A4.9 PARKING CONDITION SURVEY

A4.9.1 Design of the Survey

a. Survey Locations

The parking condition survey was carried out to collect necessary data and information for estimating parking demand and other relevant figures regarding present parking situation, especially central districts, in the Study Area. This survey includes an inventory survey, vehicle counting, and interview at three (3) areas around the city markets, with five (5) adjacent blocks along the main streets, which are shown in Figure A4.1.4.

b. Survey Method and Duration

(1) <u>Inventory Survey</u>

Charts based on the existing road map of the selected area were prepared to indicate the condition of on-street and off-street parking spaces. Widths of streets and the area of off-street parking spaces, including attached parking lots of buildings, were measured to estimate available capacities.

(2) Vehicle Counting

For on-street parking (including on-sidewalk parking), the number of parking vehicles by type was counted for each side of the street three times a day during morning, lunchtime, and afternoon periods.

(3) Interview

Information regarding parking condition (i.e. parking style, parking fee, payment method, frequency, etc.), trip purpose, walking distance to the destination, was collected through interview to the drivers who parked their cars in the survey area. In addition, reference question regarding proposed public transport system was also interviewed.

Table A4.9.1 shows outline of the parking condition survey.

No. Survey Item Contents Inventory Survey - Number of Parking Space - Fee (if charged) - Number of Parking Vehicles by Time, (2) Vehicle Counting Type (6 categories), and Section (3) Interview - Vehicle Type - Parking Style (off-street/on-sidewalk/on-street) - Payment Method & Amount Paid - Frequency of Parking - Distance to Destination - Trip Purpose - Reference Questions regarding Proposed Public Transport Service

Table A4.9.1Outline of the Parking Condition Survey

A4.9.2 Survey Output

a. General

Table A4.9.2 shows brief summary of the parking condition survey carried out on May 24 and supplement survey carried out on July 25, 26, and 27, 2000.

Item		Figures	
nem	Car	Motorbike	Cyclo
Total Number of Observed Parking Spaces	10x10=100	15x3x15=675	15x3x15=675
Total Number of Observed Vehicles (per 6 hrs)	619	3,322	1,829
Average Duration of Parking (minutes)	26.2	18.1	14.9
Average Occupancy (%)	45.0	24.8	11.2
Effective Number of Samples		550	
Sampling Ratio (%)		9.5	

Table A4.9.2 Summary of the Parking Condition Survey

b. Summary of Parking Condition

(1) Parking Style

As shown in Figure A4.9.1, more than three-quarters (3/4) of drivers paid some amount of fee for parking, regardless of their parking style (i.e. on-street, on-sidewalk, or off-street). The major parking style was "paid/on-street" with a share of 59.3%, followed by "paid/on-sidewalk" with 12.5%, and "unpaid/on-street" with 11.5%, while "off-street" parking were about only 10% in total.

(2) Payment Method

As shown in Figure A4.9.2, the major payment method was "weekly" with a share of 38.2%, followed by "hourly" with 18.9%, "daily" with 16.2%, and "monthly" with 10.0%. These four (4) types of payment method formed more than 80% of total.

(3) Amount Paid

As shown in Figure A4.9.3, the major amount paid for each parking was "250~500 Riel" with a share of 55.3%, followed by "750~1,000 Riel" with 20.2%. Note that in the area not obliged to pay parking fee, some drivers might spend some amount of money at will.

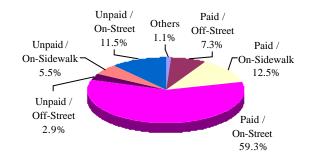


Figure A4.9.1 Parking Style

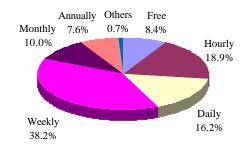


Figure A4.9.2 Payment Method

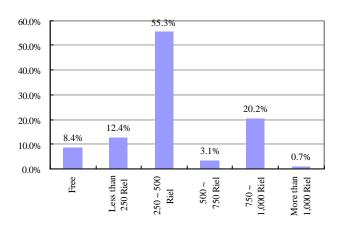


Figure A4.9.3 Amount Paid

(4) Frequency

As shown in Figure A4.9.4, nearly 70% of drivers in total were estimated as regular users (i.e. 4~7 times per week). Remaining almost 30% of drivers were estimated as occasional users (i.e. 0~3 times per week)

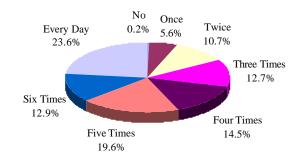


Figure A4.9.4 Parking Frequency

(5) Distance

As shown in Figure A4.9.5, more than one-third (1/3) of users walked between 50 and 100 meters from parking location to final destination, and the other almost one-third (1/3) walked up to 50 meters, while remaining one-third (1/3) walked more than 100 meters, and some of them walked more than 300 meters.

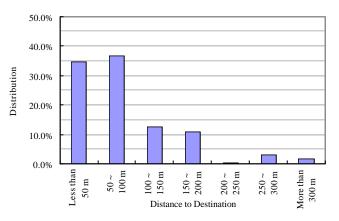


Figure A4.9.5 Walking Distance to Destination

(6) Purpose

As shown in Figure A4.9.6, the major parking purpose was "Business" with a share of 22.0%, followed by "Shopping" and "to Home" with 19.8% each. The other purposes like "To Work" and "To School" covered 16.4% and 13.8% respectively, while "Social" covered 7.5%.

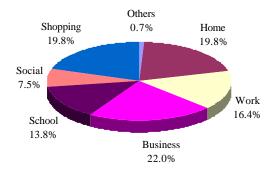


Figure A4.9.6 Parking Purpose

A4.10 INTER-REGIONAL TERMINAL PASSENGER INTERVIEW

A4.10.1 Design of the Survey

(1) Objective and Location

Inter-regional terminal passenger interview was carried out in order to figure out the response of the inter-regional terminal users in case where masstransit and/or regulation on para-transit operation would be introduced and their present means of feeder transport. To obtain the characteristics of inter-regional public transport passengers, this interview was conducted at major inter-regional public transport-mode-interchange-areas. They include the Ferry Port going to Akreiy Ksatr, the Railway Central Station, and Pochentong International Airport.

