operating at the port of Guinsiliban. However, the concerned parties would not give in to their request since charges were already been paid to the PPA stationed at the port of Benoni. The Mayor indicated that their staff must still undergo training to effectively/efficiently carry out the port management and operation functions.

26. The officials of the municipal government of Catarman mentioned that Catarman had one available, but abandoned/unutilized, fishing port that was constructed in 1982. There were no facilities at that port. Its pier was not utilized for its intended purpose, since the fishermen had the habit of bringing their fish catch directly to Balingoan, using their own pumpboats. The municipal government was planning to put up RORO landing facilities at the said port, since the shipping line operators were saying that it was an ideal site because it is the nearest port from Cagayan de Oro and Cebu. Both the municipal government and the operators agreed that it would be an ideal port leg of Cagayan de Oro-Catarman and Cebu-Catarman ferry routes. They were also targeting the influx of tourists coming from Panglao, Bohol. According to them, there are many tourists from Panglao or from other tourist areas who usually passed by Cagayan de Oro to reach Camiguin island, i.e., Catarman in particular.

The same officials commented that coconut palm are now in their "senile stage". Coco lumber was becoming so popular that the coconut farmers preferred cutting down their coconut trees. The farmers were reasoning that the price of copra was becoming very low (₱ 8/kilogram) so that they found it no longer profitable to concentrate on coconut farming. The officials were concerned as regards income of farmers, as well as the environmental aspect/ecological balance of the island, if such practices would go uncorrected. They believed that the introduction and strengthening of a replanting program of coconut farms would be timely in addressing this problem.

They also mentioned their problems regarding roads leading to tourist spots. They commented that there was a need to construct more roads or upgrade existing roads providing access to tourist spots. They added that the existing roads for this purpose and for other purposes should be concreted.

27. The officials of the municipality of Mambajao mentioned that their current development thrust was a fruit tree planting program. They explained that they had problems regarding lanzones production. Production of lanzones is dependent on climate. The level of lanzones production was noticeably very low at the time of the interview because of more rainy days than during the summer. Mango farming was being encouraged by the local government as mangoes could be induced to bear fruits even out of season, unlike lanzones. They also intended to concentrate on planting exotic fruit trees, like durian, marang and rambutan because the soil of Camiguin is conducive to these types of plants.
28. An official of Sagay Municipality indicated that a coconut farm replanting program is necessary in the wake of the current practices of the coconut farmers to cut down their coconut trees to be used or to be traded as coco lumber. The official also mentioned that their other priority was the construction of a fish landing port near their public market at the poblacion (town center) of Sagay. It would be to the advantage of their fishermen who would then be regularly bringing in their fish catch to the local traders or directly selling the same at the market place. The problem in the municipality of Sagay was the transportation services, i.e., dynamic and static. Usually their mode of transport was walking or animal-drawn vehicle.
29. The Provincial Administrator of Camiguin explained that the development/upgrading of road links to tourist spots is very essential to their province. Their development focus was also the upgrading/concrete paving of the coastal road around the whole island of Camiguin. This circumferential road has a total length of 64.09 kilometers. The upgrading of the coastal road was still very far from completion. Their other problem concerned farm-to-market roads. They were constrained in regard to implementing needed improvements because of their limited budget.

The same official also mentioned the existence of an airport on Camiguin island. PAL started operating Cebu-Camiguin flights in December 1991. The flight frequency was twice a week using a 50-seat Fokker plane. Each flight was usually occupied by foreigners. However, PAL operated for only one year. It temporarily suspended its operation because of necessary airport rehabilitation, which was ongoing in 1994.

The Camiguin provincial officials indicated that the local folk were indulging themselves in cutting down their coconut trees for commercial purposes. There was a suggestion that maybe it would be better if a new variety of coconut palm would be introduced, i.e., a coconut plant variety that would easily bear fruit in a very short period of time. The existing variety(ies) of coconut trees on the island was (were) already very old.

ANNEX C

FINANCIAL ANALYSIS & PROJECTIONS

**OF A FAST FERRY SERVICE OPERATION BETWEEN THE PORTS OF
CEBU AND BALBAGON, CAMIGUIN**

VESSEL PARTICULARS			
	PROVIDED	DERIVED	COMBINED PARTICULARS
VESSEL NAME	Liang Chiang Express		Liang Chiang Express
TYPE	Aluminium Catamaran Fast Ferry		Aluminium Catamaran Fast Ferry
BUILT	1987 - Australia		1987 - Australia
AGE	6		6
GRT	NA	539	538.83
NRT	NA	NA	NA
LENGTH	35.00		35.00
BREADTH	13.00		13.00
DEPTH	NA		0.00
DRAFT	1.70		1.70
CLASS	CR		CR
DWT	NA	44	44
PAXCAP	350		350
VEHCAP (12Trk)	NA	NA	NA
VEHCAP (PCU)	NA	NA	NA
CREW	NA	12	12
DECKS	3		3
MAIN ENG	MWM TBD604B		MWM TBD604B
NO. OF MAIN ENG	2		2
HORSEPOWER, MAIN ENG.	1680		1680
HORSEPOWER, AUX ENG.	NA	150	150
SPEED	26.0		26
FUEL CONS. AT SEA (L/Hr)	300	403	300
AUX. ENG. CONS. PER DAY	NA	1000	1000
CIF PRICE (in USD '000)	2000000		2000000
(in million Yen)			
(in million Pesos)	59000000		59000000
BROKER	TNC		TNC

LINER SHIPPING ROUTE RATIONALIZATION PROJECT

OPERATING ASSUMPTIONS -

For Vesse Liang Chang Express

on Route: Cebu-Tagbilaran-Camiguin v.v.

w/ Ft. Length : 245

MONTH >>	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
Calendar Days	31	28	31	30	31	30	31	31	30	31	30	31	365
Commission Days	30	28	31	30	31	29	29	28	28	14	26	28	330
Prov. for D/Docking	0	0	0	0	0	0	0	0	0	13	0	0	18
Prov. for Afloat Rep	0	0	0	0	0	0	0	0	0	2	0	0	2
Prov. for Bad Weather	1	0	0	0	0	1	2	3	4	2	4	3	20
No. of RdTrips/Day	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Total No. of RdTrips	30	28	31	30	31	29	29	28	26	14	26	28	330
Fuel Requirements :													
a) Per Rd Trip (Main Engine)													
- Bunker	0	0	0	0	0	0	0	0	0	0	0	0	0
- SFO	0	0	0	0	0	0	0	0	0	0	0	0	0
- ADO	2838	2838	2838	2838	2838	2838	2838	2838	2838	2838	2838	2838	2838
b) Per Day (Aux Engine)													
- ADO	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
c) Total Consumption													
- Bunker	0	0	0	0	0	0	0	0	0	0	0	0	0
- SFO	0	0	0	0	0	0	0	0	0	0	0	0	0
- ADO	118,154	107,477	118,892	115,154	118,982	112,315	113,315	110,477	108,800	57,738	103,800	110,477	1238692
d) Fuel Prices (P/li.):													
- Bunker	4.08	4.08	4.08	4.08	4.08	4.08	4.08	4.08	4.08	4.08	4.08	4.08	4.08
- SFO	6.57	6.57	6.57	6.57	6.57	6.57	6.57	6.57	6.57	6.57	6.57	6.57	6.57
- ADO	6.97	6.97	6.97	6.97	6.97	6.97	6.97	6.97	6.97	6.97	6.97	6.97	6.97
Lube Requirements (li.):													
a) Total Consumption													
- System oil	1,046	967	1,071	1,036	1,071	1,011	1,020	934	934	620	934	934	11,598
- Hydraulic oil	58	54	59	58	59	56	57	55	52	29	52	55	644
b) Lube Prices (P/li.):													
- System oil	37.43	37.43	37.43	37.43	37.43	37.43	37.43	37.43	37.43	37.43	37.43	37.43	37.43
- Hydraulic oil	32.59	32.59	32.59	32.59	32.59	32.59	32.59	32.59	32.59	32.59	32.59	32.59	32.59
Water Consum. (MT):													
	91.504	82.886	93.55	94.726	99.512	95.124	82.966	94.496	90.864	54.396	91.344	98.58	1077.748
No. of Personnel: (Sch. A)													
Deck Dept.	6	6	6	6	6	6	6	6	6	6	6	6	6
Engine Dept.	4	4	4	4	4	4	4	4	4	4	4	4	4
Steward Dept.	2	2	2	2	2	2	2	2	2	2	2	2	2
Port Personnel	6	6	6	6	6	6	6	6	6	6	6	6	6
Gen. Admin.	3	3	3	3	3	3	3	3	3	3	3	3	3
Total	21	21	21	21	21	21	21	21	21	21	21	21	21