(2) Survey Item

To collect necessary data and information of inter-regional public transport terminal users, the interview form was designed to cover user's characteristics and their intention. Interview form is shown in Appendix and the survey results are summarized following sections by questionnaire items. Table A4.10.1 shows outline of the inter-regional terminal passenger interview.

Table A4.10.1 Outline of the Interview

No.	Survey Item	Contents
i.	Personal Attributes	- Gender & Age
		- Occupation & Sector
		- Driving License Hold
		- Place of Work / Study
ii.	Trip Descriptions	- Origin & Destination
		- Trip Purpose
		- Number of Sub Trips
	Criteria for Selection of	- Transport Mode
	Existing Mode	- Waiting Time
		- Travel Time
		- Trip Cost / Expense
		- Reason
	Criteria for Selection of	- Intention of Use
	Proposed Mode	- Expectation to the Service
		- Affordable Trip Cost
		- Acceptable Waiting Time

A4.10.2 Survey Output

(1) General Characteristics of Inter-Regional Public Transport Passengers

The general characteristics of inter-regional public transport passengers are tabulated in Table A4.10.2 (a) and summarized below.

- a. 48.8% of interviewees are male and the rest are female.
- b. Average age of interviewees is 36 years old and air-passengers are slightly older than those of other modes.
- c. Approximately half of ferry-users are workers/businessmen and one-fourth are housewives, while less than 10% are students; 67% of railway-users are workers/businessmen; 24% and 20% of air-passengers are public servants and housewives, respectively.
- d. 7.5% of ferry-users work in the industrial sector of government service, while 6.2% are involved in both construction and commerce sectors. About 26% of railway-users are engaged in agriculture.
- e. Only 13% to 15% of river-ferry and railway users possess a driving license(s), while 6.1% of air passengers are holding driving license(s).
- f. Average daily numbers of trips of ferry, rail and air passengers are 2.0 trips, 1.8 trips and 1.4 trips, respectively.
- g. Main purposes of trips are 'to home' (50.3%) and 'to work' (11.2%) for ferry passengers, 'to home' (28.4%) and 'business' (19.4%) for rail passengers, and 'to home' (37.5%) and 'to work' (17.9%) for air passengers.

(2) Characteristics of Feeder Trip Mode of Inter-Regional Public Transport Passengers

The characteristics of feeder trip mode of inter-regional public transport passengers are tabulated in Table A4.10.2 (b) and summarized below.

- a. Almost half of ferry-passengers (48% out of total) use motodop as main feeder trip mode, while 19% of them drive motorcycles. Meanwhile, 26% of them use passenger cars or pick-ups (including public transport modes, such as taxis and taxi-buses). Around 30% and 21% of railway-passengers use motodop and pickup as feeder trip modes, respectively. On the other hand, 43% and 37% of air-passengers use passenger cars and taxis as access modes to/from airport, respectively.
- b. Average waiting time and travel time for feeder trip modes of river-ferry, railway, and air transport passengers are less than 5 minutes (3.4 minutes) and 21 minutes, respectively.
- c. 76%, 36% and 84% of river ferry, railway and air transport passengers paid between 1,000 Riels and 1,500 Riels for the feeder trip cost, respectively.
- d. Reasons for selecting the feeder trip means by mode are as follows;
 - River ferry passengers: fast (32.3%), convenient (24.2%) and safe (24.2%),
 - Railway passengers: cheap (35.8%), fast (29.1%) and convenient (15.7%) and
 - Air passengers: safe (51.3%), convenient (17.9%) and fast (10.7%).

(3) Opinion Survey on Introduction of City Bus Service

- a. All of the interviewees answered 'I will use' in the case of introduction of city bus service.
- b. 32.9% and 22.4% of river ferry users expect "safety" and "fastness" for proposed city bus service, respectively.
- c. 72.0% of river ferry-users are willing to pay approximately 500 Riels for proposed bus service, while railway-users are willing to pay approximately 1,000 Riels. On the other hand, one-third of air passengers are willing to pay approximately 1,250 Riels for the bus service.
- d. 36.6% and 64.3% of ferry and air passengers will not wait more than 5 minutes at the bus stop for proposed bus services, while 31.3% of railway passengers will be able to wait between 5 to 10 minutes.

Source: Public Transport Passenger Interview Survey, JICA2000

Table A4.10.2 (a)Inter-Regional Public Transport Passenger Interview Result – General Characteristics –