2

69

LINER SHIPPING ROUTE RATIONALIZATION PROJECT

TRAFFIC & LOAD FACTOR ASSUMPTIONS

MV Liang Chiang Express

Based on a market share of 100% of passengers and 100% of freight

MONTH >>	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
CEBU-TAGBILARAN	58 n. miles												
Passengers:													
Super De Luxe	0	0	0	0	0	0	0	0	0	0	0	0	0
First Class (in pax)	2,352	2,143	3,375	5,363	6,356	5,562	3,083	3,848	3,432	1,998	3,672	4,860	48,074
Freight/Extra Baggage (in MT)	43	46	68	69	107	96	52	69	64	35	54	75	798
CEBU - CAMIGUIN	123 n. miles												
Passengers:													
Super De Luxe	0	0	0	0	0	0	0	0	0	0	0	0	0
First Class (in pax)	3,629	3,215	5,063	8,044	9,584	8,343	4,825	5,772	5,143	2,998	5,509	7,336	69,115
Freight/Extra Baggage (in MT)	64	69	102	104	160	144	79	69	88	62	81	112	1,152
TAGBILARAN - CAMIGUIN	65 n. miles												
Passengers:													
Super De Luxe	0	0	0	0	0	0	0	0	0	0	0	0	0
First Class (in pax)	2,352	2,143	3,375	5,363	6,356	5,562	3,083	3,848	3,432	1,998	3,672	4,860	48,074
Freight/Extra Baggage (in MT)	43	48	68	69	107	96	52	69	64	35	54	75	798
UNT-MILES SERVED:													
Passenger-Miles	723,240	659,084	1,037,874	1,849,061	1,954,470	1,710,315	948,084	1,183,260	1,056,340	614,508	1,129,263	1,503,738	#####
Ton-Miles	13,161	14,145	20,910	21,279	32,841	29,520	16,113	18,204	18,660	10,701	16,605	23,001	238,160
Passenger Load Factor	28%	27%	39%	64%	73%	68%	38%	49%	47%	51%	50%	62%	50%
Cargo Load Factor	5%	6%	8%	6%	12%	12%	5%	7%	9%	9%	7%	9%	8%
Passenger Revenue:													
CEBU-TAGBILARAN	352,800	821,450	506,250	804,450	853,400	834,300	462,450	577,200	514,800	299,700	550,800	733,500	6,911,100
CEBU - CAMIGUIN	1,128,960	1,028,800	1,620,160	2,574,090	3,050,880	2,669,760	1,480,000	1,847,040	1,647,360	958,280	1,762,880	2,347,520	22,118,800
TAGBILARAN - CAMIGUIN	399,840	364,310	573,750	911,710	1,080,520	945,640	524,110	654,150	583,440	339,660	624,240	831,300	7,832,580
Total Passenger Revenue	1,881,600	1,714,560	2,700,160	4,290,240	5,084,800	4,449,600	2,466,560	8,078,400	7,745,600	1,598,720	2,937,920	3,912,320	36,860,480
Freight Revenue:													
CEBU-TAGBILARAN	26,660	28,520	42,160	42,730	66,340	59,520	32,240	38,530	39,680	21,700	33,480	46,500	476,160
CEBU - CAMIGUIN	53,120	57,270	84,680	86,320	132,810	119,520	65,570	73,870	79,680	48,160	67,230	92,930	956,160
TAGBILARAN - CAMIGUIN	27,960	29,900	44,200	44,850	69,550	62,400	33,800	38,950	41,600	22,750	35,100	48,750	499,200
Total Freight Revenue	107,740	115,690	171,020	173,950	268,690	241,440	131,610	148,800	160,960	87,610	135,810	188,210	1,931,520

3

6

LINER SHIPPING ROUTE RATIONALIZATION PROJECT
 PROJECTED PROFIT AND LOSS STATEMENT - YEAR ONE

MV Liang Chiang Express

MONTH >>	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
VESSEL REVENUE:													
Passage	1,981,600	1,714,560	2,700,160	4,290,240	5,084,000	4,449,600	2,468,560	8,078,400	2,745,600	1,598,720	2,837,820	8,912,320	36,860,480
Freight	107,730	115,690	171,020	173,950	268,890	241,440	181,610	148,800	160,960	87,610	135,810	188,210	1,931,520
Less: ComCar Tax	59,860	54,806	86,135	133,826	160,605	140,731	77,945	98,818	87,197	50,590	92,212	123,016	1,163,760
NET REVENUE	1,929,650	1,775,344	2,785,045	4,330,234	5,192,885	4,550,309	2,520,225	8,130,334	2,819,363	1,635,740	2,881,518	8,977,514	37,628,240
VOYAGE EXPENSES:													
Fuel & Lubes	850,849	787,103	871,438	843,825	871,438	822,538	829,881	809,074	760,178	422,848	760,176	809,074	9,437,683
PPA Charges	9,127	8,509	9,421	9,117	9,421	8,823	8,833	8,540	7,842	4,427	7,842	8,540	100,642
Clearing Expenses	11,250	10,500	11,625	11,250	11,625	10,875	10,875	10,500	9,750	5,250	9,750	10,500	123,750
Mooring & Unmooring	9,000	8,400	9,300	9,000	9,300	8,700	8,700	8,400	7,800	4,200	7,800	8,400	99,000
TOTAL VOY EXPENSES	880,026	814,513	901,782	872,892	901,782	850,936	853,270	836,514	785,868	438,722	785,668	836,514	9,781,085
VESSEL RUNNING EXPENSES:													
Salaries & Wages	77,500	77,500	77,500	77,500	77,500	77,500	81,250	81,250	81,250	81,250	81,250	81,250	952,500
Empl. Benefits	46,541	10,541	10,541	10,541	10,541	48,281	10,853	10,853	10,853	10,853	10,853	92,103	284,384
Pax Meals & Subsistence	54,480	49,580	74,940	114,460	134,560	118,440	69,100	84,400	75,840	47,400	80,640	105,240	1,009,080
Fresh Water	2,268	2,067	2,339	2,538	2,438	2,378	2,324	2,862	2,272	1,360	2,284	2,415	26,844
Stores & Spare Parts	117,426	50,022	53,837	52,566	53,837	51,294	84,294	50,022	47,479	105,719	47,479	50,022	763,998
Repairs & Maint.	73,750	78,750	73,750	73,750	73,750	78,750	73,750	73,750	73,750	78,750	73,750	73,750	885,000
Accrued Drydocking	34,313	34,313	34,313	34,313	34,313	34,313	34,313	34,313	34,313	34,313	34,313	34,313	411,751
Taxes & Licenses	49,767	36,605	57,424	89,234	107,070	83,821	51,963	164,544	58,131	88,727	61,475	82,011	885,840
Hull & Machy Insurance	172,083	172,083	172,083	172,083	172,083	172,083	172,083	172,083	172,083	172,083	172,083	172,083	2,066,000
Other Insurance & P&I	8,912	8,912	8,912	8,912	8,912	8,912	8,912	8,912	8,912	8,912	8,912	8,912	106,844
Vsl Depreciation	352,600	352,500	352,500	352,500	352,500	352,500	352,500	352,500	352,500	352,500	352,500	352,500	4,230,000
Amortiz. of Capex-Vsl	120,333	120,333	120,333	120,333	120,333	120,333	120,333	120,333	120,333	120,333	120,333	120,333	1,444,000
Misc Vsl Expenses	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	120,000
TOTAL RUNNING EXP	1,118,912	898,206	1,048,472	1,118,810	1,157,867	1,164,615	1,071,675	1,165,323	1,047,716	1,052,200	1,056,872	1,184,932	13,185,420
VSL CONTRIB TO OVRHD	-70,267	-37,377	834,791	2,338,933	3,133,217	2,634,768	590,279	1,128,547	985,979	146,817	1,139,979	1,956,039	14,681,734

4

12

LINER SHIPPING ROUTE RATIONALIZATION PROJECT
 PROFIT AND LOSS STATEMENT - YEAR ONE (cont'd.)

MV Liang Chiang Express

MONTH >>	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
VSL CONTRIB TO OVRHD	-70,287	-37,377	834,791	2,338,963	3,133,217	2,534,758	590,279	1,128,547	985,979	148,817	1,139,979	1,956,069	14,681,734
TERMINAL EXPENSES:													
Salaries & Wages	42,000	42,000	42,000	42,000	42,000	42,000	42,000	42,000	42,000	42,000	42,000	42,000	504,000
Empl.' Benefits	23,541	5,541	5,541	5,541	5,541	26,641	5,541	5,541	5,541	5,541	5,541	47,541	147,494
Subsistence	3,720	3,360	3,720	3,600	3,720	3,600	3,720	3,720	3,600	3,720	3,600	3,720	43,600
Vsl Forms & Tickets	840	768	1,208	1,305	2,267	1,665	1,100	1,870	1,227	718	1,307	1,742	16,433
Office Rental	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	48,000
Light & Water	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	24,000
Gasoline & Oil	2,056	1,855	2,056	1,993	2,056	1,993	2,056	2,056	1,993	2,056	1,993	2,056	24,229
Postage & tel.	1,950	1,950	1,950	1,950	1,950	1,950	1,950	1,950	1,950	2,730	1,950	1,950	24,180
Transport & Travel	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	72,000
Repairs & Maint.	750	750	750	750	750	750	750	750	750	750	750	750	8,000
Represent/Donations	4,000	4,000	2,000	2,000	2,000	6,000	2,000	2,000	2,000	2,000	2,000	10,000	40,000
Advert/Notices	8,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	72,000
Depreciation	167	167	167	167	167	167	167	167	167	167	167	167	2,000
Amort. of Capex-Termi	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	21,600
Miscellaneous	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	12,000
TOTAL TERMINAL EXP	99,825	81,201	80,199	80,705	81,252	105,785	80,084	80,355	80,027	80,477	80,107	130,726	1,060,736
TOTAL CONTRIBUTION TO OVERHEAD	-170,112	-118,578	754,598	2,258,253	3,051,965	2,428,972	510,195	1,048,193	905,952	66,340	1,059,872	1,825,843	13,620,998

5

13

LINER SHIPPING ROUTE RATIONALIZATION PROJECT

MONTH >>	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
GEN ADMINISTRATIVE EXPENSES:													
Salaries & Allow.	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	168,000
Empl.* Benefits	13,521	4,521	4,521	4,521	4,521	25,521	4,521	4,521	4,521	4,521	4,521	46,521	126,247
Ship Mgt Fee	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	600,000
Legal & Audit Fee	4,000	4,000	4,000	4,000	24,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	68,000
Board Honora & Mtg	14,000	14,000	14,000	14,000	14,000	28,000	14,000	14,000	14,000	14,000	14,000	28,000	196,000
Supplies & Xerox	4,050	3,600	4,050	3,800	4,050	3,900	4,050	4,050	3,900	4,050	3,900	4,050	47,550
Postage & tel.	3,925	3,925	3,925	3,925	3,925	3,925	3,925	3,925	3,925	5,225	3,925	3,925	48,400
Transport & Travel	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	36,000
Repairs & Maint.	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	24,000
Represent./Donations	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	18,000
Advert./Notices	5,000	5,000	5,000	2,000	2,000	2,000	2,000	2,000	5,000	5,000	5,000	5,000	48,000
Taxes & Licenses	800	800	800	800	800	800	800	800	800	800	800	800	9,600
Insurance	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	25,000
Depreciation	333	333	333	333	333	333	333	333	333	333	333	333	4,000
Miscellaneous	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	60,000
TOTAL ADMIN. EXP	123,212	113,782	120,212	111,062	131,212	152,062	111,212	114,212	120,062	115,512	114,062	170,212	1,502,797

9

10

LINER SHIPPING ROUTE RATIONALIZATION PROJECT
 CONSOLIDATED INCOME STATEMENT

MONTH >>	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
VESSEL REVENUE, NET	1,823,650	1,775,343	2,785,045	4,330,264	5,192,885	4,550,309	2,520,225	3,130,384	2,819,389	1,636,740	2,981,518	3,977,514	37,628,240
VOYAGE EXPENSES	880,028	814,513	901,782	372,632	901,782	850,938	858,270	836,514	785,688	436,722	785,668	826,514	9,781,095
RUNNING EXPENSES	1,119,812	898,206	1,048,472	1,118,610	1,157,887	1,164,615	1,071,878	1,165,323	1,047,716	1,052,200	1,055,872	1,184,932	13,186,420
TERMINAL EXPENSES	99,825	81,201	80,193	80,705	81,252	105,785	80,084	80,355	80,027	80,477	80,107	130,726	1,060,788
CONTRIBUTION TO OVERHEAD	-170,112	-118,578	754,599	2,258,258	3,051,965	2,428,972	510,185	1,043,198	805,952	66,340	1,062,872	1,825,343	13,820,998
ADMINISTRATIVE & OVERHEAD	123,212	113,782	120,212	111,062	131,212	152,062	111,212	114,212	120,062	115,512	114,062	176,212	1,502,787
OPERATING INCOME	-293,324	-232,340	634,393	2,147,195	2,920,753	2,278,910	388,983	833,980	785,890	-48,172	945,809	1,849,131	12,118,201
LESS: Bank Interest	651,000	582,103	636,874	609,799	622,957	536,123	608,814	601,427	574,984	586,422	560,218	570,956	7,201,454
Other Interest	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	1,440,000
OTHER INCOME, NET	3,000	5,800	6,200	6,000	6,200	5,800	5,800	5,600	5,200	2,800	5,200	5,600	68,000
NET INC. BEFORE TAX	-1,058,324	-928,843	-116,287	1,423,397	2,183,995	1,566,587	-323,831	218,153	96,126	-752,794	270,792	963,776	3,542,747
PROVS. FOR INC. TAX	0	0	0	0	526,878	548,308	-113,341	76,854	33,644	-263,478	84,777	337,321	1,239,961
NET INCOME (LOSS)	-1,058,324	-928,843	-116,287	1,423,397	1,857,617	1,018,282	-210,490	141,800	62,482	-489,316	176,015	626,454	2,802,786