-							Interview Place	v Place					,			
-				River Port	Port			Railway				Airport			Total	
Items		Unit	Coming In	Going Out	To	otal	Coming In	Going Out	Total	lai	Coming In	Going Out	Total	lal		
Number of sa	mples:		48	113	161		76	58	134		26	168	224		519	
Sex			48	113	161	100.0%	76	58	134	100.0%	26	168	224	100.0%	519	100.0%
	Male		27	41	89	42.2%	36	26	62	46.3%	35	87	122	54.5%	252	48.6%
	Female		21	7.2	93	57.8%	40	32	72	53.7%	21	81	102	45.5%	267	51.4%
Age			48	113	161	100.0%	2/2	58	134	100.0%	56	168	224	100.0%	519	100.0%
)	-19	, ,,,,	10	6	19	11.8%	0	4	4	3.0%	0	6	6	4.0%	32	6.2%
12.2	20 - 29		8	24	32	19.9%	35	22	57	42.5%	6	20	29	12.9%	118	22.7%
1 = 4	30 - 39		15	59	44	27.3%	25	14	39	29.1%	22	39	61	27.2%	144	27.7%
1.4	40 - 49		12	22	34	21.1%	. 5	7	12	6.0%	20	41	61	27.2%	107	20.6%
. 41	50 - 59		2	17	19	11.8%	6	6	18	13.4%	4	31	35	15.6%	72	13.9%
	- 09	;	1	21 2	13	8.1%	2 5	2,7	4	3.0%	1 5	82 5	53	12.9%	46	8.9%
_	Average Age	Years old	32	85	વ :	7000%	33	* S	33.5	700 004	88	74	40	100 00%	20.2	10000
Occupation			84	FILE	191	3.0.0% 1.00.0%	واع	308	134	100.0%	8	201	577	100.0%	219	100.0%
	Freelance/Self Employee			=	47	14.9%	3 2	=	15	23.170		er i	77	2,4%	0	14.0%
	Shop Clerk		4 0	25	\$ 0	14.9%	38	17	35	20.0%	٥	ST	77	9.4%	104	20.0%
	Driver 17		9	۶	Ş	200 10	3 4	-	1	0.00	2 5	3 2	۲	20.00	, 5	20.01
-,,,	Rousewire		1	G «	15	9.3%	1		2	1.5%	5 6	15	2 8	8.0%	38	6.7%
	Company Executive			3		1.9%	0	0	0	0.0%	0	6	6	4.0%	12	2.3%
	Company Employee		2	. 00	10	6.2%	0	4	4	3.0%	- oo	23	33	14.7%	47	9.1%
	Public Servant		13	7	20	12.4%	80	7	15	11.2%	13	41	54	24.1%	68	17.1%
•=-	Others		10	15	25	15.5%	2	9	8	%0'9	2	21	23	10.3%	99	10.8%
Sector			48	113	191	100.0%	76	58	134	100.0%	99	168	224	100.0%	519	100.0%
	Agriculture		1	0	1	99.0	22	13	35	26.1%	0	5	5	2.2%	41	7.9%
	Mining		3	2	S	3.1%	10	9	16	11.9%	0	2	2	0.9%	23	4.4%
	Industry			9	7	4.3%	13	7	2	14.9%	9	7	13	5.8%	40	7.7%
	Construction		5	2	9	6.2%	11	2	13	9.7%		E .	4	1.8%	12	5.2%
	Transport		٥	7	7	1.2%	7	,	١	3.7%	7 5	7 6	4 8	1.8%	= -	2.1%
	Government Service		m	2 0	2] 5	%C/	~ C	4	2 5	5.7%	O.	3 5	30	13.4%	47	%I'%
	Commerce Finance/Incurance		7 6	۰,	2 6	1 9%	0	-	3 0	%00	4	5	9	4.0%	22	23%
	Other Services		31	88	111	68.9%	8	19	27	20.1%	28	102	130	58.0%	268	51.6%
Driving License	nsc		48	113	161	100.0%	76	58	134	100.0%	26	168	224:	100,0%	519	100.0%
<u>-</u>	Have		5	16	21	13.0%	12	8	20	14.9%	37	117	154	%8.89	195	37.6%
	Do not have		43	- 66	.140	87.0%	64	50	114	85.1%	19	51	70	31.3%	324	62.4%
Average No.	Average No. of Trips per Day	Trips/day	2.1	1.9	2.0		1.6	2.0	1.8		1.2	1.6	1.4		1.7	
Trip Purpose			48	113	161	100.0%	92	58	134	100.0%	56	168	224	100.0%	519	100.0%
	Home		15	.9	82	50.9%	19	19	38	28.4%	15	69	84	37.5%	204	39.3%
	Work		11	7	18	11.2%	12	12	24	17.9%	14	56	40	17.9%	. 82	15.8%
	Business		8	6	17	10.6%	15	11	56	19.4%	15	13	28	12.5%	11	13.7%
	School		3	2	5	3.1%	2	1	3	2.2%	3	10	13	5.8%	21	4.0%
	Social		9	2	8	5.0%	80	3	11	8.2%	0	o	0	0.0%	19	3.7%
	Shopping		0	1	1	99'0	19	1	20	14.9%	0	1	1	0.4%	22	4.2%
	Others		'n	25	30	18.6%	1	11	12	9.0%	6	49	28	25.9%	100	19.3%

Source: Public Transport Passenger Interview Survey, JICA2000

Table A4.10.2 (b)Inter-Regional Public Transport Passenger Interview Result – Characteristics of Feeder Trip Mode –

						Oliui acco	101100	maracatorica or a social rate areas	T.							
							Interview Place									
				Rive	River Port			Railway				Airport			Total	_
Items		Unit	Coming In	Going Out	Tota	tal	Coming In	Going Out	Total	la	Coming In	Going Out	Total	al		
																-
Number of samples;	samples;		48	113	161		2/2	58	134		56	168	224		519	
Sub-trip mode	ode		48	113	191	100.0%	16	58	134	100.0%	56	168	224	100.0%	519	100.0%
	Passenger Car		0	10	10	6.2%	13	4	17	12.7%	22	74	96	42.9%	123	23.7%
	Taxi		0	8	80	5.0%	12	4	16	11.9%	29	53	82	36.6%	106	20.4%
	Minibus/ Pass. Van		11	5	16	9.6%	13	2	15	11.2%	3	31	34	15.2%	65	12.5%
	Pick-up/Cargo Van		3	5	8	5.0%	75	4	28	20.9%	0	7	7	3.1%	43	8.3%
	Truck/Trailer		٥	0	0	0.0%	0	2	2	1.5%	0	1	1	0.4%	3	0.6%
	Large Bus		0	0	٥	0.0%	0	0	0	%0'0	0	0	0	0.0%	0	0.0%
	Motorcycle		٥	24	30	18.6%	٥	7	7	5.2%	0	0	0	0.0%	37	7.1%
	Motodop		22	52	77	47.8%	11	29	40	29.9%	2	1	3	1.3%	120	23.1%
	Motorumo		0	3	3	1.9%		m	4	3.0%	0	0	0	%0.0		1.3%
	Cyclo		3	0	3	1.9%	0	1	1	0.7%	0	0	0	0.0%	4	0.8%
	Bicycle		0	٥	0	%0'0	0	1	1	0.7%	0	0	0	0.0%	1	0.2%
	Walk		٥	٥	9	3.7%	2	1	3	2.2%	0		1	0.4%	10	1.9%
	Others		0	0	0	0.0%	0	0	0	%0'0	0	0	0	0.0%	0	0.0%
Average W	Average Waiting Time	Minute	4.8	2.5	3.65		4.7	2.9	3.8		2.5	2.8	2.65		3.4	
Average T	Average Travel Time	Minute	25.1	16.1	20.6		25.7	722.7	24.2		28.9	20.3	24.6		23.1	
Trip Cost/Expense	Expense		48	113	161	100.0%	92	58	134	100.0%	56	168	224	100.0%	519	100.0%
•	-250		٥	2	2	1.2%	6	10	19	14.2%	3	29	32	14.3%	53	10.2%
	250 - 500		0	2	2	1.2%	15	9 .	21	15.7%	0	0	0	0.0%	23	4.4%
	500 - 750		0	9	9	3.7%	26	3	29	21.6%	0	0	0	0.0%	35	6.7%
	750 - 1.000		9	22	28	17.4%	. 9	10	16	11.9%	1	3	4	1.8%	48	9.2%
	1,000 - 1,500		42	81	123	76.4%	19	29	48	35.8%	52	135	187	83.5%	358	69.0%
	1,500 - 2,000		٥	0	0	%0'0	1	0	1	0.7%	0	1	1	0.4%	2	0.4%
	2,000			-											0	0.0%
Why do yo	Why do you use this?		48	113	161	100.0%	76	58	134	100.0%	26	168	224	100.0%	519	100.0%
	Convenient		11	28	39	24.2%	12	9	21	15.7%	1	39	40	17.9%	100	19.3%
	Cheap		5	16	21	13.0%	40	8	48	35.8%	2	12	14	6.3%	83	16.0%
	Fast		21	31	52	32.3%	12	27	39	29.1%	7	17	24	10.7%	115	22.2%
	Safe		8	31	39	24.2%	4	6	13	9.7%	38	77	115	51.3%	167	32.2%
•••••	Luxury		٥	0	0	%0.0	1	1	2	1.5%	2	3	5	2.2%	7	1.3%
	Reliable		0	2	. 2	1.2%	3	1	4	3.0%	9	3	9	4.0%	15	2.9%
	Weather		0	0	0	%0.0	0	0	0	0.0%	0	0	0	0.0%	0	0.0%
	Luggages		3	4	4	4.3%	+	3	7	5.2%	0	11	11	4.9%	25	4.8%
	Accopany		0	1	1	0.6%	0	0	0	0.0%	0	9	9	2.7%	7	1.3%
	No particular reason		0	0	0	0.0%	0	0	0	20.0	0	0	0	%0.0	0	0.0%