7

65

LINEAR SHIPPING ROUTE RATIONALIZATION PROJECT
LOAN 1 AMORTIZATION SCHEDULE

Assume: Starting Balance -		42000000
Interest Rate -		18.00%
Loan Repayment -		5 yrs.

YEAR 1 >>>	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YEAR 1
Amortization No.	1	2	3	4	5	6	7	8	9	10	11	12	
No. of Days	31	28	31	30	31	30	31	31	30	31	30	31	
Beginning Bal. LTD	42000000	41578756	41088614	40653244	40190798	39741511	39285360	38801759	38330942	37833662	37347840	36835613	
Projected Payments	1072244	1072244	1072244	1072244	1072244	1072244	1072244	1072244	1072244	1072244	1072244	1072244	12866980
Interest Rate Prevlg	18%	18%	18%	18%	18%	18%	18%	18%	18%	18%	18%	18%	
Interest on LTD	651000	582103	496874	409799	322957	236123	150814	601427	574984	486422	390218	295955	
Interest on Accr.Int	0	0	0	0	0	0	0	0	0	0	0	0	
Paymt of Accr. Int.	0	0	0	0	0	0	0	0	0	0	0	0	
Paymt of Int. on LTD	651000	582103	496874	409799	322957	236123	150814	601427	574984	486422	390218	295955	0
Payment of Principal	421244	490142	435371	462446	449287	476121	453831	470817	497280	485822	512027	570955	7201454
Accrued Int. Payable	0	0	0	0	0	0	0	0	0	0	0	0	
Ending Bal. LTD	41578756	41088614	40653244	40190798	39741511	39285360	38801759	38330942	37833662	37347840	36835613	36334524	

YEAR 2 >>>	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YEAR 2
Amortization No.	13	14	15	16	17	18	19	20	21	22	23	24	
No. of Days	31	28	31	30	31	30	31	31	30	31	30	31	
Beginning Bal. LTD	36334524	35825465	35254778	34728983	34177673	33635183	33067467	32507768	31939394	31346241	30758864	30149017	
Projected Payment	1072244	1072244	1072244	1072244	1072244	1072244	1072244	1072244	1072244	1072244	1072244	1072244	12866980
Interest Rate Prevlg	18%	18%	18%	18%	18%	18%	18%	18%	18%	18%	18%	18%	
Interest on LTD	563185	501557	446449	390935	329754	269528	212546	150870	97931	48567	461898	467310	13%
Interest on Accr.Int	0	0	0	0	0	0	0	0	0	0	0	0	
Paymt of Accr. Int.	0	0	0	0	0	0	0	0	0	0	0	0	
Paymt of Int. on LTD	563185	501557	446449	390935	329754	269528	212546	150870	97931	48567	461898	467310	6076489
Payment of Principal	509059	570688	525795	551809	542490	567716	569658	568374	598153	586377	610646	604934	6780441
Accrued Int. Payable	0	0	0	0	0	0	0	0	0	0	0	0	
Ending Bal. LTD	35825465	35254778	34728983	34177673	33635183	33067467	32507768	31939394	31346241	30758864	30149017	29544083	

YEAR 3 >>>	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YEAR 3
Amortization No.	25	26	27	28	29	30	31	32	33	34	35	36	
No. of Days	31	28	31	30	31	30	31	31	30	31	30	31	
Beginning Bal. LTD	29544033	28929772	28282545	27628370	26970552	26316351	25688852	24964010	24278708	23570645	22863745	22134457	
Projected Payment	1072244	1072244	1072244	1072244	1072244	1072244	1072244	1072244	1072244	1072244	1072244	1072244	12866980
Interest Rate Prevlg	18%	18%	18%	18%	18%	18%	18%	18%	18%	18%	18%	18%	
Interest on LTD	457933	405017	338069	274428	218044	164745	11402	386942	364181	335245	342956	343084	
Interest on Accr.Int	0	0	0	0	0	0	0	0	0	0	0	0	
Paymt of Accr. Int.	0	0	0	0	0	0	0	0	0	0	0	0	
Paymt of Int. on LTD	457933	405017	338069	274428	218044	164745	11402	386942	364181	335245	342956	343084	4728142
Payment of Principal	614311	667227	634175	657819	654201	677499	674842	685302	708064	706899	729283	729160	8138788
Accrued Int. Payable	0	0	0	0	0	0	0	0	0	0	0	0	
Ending Bal. LTD	28929772	28282545	27628370	26970552	26316351	25688852	24964010	24278708	23570645	22863745	22134457	21405297	

CO

106

LINER SHIPPING ROUTE RATIONALIZATION PROJECT
 LOAN 1 AMORTIZATION SCHEDULE - Page 2 of 2

YEAR 4 >>>	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YEAR 4
Amortization No.	87	88	89	40	41	42	43	44	45	46	47	48	
No. of Days	31	28	31	30	31	30	31	31	30	31	30	31	
Beginning Bal. LTD	21405297	20654835	18881893	18117824	18322347	17544255	16785174	15922325	15096877	14251086	13399734	12528486	
Projected Payment	1072244	1072244	1072244	1072244	1072244	1072244	1072244	1072244	1072244	1072244	1072244	1072244	12866800
Interest Rate Prevlg	18%	18%	18%	18%	18%	18%	18%	18%	18%	18%	18%	18%	18%
Interest on LTD	331732	289308	308189	286767	284151	263164	259395	246796	226453	220892	200936	194192	
Interest on Accr.Int	0	0	0	0	0	0	0	0	0	0	0	0	
Paymt of Accr. Int.	0	0	0	0	0	0	0	0	0	0	0	0	0
Paymt of Int. on LTD	331732	289308	308189	286767	284151	263164	259395	246796	226453	220892	200936	194192	3112066
Payment of Principal	740512	782936	764075	785477	788093	809000	812849	825448	845791	851352	871248	878053	8754884
Accrued Int. Payable	0	0	0	0	0	0	0	0	0	0	0	0	
Ending Bal. LTD	20664835	18881893	18117824	18322347	17544255	16735174	15922325	15096877	14251086	13399734	12528486	11650433	