Table A4.10.2 (c) Inter-Regional Public Transport Passenger Interview Result - Opinion Survey on Introduction of City Bus Service -

		-			•										
·	_					Intervie	Interview Place								
1	:		Rive	River Port			Railway	vay			Airport	מנ		Total	la la
liems	Onit	Coming In	Soing Out	Total	ı	Coming In	Going Out	Total	al	Coming In	Going Out	Total	al		
Number of samples:		48	113	161		76	58	134		56	168	224		519	
Will you use if?		48	113	161	100.0%	76	58	134	100.0%	56	168	224	100.0%	510	100 0%
Yes		48	113	161	100.0%	76	58	134	100.0%	56	168	224	100.0%	\$10	100.0%
No		0	0	0	0.0%	0	0	0	20.0	•	0		2500	c	0.001
What do you expect?		48	113	161	100.0%	76	58	134	100.0%	S6	168	224	100 0%	\$10	100.0%
Convenient		9	18	24	14.9%	7	11	18	13.4%	11	35	46	20.5%	88	17.0%
Cheap		13	10	23	14.3%	26	15	41	30.6%		8	6	4.0%	23	14 19
Fast		10	56	36	22.4%	17	13	30	22.4%	4	82	24	10.7%	8	17.3%
Sate		٥,	44	53	32.9%	14	10	24	17.9%	26	65	16	40.6%	168	32.4%
Luxury n-m-m-		,	5	12	7.5%	88	5	13	9.7%	7	8	15	6.7%	40	7.7%
Kellable			2	S	3.1%	-	2	3	2.2%	7	19	26	11.6%	34	6.6%
Line to the total		-	8	ω ;	2.0%	3	2	2	3.7%	0	13	13	5.8%	26	5.0%
row much can you pay;		48	113	161	100.0%	76	58	134	100.0%	56	168	224	100.0%	519	100.0%
057 030	1	11	. 2	13	8.1%	11	9	17	12.7%	0	2	7	0.9%	32	62%
500 - 350	T	07	38	28	36.0%	15	11	56	19.4%	0	31	31	13.8%	115	22.2%
750-1000		ο,	2 2	80 3	36.0%	21	16	37	27.6%	2	61	63	28.1%	158	30.4%
1 000 - 1 500	Rick	- 0	3	\$ 0	14.9%	=	S	16	11.9%	12	35	47	21.0%	87	16.8%
1 500 - 2 000	T	٥		ø	5.0%	14	17	31	23.1%	42	36	78	34.8%	117	22.5%
2 000	T		0	٥,	0.0%	-	0	-	0.7%	o	0	0	0.0%		0.2%
No idea	T	> 0		0	0.0%	0	٥	0	0.0%	٥	0	0	0.0%	-	0.0%
Why lone can you smith		0 8	0 ;	0 5	0.0%	3	3	9	4.5%	0	3	3	1.3%	6	1.7%
S S S S S S S S S S S S S S S S S S S		ş ;	20	ē	100.0%	76	28	134	100.0%	56	168	224	100.0%	519	100.0%
S_10	T	12	30	S,	35.6%	œ ;	9	14	10.4%	51	93	144	64.3%	217	41.8%
10-15	T	cr o	35	Ç.	28.0%	14	28	42	31.3%	2	21	23	10.3%	110	21.2%
CI - OY 11		١,	15	9	24.8%	12	21	33	24.6%	1	36	37	16.5%	911	21.2%
02.02	TATITION	-	١		6.8%	6	H	10	7.5%	2	15	17	7.6%	38	7.3%
20 - 20		S.	7	<u>, </u>	3.1%	26	0	26	19.4%	0	0	0	0.0%	31	6.0%
SOC SALES	T			-1	0.6%	4	٥	4	3.0%	0	0	0	0.0%	S	1.0%
ואט וטכם		ם ח	٥	0	0.0%	3	7	'n	3.7%	0	3	3	1 30%	a	1 50

Source: Public Transport Passenger Interview Survey, JICA2000

A4.11 BUS AND TAXI-BUS OWNER/DRIVER INTERVIEW

A4.11.1 Design of the Survey

(1) Objective and Location

Bus and taxi-bus owner/driver interview was carried out in order to figure out the response of the small-scale transport operators in case where masstransit and/or regulation on para-transit operation would be introduced and their present situations confronted. To obtain the characteristics of bus and taxi-bus owner/driver, this interview was conducted at five (5) major bus and taxi-bus terminals and owners office. Five (5) major bus and taxi-bus terminals were Central Market, Duem Kor Market, Olympic Market, Ou Ruessei Market, and Chbar Ampao Market.