YEAR 5 >>>	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YEAR 5
Amortization No.	49	50	51	52	53	54	55	56	57	58	59	60	
No. of Days	31	28	31	30	31	30	31	31	30	31	30	31	
Beginning Bal. LTD	11650433	10758771	9837149	8917381	7978897	7030326	6063537	5085278	4091855	3080969	2056500	1015103	
Projected Payment	1072244	1072244	1072244	1072244	1072244	1072244	1072244	1072244	1072244	1072244	1072244	1072244	12836368
Interest Rate Prevlg	18%	18%	18%	18%	18%	18%	18%	18%	18%	18%	18%	18%	18%
Interest on LTD	180532	150623	152476	133761	123673	105455	83985	78822	61378	47755	30848	15734	
Interest on Accr.Int	0	0	0	0	0	0	0	0	0	0	0	0	
Paymt of Accr. Int.	0	0	0	0	0	0	0	0	0	0	0	0	0
Paymt of Int. on LTD	180532	150623	152476	133761	123673	105455	83985	78822	61378	47755	30848	15734	1175090
Payment of Principal	891652	921621	919763	938483	848571	666789	978259	933422	1010886	1024489	1041397	1025948	11661278
Accrued Int. Payable	0	0	0	0	0	0	0	0	0	0	0	0	
Ending Bal. LTD	10758771	9837149	8917381	7978897	7030326	6063537	5085278	4091855	3080969	2056500	1015103	-10845	

67

LINER SHIPPING ROUTE RATIONALIZATION PROJECT
MV Liang Chiang Express
CAPITAL EXPENDITURE PROGRAM

MONTH >>	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Additional spares for vessel	500000												
Spare main engine	6720000												6720000
Terminal Capex													
VHF Base Station	48000												
VHF Handheld Radio	30000												
SSB Transceiver 100W	30000												
TOTAL CAPEX FOR VSL	7220000	0	0	0	0	0	0	0	0	0	0	0	7220000
TOTAL CAPEX FOR TERMINALS	108000	0	0	0	0	0	0	0	0	0	0	0	108000
TOTAL CAPEX	7328000	0	0	0	0	0	0	0	0	0	0	0	7328000
CUMM. TOTAL FOR VSL	7220000	7220000	7220000	7220000	7220000	7220000	7220000	7220000	7220000	7220000	7220000	7220000	
CUMM. TOTAL FOR TERMINAL	108000	108000	108000	108000	108000	108000	108000	108000	108000	108000	108000	108000	

10

57

LINEAR SHIPPING ROUTE RATIONALIZATION PROJECT
PROJECTED CASH FLOW - YEAR ONE

MV Liang Chiang Express

MONTH >>	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL
CASH INFLOW :													
Incr. in Paid-In Capital	0												0
Loan Proceeds	42000000												42000000
Incr. in STLoans- CI	6000000	0	0	0	0	0	0	0	0	0	0	0	6000000
Insurance Proceeds	0	0	0	0	0	0	0	0	0	0	0	0	0
Net Income After Tax	-1058324	-928843	-116287	1423397	1657617	1018282	-210490	141800	62492	-489316	176015	626454	2302785
Incr. in Accum. Deprec'n	354800	354800	354800	354800	354800	354800	354800	354800	354800	354800	354800	354800	4257600
Incr. in Amort. of Capex	120333	120333	120333	120333	120333	120333	120333	120333	120333	120333	120333	120333	1444000
Incr. in Accts Payable	853439	789822	874594	847180	875653	828473	882911	812394	768352	426289	763432	812765	9478306
Incr. in Interest Payable	771000	702103	756874	729799	742957	716123	728814	721427	694984	706422	680218	690955	8641454
Incr. in Drydocking Prov.	34313	34313	34313	34313	34313	34313	34313	34313	34313	34313	34313	34313	411751
Incr. in Accrued R&Maint	191926	124522	126337	127066	128337	125794	158784	124522	121979	180219	121979	124522	1657888
Incr. in Inc. Tax Payable	0	0	0	0	528378	548306	-113341	76354	38644	-263478	84777	337321	1238961
Incr. in Othr Taxes Paybl	110297	82313	144359	224010	268475	235352	180709	262160	146128	85117	154487	205827	2058200
Incr. in Prov. for Insur.	183079	183079	183079	183079	183079	183079	183079	183079	183079	183079	183079	183079	2198944
Incr. in SSS/Med Payable	5202	5202	5202	5202	5202	5202	5202	5202	5202	5202	5202	5202	62420
TOTAL CASH INFLOW >>	49566033	1477643	2485603	4049176	4897144	4168055	2224929	2836383	2520276	1342979	2888634	3495571	81762420
CASH OUTFLOW :													
Acquisition of Vsl, P & E	60030000	0	0	0	0	0	0	0	0	0	0	0	60030000
Payment of Loan Interest	771000	702103	756874	729799	742957	716123	728814	721427	694984	706422	680218	690955	8641454
Payment of LTD Principal	421244	490142	435371	462446	449287	478121	463931	470817	497280	485822	512027	501289	5665476
Liqdn of STLoans - CI	0	0	0	0	0	0	0	0	0	0	0	0	0
Payment of Trade Accts	0	853439	789822	874594	847180	875653	828473	832911	812394	768352	426289	763432	8665541
Payment for Drydocking	0	0	0	0	0	0	0	0	0	0	123525	288226	411751
Payments for R & Maint.	100000	20000	20000	20000	100000	20000	20000	20000	70000	150000	250000	250000	1040000
Payment of Com. Car. Tax	0	0	0	200723	0	0	485262	0	0	261868	0	0	897942
Payment of Income Tax	0	0	0	0	0	528378	0	0	511318	0	0	-135057	902640
Payment of Taxes & Lic.	10000	0	0	136215	0	0	282574	100000	0	177039	0	0	715828
Payment of Insur. Premium	848194	0	0	516250	0	0	516250	0	0	516250	0	0	2198944
Advances for Insur. Accts	0	0	0	0	0	0	0	0	0	0	0	0	0
Payment of SSS/Med Acct	0	0	0	15605	0	0	15805	0	0	15605	0	0	46315
Capex Disbursements	7328000	0	0	0	0	0	0	0	0	0	0	0	7328000
Cash Dividends	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL CASH OUTFLOW >>	69308438	2056693	2002066	2955632	2139424	2614276	3288408	2143155	2585957	3076448	1932058	2358845	96542381
NET CASH INFLOW	-19742405	-588040	483537	1093545	2757720	1553780	-1073485	691228	-65681	-1733470	696575	1136726	-14789971
BEGINNING CASH BALANCE	20000000	257595	-330445	153092	1248636	4004357	5558126	4484651	5176879	5110197	3376728	4073303	20000000
ENDING CASH BALANCE	257595	-330445	153092	1248636	4004357	5558198	4484851	5176879	5110197	3376728	4073303	5210029	5210029