(2) Survey Item

To collect necessary data and information of operators, the interview form was designed to cover operator's characteristics and their situation. Interview form is shown in Appendix and the survey results are summarized in following sections by questionnaire items. Table A4.11.1 shows outline of the bus and taxi-bus owner/driver interview.

Table A4.11.1 Outline of the Interview

Survey Item	Contents
Owner Only	- Number of Owned Vehicles
	- Number of Employees
Owner / Driver	- Nature of Business
	- Area / Route of Operation
	- Frequency of Operation
	- Average Number of Passenger
	- Charge and Cost
	- Problems for Operation
	- Future Plan

A4.11.2 Survey Output

The characteristics of taxi-bus operation are tabulated in Table A4.11.2 and summarized below, based on the interview survey of owners and drivers.

- a. 70% of total taxi-bus-owner respondents wanted to continue their business; on the other hand, more than 60% of total taxi-bus-driver respondents, excluding those who answered 'no idea', wanted to quit their jobs.
- b. 60% of total owner respondents have other primary businesses, while 90% of the total driver interviewees answered that being a taxi-bus driver is their primary job.
- c. Average monthly income and expenditure of taxi-bus owners and drivers are 2,080 thousand Riels and 1,220 thousand Riels, and 840 thousand Riels and 500 thousand Riels respectively.
- d. Average weekly working hours of drivers is 34 hours.
- e. Average daily number of trips, occupancy, average fare and average trip length of taxi-bus are 1.6 trips, 12.5 persons, 4,790 Riels and 58.8 km respectively.
- f. Main operating area of taxi-bus is outside of the city.
- g. Most serious problems faced by the owners and drivers are as follows:
 - Owners: not enough passengers (this means too many competitors)
 - Drivers: own health

Table A4.11.2 Result of Bus and Taxi-Bus Owners and Drivers Interview

Respond	lents: Taxi-Bus Owners		
Number	of samples: 20		
Items		Unit	Figure
Continu	e or quit of this business		
	Continue		70.0%
	Quit		5.0%
	No idea		25.0%
Average	Business Experience	Years	3.35
Primary	or Secondary Business		
	Primary		40.0%
	Secondary		60.0%
Average	Monthly Income	Riels 000	2,080
Average	Monthly Expenditure	Riels 000	1,220
Average	No.of Drivers	Person	4.1
Average	No.of Vehicles Owned	Vehicle	4.3
Average	Used Year of the Vehicle	Year	3
Average	Distance of Operation	Km	126
Usual A	rea of Operation		
	Outside of the City		65.0%
	Within the Suburb		30.0%
	Within the CBD		5.0%
Encount	ered Problems		
	Not Enough Passengers		30.6%
	Too Many Operators		25.0%
	Poor Pavement Condition		16.7%

Source: Bus/Taxi-Bus Driver Interview Survey, 2000

Number of samples: 75				
Continue or quit of this business	Responde	ents: Taxi-Bus Drivers		
Continue 29.3%	Number	of samples: 75		
Continue	Items		Unit	Figure
Quit	Continue	or quit of this business		
No idea 25.3%		Continue		29.3%
Average Age of Driver Average Business Experience Average No. of Family Members Primary or Secondary Business Primary 90.7% Secondary 9.3% Average Monthly Income Riels 000 839 Average Monthly Expenditure Riels 000 502 Average Working Days per Week Days 4.0 Average Working Hours per Day Hours 8.4 Average No. of Trips per Day Trips 1.64 Average No. of Pax per Trip Person 12.5 Average Fare per Pax per Trip Riels 4,790 Average Trip Length Km 58.6 Usual Area of Operation Outside of the City 86.6% Within the Suburb 6.7% Encountered Problems Own Health 33.3% Not Enough Passengers 16.9% Too Many Drivers 11.3% Too Many Regulations 10.8%		Quit		46.4%
Average Business Experience Average No. of Family Members Primary or Secondary Business Primary 90.7% Secondary 9.3% Average Monthly Income Riels 000 839 Average Monthly Expenditure Riels 000 502 Average Working Days per Week Days 4.0 Average Working Hours per Day Hours 8.4 Average No. of Trips per Day Trips 1.64 Average No. of Pax per Trip Person 12.5 Average Fare per Pax per Trip Riels 4,790 Average Trip Length Km 58.6 Usual Area of Operation Outside of the City 86.6% Within the Suburb 6.7% Within the CBD 6.7% Encountered Problems Own Health 33.3% Not Enough Passengers 16.9% Too Many Drivers 11.3% Too Many Regulations 10.8%		No idea		25.3%
Average No. of Family Members Primary or Secondary Business Primary 90.7% Secondary 9.3% Average Monthly Income Riels 000 839 Average Monthly Expenditure Riels 000 502 Average Working Days per Week Days 4.0 Average Working Hours per Day Hours 8.4 Average No. of Trips per Day Trips 1.64 Average No. of Pax per Trip Person 12.5 Average Fare per Pax per Trip Riels 4,790 Average Trip Length Km 58.6 Usual Area of Operation Outside of the City 86.6% Within the Suburb 6.7% Within the CBD 6.7% Encountered Problems Own Health 33.3% Not Enough Passengers 16.9% Too Many Drivers 11.3% Too Many Regulations 10.8%	Average A	Age of Driver	Years	38.2
Primary or Secondary Business Primary 90.7% Secondary 9.3% Average Monthly Income Riels 000 839 Average Monthly Expenditure Riels 000 502 Average Working Days per Week Days 4.0 Average Working Hours per Day Hours 8.4 Average No. of Trips per Day Trips 1.64 Average No. of Pax per Trip Person 12.5 Average Fare per Pax per Trip Riels 4,790 Average Trip Length Km 58.6 Usual Area of Operation Outside of the City 86.6% Within the Suburb 6.7% Within the CBD 6.7% Encountered Problems Own Health 33.3% Not Enough Passengers 16.9% Too Many Drivers 11.3% Too Many Regulations 10.8%	Average l	Business Experience	Year	5.0
Primary 90.7% Secondary 9.3% Average Monthly Income Riels 000 839 Average Monthly Expenditure Riels 000 502 Average Working Days per Week Days 4.0 Average Working Hours per Day Hours 8.4 Average No. of Trips per Day Trips 1.64 Average No. of Pax per Trip Person 12.5 Average Fare per Pax per Trip Riels 4,790 Average Trip Length Km 58.6 Usual Area of Operation 86.6% Within the Suburb 6.7% Within the CBD 6.7% Encountered Problems 33.3% Not Enough Passengers 16.9% Too Many Drivers 11.3% Too Many Regulations 10.8%	Average 1	No. of Family Members	Person	5.3
Secondary 9.3%	Primary o	or Secondary Business		
Average Monthly Income Average Monthly Expenditure Riels 000 502 Average Working Days per Week Average Working Hours per Day Average No. of Trips per Day Average No. of Pax per Trip Average Fare per Pax per Trip Average Trip Length Cutside of the City Within the Suburb Within the CBD Encountered Problems Own Health Not Enough Passengers Too Many Drivers Too Many Regulations Riels 000 502 Average Riels 000 Riels 04,0 Encls 4,790 Riels 4,790 Average Trip Length Km 58.6 6.7% 86.6% 86.6% 10.8%		Primary		90.7%
Average Monthly Expenditure Average Working Days per Week Average Working Hours per Day Average No. of Trips per Day Average No. of Pax per Trip Average Fare per Pax per Trip Average Trip Length Cutside of the City Within the Suburb Within the CBD Encountered Problems Own Health Not Enough Passengers Too Many Drivers Too Many Regulations Pays 4.0 Average Hours 8.4 Average No. of Trips per Day Trips 1.64 Average Person 12.5 Riels 4,790 Riels 4,790 Average Trip Length Km 58.6 Usual Area of Operation Outside of the City Within the Suburb 6.7% Find Many Passengers 16.9% Too Many Regulations 10.8%		Secondary		9.3%
Average Working Days per Week Average Working Hours per Day Average No. of Trips per Day Average No. of Pax per Trip Average Fare per Pax per Trip Average Trip Length Cutside of the City Within the Suburb Within the CBD Encountered Problems Own Health Not Enough Passengers Too Many Drivers Too Many Regulations Average Working Days per Week Hours 8.4 A.79 Person 12.5 Average Fare per Pax per Trip Riels 4,790 Km 58.6 Usual Area of Operation 6.7% 86.6% Within the CBD 6.7% Encountered Problems Own Health 133.3% 10.8%	Average l	Monthly Income	Riels 000	839
Average Working Hours per Day Hours 8.4 Average No. of Trips per Day Trips 1.64 Average No. of Pax per Trip Person 12.5 Average Fare per Pax per Trip Riels 4,790 Average Trip Length Km 58.6 Usual Area of Operation 0utside of the City 86.6% Within the Suburb 6.7% Within the CBD 6.7% Encountered Problems 0wn Health 33.3% Not Enough Passengers 16.9% Too Many Drivers 11.3% Too Many Regulations 10.8%	Average l	Monthly Expenditure	Riels 000	502
Average No. of Trips per Day Trips 1.64 Average No. of Pax per Trip Person 12.5 Average Fare per Pax per Trip Riels 4,790 Average Trip Length Km 58.6 Usual Area of Operation 86.6% Within the Suburb 6.7% Within the CBD 6.7% Encountered Problems 0wn Health 33.3% Not Enough Passengers 16.9% Too Many Drivers 11.3% Too Many Regulations 10.8%	Average \	Working Days per Week	Days	4.0
Average No. of Pax per Trip Person 12.5 Average Fare per Pax per Trip Riels 4,790 Average Trip Length Km 58.6 Usual Area of Operation 86.6% Within the Suburb 6.7% Within the CBD 6.7% Encountered Problems 33.3% Not Enough Passengers 16.9% Too Many Drivers 11.3% Too Many Regulations 10.8%	Average \	Working Hours per Day	Hours	8.4
Average Fare per Pax per Trip Riels 4,790 Average Trip Length Km 58.6 Usual Area of Operation 86.6% Within the Suburb 6.7% Within the CBD 6.7% Encountered Problems 33.3% Not Enough Passengers 16.9% Too Many Drivers 11.3% Too Many Regulations 10.8%	Average I	No. of Trips per Day	Trips	1.64
Average Trip Length Km 58.6 Usual Area of Operation Outside of the City 86.6% Within the Suburb 6.7% Within the CBD 6.7% Encountered Problems Own Health 33.3% Not Enough Passengers 16.9% Too Many Drivers 11.3% Too Many Regulations 10.8%	Average I	No. of Pax per Trip	Person	12.5
Usual Area of Operation	Average l	Average Fare per Pax per Trip Riels		4,790
Outside of the City 86.6% Within the Suburb 6.7% Within the CBD 6.7% Encountered Problems 33.3% Own Health 33.3% Not Enough Passengers 16.9% Too Many Drivers 11.3% Too Many Regulations 10.8%	Average Trip Length Km			58.6
Within the Suburb 6.7%				
Within the CBD 6.7%		Outside of the City		86.6%
Encountered Problems Own Health Not Enough Passengers Too Many Drivers 11.3% Too Many Regulations 10.8%		Within the Suburb		6.7%
Own Health 33.3% Not Enough Passengers 16.9% Too Many Drivers 11.3% Too Many Regulations 10.8%		Within the CBD		6.7%
Not Enough Passengers 16.9% Too Many Drivers 11.3% Too Many Regulations 10.8%	Encounte	red Problems	.	
Too Many Drivers 11.3% Too Many Regulations 10.8%		Own Health		33.3%
Too Many Regulations 10.8%		Not Enough Passengers		16.9%
		Too Many Drivers		11.3%
		Too Many Regulations		10.8%
		Poor Pavement Condition		10.3%

Source: Bus/Taxi-Bus Driver Interview Survey, 2000

A4.12 BUS AND TAXI-BUS PASSENGER INTERVIEW

A4.12.1 Design of the Survey

(1) Objective and Location

Bus and taxi-bus passenger interview was carried out in order to figure out the response of the bus and taxi-bus users in case where masstransit and/or regulation on para-transit operation would be introduced and their present means of feeder transport. To obtain the characteristics of bus and taxi-bus passengers, this survey was conducted at five (5) major bus and taxi-bus terminals. These

were Central Market, Duem Kor Market, Olympic Market, Ou Ruessei Market, and Chbar Ampao Market

Table A4.12.1 Outline of the Interview

#	Survey Item	Contents
i.	Personal Attributes	- Gender & Age
		- Occupation & Sector
		- Driving License Hold
		- Place of Work / Study
ii.	Trip Descriptions	- Origin & Destination
		- Trip Purpose
		- Number of Sub Trips
	Criteria for Selection of	- Transport Mode
	Existing Mode	- Waiting Time
		- Travel Time
		- Trip Cost / Expense
		- Reason
	Criteria for Selection of	- Intention of Use
	Proposed Mode	- Expectation to the Service
	•	- Affordable Trip Cost
		- Acceptable Waiting Time

(2) Survey Item

To collect necessary data and information of bus and taxi-bus users, the interview form was designed to cover user's characteristics and their intention. Interview form is shown in Appendix and the survey results are summarized following sections by questionnaire items. Table A4.12.1 shows outline of the bus and taxi-bus passenger interview.