LINER SHIPPING ROUTE RATIONALIZATION PROJECT
 PROJECTED BALANCE SHEET - YEAR 1

ASSETS	MONTH >>												
	0 Dec	1 Jan	2 Feb	3 Mar	4 Apr	5 May	6 Jun	7 Jul	8 Aug	9 Sep	10 Oct	11 Nov	12 Dec
Current Assets:													
Cash	2000000	257595	-330445	153092	1246636	4004357	5558136	4484651	5176878	5110197	3376728	4073303	5210029
Claims Receivable	0	0	0	0	0	0	0	0	0	0	0	0	0
Prepaid Expenses	0	430803	213412	-3980	294879	77488	-189303	158955	-58436	-275827	23032	-70834	0
	2000000	688398	-117034	149112	1541515	4081844	5418233	4643606	5117443	334370	3399760	4002469	5210029
Property & Eqpm:													
Vessel	0	6000000	6000000	6000000	6000000	6000000	6000000	6000000	6000000	6000000	6000000	6000000	6000000
Transportation Eqpm	0	0	0	0	0	0	0	0	0	0	0	0	0
Furniture & Fixtures	0	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Office Eqpm	0	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Other Property & Eqpm	0	118000	118000	118000	118000	118000	118000	118000	118000	118000	118000	118000	118000
	0	60138000	60138000	60138000	60138000	60138000	60138000	60138000	60138000	60138000	60138000	60138000	60138000
Less: Accumulated Depreciation													
Vessel	0	352500	705000	1057500	1410000	1762500	2115000	2467500	2820000	3172500	3525000	3877500	4230000
Transportation Eqpm	0	0	0	0	0	0	0	0	0	0	0	0	0
Furniture & Fixtures	0	167	333	500	667	833	1000	1167	1333	1500	1667	1833	2000
Office Eqpm	0	167	333	500	667	833	1000	1167	1333	1500	1667	1833	2000
Other Property & Eqpm	0	1967	3933	5900	7867	9833	11800	13767	15733	17700	19667	21633	23600
Total Depreciation	0	354800	709600	1064400	1419200	1774000	2128800	2483600	2838400	3193200	3548000	3902800	4257600
Net Book Value	0	59783200	59428400	59073600	58718800	58364000	58009200	57654400	57299600	56944800	56590000	56235200	55880400
Other Assets	0	7099667	6978333	6859000	6738667	6618333	6498000	6377667	6257333	6137000	6016667	5896333	5776000
TOTAL ASSETS	2000000	67571264	66290693	66081712	65898982	65064178	63925423	62678673	61431378	60184670	58937968	57691170	56444270

LIABILITIES

MONTH >>	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Current Liabilities:													
Accounts Payable	0	853479	785322	874594	847180	875563	826473	882911	812394	783952	426289	763432	812785
Accrued Expenses Payable	0	91926	196443	304785	411851	440188	545982	684776	788298	841277	871497	743476	617988
Accrued Taxes Payable	0	100287	192579	335838	224010	492484	727836	180709	292889	438997	85117	239603	445480
Income Tax Payable	0	0	0	0	0	526378	548306	434965	511318	33644	-229834	-135057	337321
Interest Payable	0	0	0	0	0	0	0	0	0	0	0	0	0
SSS/Medicare Payable	0	6202	10403	15605	5202	10403	15605	5202	10403	15605	5202	10403	15605
	0	1050833	1189252	1531923	1488242	2345107	2664202	2089562	2416283	2092875	1158270	1621858	2229120
Others Payable	0	6000000	6000000	6000000	6000000	6000000	6000000	6000000	6000000	6000000	6000000	6000000	6000000
Long Term Liabilities	0	41578753	41088614	40653244	40190790	39741511	39265380	38801759	38330342	37853662	37347840	36835813	36334524
Stockholder's Equity:													
Authorized Capital	25000000	25000000	25000000	25000000	25000000	25000000	25000000	25000000	25000000	25000000	25000000	25000000	25000000
Subscribed Capital	20000000	20000000	20000000	20000000	20000000	20000000	20000000	20000000	20000000	20000000	20000000	20000000	20000000
Paid-in Capital	20000000	20000000	20000000	20000000	20000000	20000000	20000000	20000000	20000000	20000000	20000000	20000000	20000000
Retained Earnings:													
Balance, Beginning	0	0	-1058324	-1987167	-2103454	-680058	977559	1995841	1785351	1927151	1989633	1500316	1878381
Add: Net Income (Loss)	0	-1058324	-928843	-116287	1423397	1657617	1018282	-210490	141800	62482	-489318	176015	628454
Less: Cash Dividends	0	0	0	0	0	0	0	0	0	0	0	0	0
Balance, Ending	0	-1058324	-1987167	-2103454	-680058	977559	1995841	1785351	1927151	1989633	1500316	1676331	2302785
Total Stockholder's Eqty	20000000	18941676	18012833	17895546	19819942	20977559	21985841	21785351	21927151	21896333	21503318	21676331	22302785
TOTAL LIAB. & STOCK EQTY	20000000	67571284	66290693	66081712	66898962	69064178	69925433	68675673	68574376	67916170	66006426	66134002	66866429

LINEAR SHIPPING ROUTE RATIONALIZATION PROJECT

OPERATING ASSUMPTIONS - For Vessel Liang Chiang Express

on Route: Cebu-Tagbilaran-Camiguin v.v.

with Route Length of: 243 miles/rd voyage

YEAR >>	1	2	3	4	5	6	7	8	9	10
Calendar Days	365	365	366	365	365	365	366	365	365	365
Commission Days	830	327	331	330	330	326	331	330	330	325
Prov. for D/Docking	13	16	18	13	13	17	13	13	13	18
Prov. for A/Mcal Rep	2	2	2	2	2	2	2	2	2	2
Prov. for Bad Weather	20	20	20	20	20	20	20	20	20	20
No. of RdTrips/Day	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Total No. of RdTrips	830	327	331	330	330	326	331	330	330	325
Fuel Requirements:										
a) Per Round Trip (Main Engine)										
- Bunker	0	0	0	0	0	0	0	0	0	0
- SFO	0	0	0	0	0	0	0	0	0	0
- ADO	2,838	2,835	2,958	2,838	2,895	2,953	3,012	2,838	2,885	2,953
b) Per Day (Aux Engine)										
- ADO	1,000	1,020	1,040	1,000	1,020	1,040	1,061	1,000	1,020	1,040
c) Total Consumption										
- Bunker	0	0	0	0	0	0	0	0	0	0
- SFO	0	0	0	0	0	0	0	0	0	0
- ADO	1,288,692	1,302,720	1,344,748	1,288,692	1,314,465	1,336,594	1,388,632	1,288,692	1,314,465	1,335,553
d) Fuel Prices (P/):										
- Bunker	4.08	4.26	4.47	4.69	4.93	5.18	5.43	5.71	5.99	6.29
- SFO	6.57	6.90	7.24	7.61	7.99	8.39	8.80	9.24	9.71	10.19
- ADO	8.97	7.32	7.68	8.07	8.47	8.90	9.34	9.81	10.30	10.31
Lube Requirements (li.):										
a) Total Consumption										
- System oil	11,598	11,724	12,103	11,598	11,830	12,029	12,318	11,598	11,330	12,020
- Hydraulic oil	644	651,36023	672,37451	644,34615	657,23308	658,29694	684,3159	644,34615	657,23309	687,77674
b) Lube Prices (P/l.):										
- System oil	37.43	39.30	41.27	43.33	45.50	47.77	50.16	52.67	55.90	58.07
- Hydraulic oil	32.59	34.22	35.93	37.73	39.61	41.59	43.67	45.86	48.15	50.56
Water Consum (MT):										
	1077.748	1087.776	1115.562	1125.478	1132.47	1125.878	1144.214	1146.088	1150.802	1141.36
No. of Personnel: (see Schedule)										
Deck Dept.	6	6	6	6	6	6	6	6	6	6
Engine Dept.	4	4	4	4	4	4	4	4	4	4
Steward Dept.	2	2	2	2	2	2	2	2	2	2
Port Personnel	6	6	6	6	6	6	6	6	6	6
Gen. Admin.	3	3	3	3	3	3	3	3	3	3
Total	21	21	21	21	21	21	21	21	21	21

LINER SHIPPING ROUTE RATIONALIZATION PROJECT MV Liang Chiang Express
 TRAFFIC & LOAD FACTOR PROJECTIONS
 YEARS 1 TO 10

YEAR >>	1	2	3	4	5	6	7	8	9	10
CEBU-TAGBILARAN										
Passengers:										
Super De Luxe	0	0	0	0	0	0	0	0	0	0
First Class (in pax)	46,074	55,268	63,581	69,839	73,435	75,638	77,907	80,244	82,651	85,120
Freight/Baggage (in MTons)	768	921	1,059	1,164	1,222	1,258	1,295	1,833	1,372	1,418
CEBU - CAMIGUIN										
Passengers:										
Super De Luxe	0	0	0	0	0	0	0	0	0	0
First Class (in pax)	69,115	82,938	95,878	104,915	110,160	113,454	116,867	120,873	123,984	127,703
Freight/Baggage (in kg.)	1,152	1,362	1,589	1,747	1,834	1,889	1,945	2,003	2,063	2,124
TAGBILARAN - CAMIGUIN										
Passengers:										
Super De Luxe	0	0	0	0	0	0	0	0	0	0
First Class (in pax)	46,074	55,268	63,581	69,839	73,435	75,638	77,907	80,244	82,651	85,130
Freight/Baggage (in kg.)	768	921	1,059	1,164	1,222	1,258	1,295	1,833	1,372	1,413
UNIT-MILES SERVED:										
Passenger-Miles	14,168,247	17,001,738	19,551,957	21,507,042	22,582,185	23,259,546	23,957,202	24,875,691	25,416,105	26,179,459
Ton-Miles	286,160	283,239	325,704	358,053	375,888	387,081	398,520	410,328	422,505	435,051
Passenger Load Factor	50%	60%	69%	76%	79%	83%	84%	87%	89%	94%
Cargo Load Factor	8%	10%	11%	12%	13%	14%	14%	14%	15%	15%
Passenger Revenue:										
CEBU-TAGBILARAN	6,911,100	8,293,200	9,537,150	10,490,650	11,015,250	11,845,700	11,896,050	12,036,600	12,397,650	12,769,500
CEBU - CAMIGUIN	#####	26,540,160	30,520,960	33,572,600	35,251,200	36,908,480	37,397,440	38,519,360	39,674,890	40,864,950
TAGBILARAN - CAMIGUIN	7,832,580	8,398,930	10,808,770	11,889,630	12,483,850	12,858,480	13,244,190	13,641,480	14,050,670	14,472,100
Total Passenger Revenue	#####	44,232,320	50,866,880	55,953,280	58,750,400	60,512,640	62,327,680	64,197,440	66,123,200	68,106,550
Freight Revenue:										
CEBU-TAGBILARAN	476,160	571,020	655,580	721,680	757,540	779,960	802,900	826,480	850,640	876,060
CEBU - CAMIGUIN	956,160	1,147,050	1,318,870	1,450,010	1,522,220	1,567,870	1,614,350	1,662,490	1,712,290	1,762,920
TAGBILARAN - CAMIGUIN	499,200	598,650	688,350	758,600	794,300	817,700	841,750	866,450	891,800	918,450
Total Freight Revenue	1,931,520	2,316,730	2,663,800	2,928,290	3,074,160	3,165,530	3,259,000	3,355,400	3,454,790	3,557,430

15

17

LINER SHIPPING ROUTE RATIONALIZATION PR. MV Liang Chiang Express
 PROJECTED PROFIT AND LOSS STATEMENT - Years 1 to 10

YEAR >>	1	2	3	4	5	6	7	8	9	10
VESSEL REVENUE:										
Passage	38,860,480	44,232,320	50,666,830	55,953,280	58,750,400	60,512,640	62,327,680	64,187,440	66,123,200	68,106,560
Freight	1,931,520	2,316,730	2,663,800	2,828,290	3,074,160	3,185,530	3,259,000	3,355,400	3,454,730	3,557,430
Less: ComCar Tax	1,183,760	1,396,472	1,605,820	1,766,447	1,854,737	1,910,345	1,967,600	2,028,585	2,087,338	2,149,920
NET REVENUE	37,628,240	45,152,578	51,924,760	57,115,123	59,969,823	61,767,825	63,619,080	65,526,255	67,490,592	69,514,070
VOYAGE EXPENSES:										
Fuel & Lubes	9,437,693	10,017,449	10,857,665	10,925,309	11,701,006	12,492,890	13,431,949	13,279,782	14,222,646	15,173,354
PPA Charges	100,642	99,761	100,846	100,642	100,642	99,487	100,848	100,642	100,842	99,173
Clearing Expenses	123,750	122,625	124,125	123,750	123,750	122,250	124,125	122,750	123,750	121,875
Mooring & Unmooring	89,000	88,100	89,300	89,000	89,000	97,800	99,200	99,000	99,000	87,600
TOTAL VOY EXPENSES	9,761,085	10,337,935	11,182,036	11,248,702	12,024,399	12,812,397	13,756,320	13,603,174	14,546,089	15,491,902
VESSEL RUNNING EXPENSES:										
Salaries & Wages	952,500	1,047,750	1,152,525	1,267,778	1,394,555	1,534,011	1,687,412	1,858,158	2,041,768	2,245,945
Empl. Benefits	284,364	308,270	325,098	349,109	375,521	404,574	436,533	471,687	510,357	552,894
Subsistence	1,009,080	1,312,696	1,644,068	1,974,257	2,274,288	2,568,944	2,902,844	3,279,172	3,708,263	4,193,588
Fresh Water	26,944	29,914	33,802	37,478	41,448	45,365	50,689	55,814	61,833	67,870
Stores & Spare Parts	783,998	778,114	806,553	828,284	852,573	871,565	906,559	932,973	962,497	983,638
Repairs & Maint.	885,000	829,250	875,713	1,024,493	1,076,723	1,129,509	1,185,985	1,245,284	1,307,548	1,372,925
Accrued Drydocking	411,751	432,341	453,959	476,557	500,491	525,517	551,793	579,334	608,353	638,772
Taxes & Licenses	885,840	1,040,981	1,180,614	1,297,631	1,348,491	1,383,563	1,421,734	1,461,057	1,501,569	1,543,280
Hull & Machy insur	2,065,000	2,065,000	2,065,000	2,065,000	2,065,000	2,065,000	2,065,000	2,065,000	2,065,000	2,065,000
Other Insurance & P&I	106,944	106,944	106,944	106,944	106,944	106,944	106,944	106,944	106,944	106,944
Vsl Depreciation	4,230,000	4,230,000	4,230,000	4,230,000	4,230,000	4,230,000	4,230,000	4,230,000	4,230,000	4,230,000
Amortiz. of Capax-Vsl	1,444,000	1,444,000	1,444,000	1,444,000	1,444,000	100,000	100,000	100,000	100,000	100,000
Miso Vsl Expenses	120,000	132,000	145,200	159,720	175,692	183,261	212,587	233,848	257,281	282,954
TOTAL RUNNING EXP	13,185,420	13,853,260	14,583,475	15,251,357	15,882,725	15,156,272	15,858,079	16,617,814	17,461,223	18,383,300
VSL CONTRIB TO OVRHD	14,681,734	20,961,384	26,179,249	30,815,064	32,082,700	33,789,155	34,004,680	35,305,767	35,483,325	35,638,868