A4.12.2 Survey Output

The general characteristics of bus and taxi-bus passengers and characteristics of their feeder trip mode are tabulated in Table A4.12.2 and summarized below.

(1) General characteristics of bus and taxi-bus passengers

- a. 45.5% of interviewees are "Male" and the rest are "Female."
- b. Average age of interviewees is 34 years old.
- c. Major occupations of interviewees are "Shop Clerk" with 32.3% share, followed by "Free-lance/Self Employee" and "Housewife" with 18.3% and 14.3%, respectively.
- d. 14.2% of interviewees are engaged in "Agriculture," while 10.7% are involved in both "Construction and Transport."
- e. 23% of interviewees possess a driving license(s)
- f. Average number of daily trips of interviewees is 2.0 trips.
- g. Main purposes of the trips for interviewees are "To Home," "Shopping" and "To Work" with shares of 25.7%, 23.7%, and 22.7%, respectively.

(2) Characteristics of feeder trip mode of bus and taxi-bus passengers

- a. More than three-forth of total interviewees uses "Motodop" as the main feeder trip mode, while 18% of them use "Cyclo." Meanwhile, 5% of them use "Motorumok."
- b. Average waiting time and travel time of bus and taxi-bus users for their feeder trip modes are 5 minutes and 21 minutes, respectively.
- c. Most of interviewees paid between 1,000 and 1,500 Riels for their feeder trip.
- d. Major reasons for selecting present feeder mode are "Convenience" with 24.2%, followed by

"Fastness" with 32.3%, and "Cheapness" with 20.3%.

(3) Opinion survey on introduction of city bus service

- a. 71% of interviewees answered "I will use" in the case of introduction of city bus service.
- b. 23% of them expect "Safety" for proposed bus service, and it is followed by "Cheapness" with 17%.
- c. 25% of them are willing to pay 1,000~1,500 Riels for the bus service.
- d. 53.3% of them answered that acceptable waiting time will be more than 5 minutes at the bus stop for the proposed bus service.

Table A4.12.2 Result of Bus and Taxi-Bus Passenger Interview

Percentage

General Characteristics			Characteristics of Feeeder Trip Mode			Opinion Sur	Opinion Survey on Introduction of City Bus Service	Bus Service
Items	Number of	Percentage	Items	Number of	Percentage	Items		Number of
	Samples			Sampies	:		e e e e e e e e e e e e e e e e e e e	Sampies
Number of samples:	009		Number of samples:	009		Number of samples:	samples:	009
Sex	009	100.0%	Sub-trip mode	009	100.0%	Will you use it?	it?	009
Male	273	45.5%	Passenger Car	2	0.3%	•	Yes	426
Female	327	54.5%	Taxi	0	0.0%		No	174
Age	009	100.0%	Minibus/ Pass. Van	0	0.0%	What do you expect?	1 expect?	009
-19	27	4.5%	Pick-up/Cargo Van	2	0.3%	•	Convenient	42
20 - 29	198	33.0%	Truck/Trailer	0	0.0%		Cheap	102
30 - 39	197	32.8%	Large Bus	0	0.0%		Fast	61
40 - 49	108	18.0%	Motorcycle	0	0.0%		Safe	137
50 - 59	55	9.2%	Motodop	457	76.2%		Luxury	25
- 09	15	2.5%	Мотопи	29	4,8%		Reliable	33
Average Age (Years Old)	34	5.7%	Oyclo	110	18.3%		No idea	200
Occupation	009	100,0%	Bicycle	•	0.0%	How much	How much can you pay?	009
Freelance/Self Employee	110	18,3%	Walk	0	0.0%		- 250 riels	28
Shop Clerk	194	32.3%	Others	o	0.0%		250 - 500	2
Driver	64	10.7%	Average Waiting Time (Minutes)	5.1			500 - 750	17
Housewife	98	14,3%	Average Travel Time (Minutes)	21.2			750 - 1,000	83
Student	36	6.0%	Trip Cost/Expense	009	100.0%		1,000 - 1,500	149
Company Executive	20	3.3%	- 250 riels	0	0.0%		1,500 - 2,000	1
Company Employee	37	6.2%	250 - 500	11	1.8%		2,000 -	0
Public Servant	28	4.7%	500 - 750	42	7.0%	******	No idea	204
Others	25	4.2%	750 - 1,000	114	19.0%	Why long ca	Why long can you wait?	009
Sector	009	100.0%	1,000 - 1,500	433	72.2%		-5 Minutes	320
Agriculture	85	14.2%	1,500 - 2,000	0	0.0%		5-10	87
Mining	58	9.7%	2,000 -	0	0.0%		10 - 15	17
Industry	59	9.8%	Why do you use this?	009	100.0%		15 - 20	2
Construction	2	10.7%	Convenient	156	26.0%		20 - 30	0
Transport	ŝ	10.7%	Cheap	122	20.3%		30-	0
Government Service	56	4.3%	Fast	154	25.7%		No idea	174
Commerce	26	43%	Safe	1 1 1	12.8%			
Other Seminer	183	20.070	Delichle	25	7.070			
Driving License	009	100.0%	Weather	,,	1.2%			
Have	137	22.8%	Luceaces	<u> </u>	1.7%			
Do not have	463	77.2%	Accopany	-	0.2%			
Average No. of Trips per Day	2.0		No particular reason	2	0.3%			
Trip Purpose	009	100.0%	, .	, marketing and a second a second and a second a second and a second a second and a second and a second and a			-	
Home	154	25.7%						
Work	136	22.7%						
Business	83	13.8%			٠			
School	35	5.8%						٠
Social	12	2.0%						
Shopping	142	23.7%						
Others	38	6.3%				Source	Source: Public Transport Passenger Interview Survey	Interview Surve

A4.13 PARA-TRANSIT DRIVER INTERVIEW

A4.13.1 Design of the Survey

(1) Objective and Location

Para-transit driver interview was carried out in order to figure out the response of the para-transit drivers in case where masstransit and/or regulation on para-transit operation would be introduced and their present situations confronted. To obtain the characteristics of para-transit drivers, this interview was conducted at five (5) major bus and taxi-bus terminals. These were Central Market, Duem Kor Market, Olympic Market, Ou Ruessei Market, and Chbar Ampao Market.