16

14

LINER SHIPPING ROUTE RATIONALIZATION FR MV Liang Chiang Express
 PROJECTED PROFIT AND LOSS STATEMENT - Years 1 to 10 (Cont'd)

YEAR >>	1	2	3	4	5	6	7	8	9	10
VSL CONTRIB TO OVRHD	14,681,734	20,961,334	26,179,249	30,815,064	32,062,700	33,799,155	34,004,690	35,305,767	35,483,325	35,688,868
TERMINAL EXPENSES:										
Salaries & Wages	504,000	554,400	609,840	670,824	737,906	811,697	892,867	982,158	1,080,369	1,189,406
Empl. Benefits	147,494	157,994	169,544	182,249	196,225	211,698	228,608	247,110	267,571	290,079
Subsistence	43,800	48,180	52,704	58,940	61,820	65,700	72,468	78,840	85,410	91,980
Vsl Forms & Tickets	16,433	20,705	25,001	28,878	31,835	34,430	37,235	40,289	43,550	47,099
Office Rental	48,000	52,800	58,080	63,888	70,277	77,304	85,035	93,538	102,692	113,181
Light & Water	24,000	26,400	29,040	31,944	35,138	38,652	42,517	46,769	51,446	56,591
Gasoline & Oil	24,223	25,440	26,712	28,048	29,450	30,923	32,469	34,092	35,797	37,587
Postage & tel.	24,180	24,380	24,180	24,180	24,180	24,420	24,180	24,180	24,180	24,480
Transport & Travel	72,000	75,600	79,380	83,349	87,516	91,892	96,487	101,311	106,377	111,698
Repairs & Maint.	9,000	9,450	9,923	10,419	10,940	11,487	12,061	12,664	13,297	13,962
Donations/Repres.	40,000	42,000	44,100	46,305	48,620	51,051	53,604	56,284	59,096	62,053
Adver./Notices	72,000	75,600	79,380	83,349	87,516	91,892	96,487	101,311	106,377	111,698
Depreciation	2,000	2,000	2,000	2,000	2,000	2,100	2,000	2,000	2,000	2,000
Amortiz. of Capax-Termi	21,600	21,600	21,600	21,600	21,600	21,600	21,600	21,600	21,600	21,600
Miscellaneous	12,000	13,200	14,520	15,972	17,569	19,325	21,259	23,385	25,723	28,295
TOTAL TERMINAL EXP	1,060,736	1,143,730	1,246,004	1,349,943	1,462,094	1,583,972	1,718,777	1,865,507	2,025,683	2,200,705
TOTAL CONTRIBUTION TO OVERHEAD	13,620,993	19,811,654	24,933,244	29,265,121	30,600,606	32,215,183	32,285,903	33,440,260	33,457,638	33,488,164

17

CV

LINER SHIPPING ROUTE RATIONALIZATION PROJECT

YEAR>> 1 2 3 4 5 6 7 8 9 10

GEN ADMINISTRATIVE EXPENSES:										
Salaries & Allow.	168,000	184,800	203,280	223,608	245,939	270,566	297,622	327,384	360,128	396,135
Empl. Benefits	128,247	136,747	148,297	161,002	174,878	190,351	207,261	225,862	248,824	288,832
Ship Mgt Fee	600,000	420,000	462,000	462,000	508,200	508,200	558,020	558,020	614,922	614,922
Legal & Audit Fee	68,000	68,000	74,800	74,800	82,290	82,280	90,508	80,508	89,559	99,559
Board Honors & Mtg	196,000	196,000	215,600	215,600	237,160	237,160	260,876	260,876	288,984	286,964
Supplies & Xerox	47,550	49,928	52,424	55,045	57,797	60,687	63,722	66,908	70,253	73,766
Postage & tel.	48,400	50,820	53,361	56,029	58,831	61,772	64,881	68,104	71,509	75,084
Transport & Travel	60,000	63,000	66,150	69,458	72,930	76,577	80,406	84,428	88,647	93,080
Repairs & Maint.	24,000	25,200	26,460	27,783	29,172	30,631	32,162	33,770	35,458	37,232
Donations/Repres.	18,000	18,900	19,845	20,837	21,879	22,978	24,122	25,328	26,594	27,924
Advert./Notices	48,000	50,400	52,920	55,568	58,344	61,262	64,325	67,541	70,918	74,464
Taxes & Licenses	9,600	12,000	14,400	16,800	19,200	19,200	19,200	19,200	19,200	19,200
Insurance	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Depreciation	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000
Miscellaneous	60,000	66,000	72,600	79,860	87,846	96,631	106,294	116,823	128,615	141,477
	1,502,797	1,370,766	1,491,137	1,547,838	1,683,598	1,747,268	1,899,378	1,974,850	2,148,087	2,237,637

LINER SHIPPING ROUTE RATIONALIZATION PROJECT CONSOLIDATED INCOME STATEMENT										
YEAR >>	1	2	3	4	5	6	7	8	9	10
VESSEL REVENUE, NET	37,628,240	45,152,579	51,924,760	57,115,123	59,969,826	61,767,825	63,619,080	65,526,255	67,490,532	69,514,070
VOYAGE EXPENSES	9,761,085	10,337,935	11,182,036	11,248,702	12,024,399	12,812,387	13,756,320	13,603,174	14,546,039	15,491,902
RUNNING EXPENSES	13,185,420	13,853,260	14,563,475	15,251,357	15,832,725	15,156,272	15,858,079	16,617,314	17,461,228	18,383,300
TERMINAL EXPENSES	1,060,736	1,149,730	1,246,004	1,349,943	1,462,094	1,583,972	1,718,777	1,865,507	2,025,638	2,200,705
CONTRIBUTION TO OVERHEAD	13,620,998	19,811,654	24,933,244	29,265,121	30,600,606	32,215,183	32,285,903	33,440,260	38,457,638	33,438,164
ADMINISTRATIVE & OVERHEAD	1,502,797	1,370,795	1,491,137	1,547,383	1,683,586	1,747,268	1,889,378	1,974,850	2,149,037	2,237,637
OPERATING INCOME	12,113,231	18,440,359	23,442,107	27,717,733	28,917,020	30,467,894	30,386,528	31,465,409	31,309,551	31,200,526
LESS: Bank Interest	7,201,454	6,078,489	4,728,144	3,112,065	1,175,090					
Other Interest	1,440,000	1,560,000	1,560,000	1,560,000	1,560,000	0	0	0	0	0
OTHER INCOME, NET	68,000	72,600	79,860	87,845	96,631	106,294	116,923	128,815	141,477	155,625
NET INC. BEFORE TAX	3,542,747	10,876,370	17,233,823	23,133,514	26,278,560	30,574,168	30,503,449	31,594,025	31,451,028	31,356,151
PROVIS. FOR INC. TAX	1,233,931	3,806,340	8,031,888	8,036,730	9,197,496	10,700,966	10,676,207	11,057,909	11,007,860	10,974,653
NET INCOME (LOSS)	2,302,785	7,070,031	11,201,985	15,036,784	17,081,064	19,873,222	19,827,242	20,536,116	20,443,168	20,381,498

11