(2) Survey Item

To collect necessary data and information of drivers, the interview form was designed to cover driver's characteristics and their situation. Interview form is shown in Appendix and the survey results are summarized following sections by questionnaire items. Table A4.13.1 shows outline of the bus and taxi-bus owner/driver interview.

Table A4.13.1 Outline of the Interview

Survey Item	Contents
Driver	- Nature of Job
	- Area / Route of Operation
	- Frequency of Operation
	- Average Number of Passenger
	- Charge and Cost
	- Problems for Operation
	- Future Plan

A4.13.2 Survey Output

The operational characteristics of para-transit drivers, obtained from the interview survey, is tabulated in Table A4.13.2 and summarized below:

- a. 60~75% of interviewed para-transit drivers, excluding those who answered 'no idea,' wanted to quit their jobs, if they could find other jobs, especially the motodop drivers.
- b. Average age, driver's experience, and average family size are approximately 35 years old, 4.5 (motodop) to 6.5 (cyclo) years, and 5 to 6 persons, respectively.
- c. Most of the interviewees (approximately 80%) are para-transit driver is their primary job. Remaining 20% are it is their secondary job.
- d. Average monthly fare income and expenditure of motodop, cyclo, and motorumok drivers are approximately 300 thousand Riels and 150 thousand Riels (monthly earnings is approximately US\$39), 200 thousand Riels and 100 thousand Riels (US\$26/month), and 400 thousand Riels and 200 thousand Riels (US\$52/month), respectively.
- e. Average weekly working hours is 40 to 50 hours. Motorumok drivers have the shortest among the three para-transit modes.
- f. Average daily number of trips and occupancy of motodop, cyclo, and motorumok are 9.5 trips with 1.4 persons, 8.7 trips with 1.6 persons, and 5.2 trips with 7.0 persons, respectively.
- g. Average trip length is 4.1 km by motodop, 1.8 km by cyclo and 21.1 km by motorumok.
- h. Main operating area of three modes are as follows:
 - Motodop: mainly in the CBD and partly suburban area and out of the city
 - Cyclo: mostly in the CBD and partly suburban area
 - Motorumok: only suburban area
- i. Most serious problems faced by the para-transit drivers are as follows:
 - Motodop: "Too Many Drivers" (scramble for passengers among motodop drivers)
 - Cyclo: "Not Enough Passengers"
 - Motorumok: "Accidents" because trunk roads in suburban area have only 2 lanes with opposite traffic

Table A4.13.2 Characteristics of Para-Transit Drivers

Items		Unit	Motodop	Cyclo	Motorumok
Number of Respondent	s:		450	50	25
Continuation of Busine	SS				
	Continue		23.6%	28.0%	28.0%
	Quit		64.9%	56.0%	60.0%
	No idea		11.5%	16.0%	12.0%
Average Age of Driver		Years Old	35.6	37.5	33.3
Average Business Expe	rience	Year	4.5	6.5	4.8
Average Number of Far	mily Members	Person	5.1	5.4	5.7
Nature of Business					
	Primary		80.9%	82.0%	80.0%
	Secondary		19.1%	18.0%	20.0%
Average Monthly Incom	ne	Thousand Riels	296	213	390
Average Monthly Expe	nditure	Thousand Riels	146	96	208
Average Working Days	per Week	Days	5.7	5.8	5.0
Average Working Hour	s per Day	Hours	9.0	9.2	8.3
Average Number of Tri	ps per Day	Trips	9.5	8.7	5.2
Average Number of Par	x per Trip	Person	1.4	1.6	7.0
Average Fare per Pax p	er Trip	Riels	808	755	945
Average Trip Length		km	4.1	1.8	20.1
Usual Area of Operation	n				
	Outside of the City		12.4%	0.0%	0.0%
	Within the Suburb		11.9%	14.0%	100.0%
	Within the CBD		75.7%	86.0%	0.0%
Encountered Problems					
	Accident		12.2%	17.0%	24.4%
	Robbery		18.9%	8.5%	0.0%
	Poor Pavement Condition		10.2%	1.7%	4.9%
•	Traffic Congestion		15.3%	8.5%	17.1%
	Too Many Regulations		2.9%	6.8%	12.2%
	Too Many Drivers		22.4%	5.1%	12.2%
	Not Enough Passengers		3.8%	33.9%	7.3%
	Too Expensive Cost		6.7%	10.2%	14.6%
	Not Enough Capacity		1.8%	0.0%	0.0%
	Health problems		5.8%	8.5%	7.3%

Source: Public Transport Owner/Driver Interview Survey, JICA2000

A4.14 PARA-TRANSIT PASSENGER INTERVIEW

A4.14.1 Design of Survey

(1) Objective and Location

Para-transit passenger interview was carried out in order to figure out the response of the para-transit users in case where masstransit and/or regulation on para-transit operation would be introduced and their present means of feeder transport. To obtain the characteristics of para-transit passengers, this survey was conducted at five (5) major transport facilities, such as bus and

taxi-bus terminals. These were Central Market, Duem Kor Market, Olympic Market, Ou Ruessei Market, and Chbar Ampao Market.

Currieri Item

No.	Survey Item	Contents
i.	Personal Attributes	- Gender & Age
		- Occupation & Sector
		- Driving License Hold
		- Place of Work / Study
ii.	Trip Descriptions	- Origin & Destination
		- Trip Purpose
		- Number of Sub Trips
	Criteria for Selection of	- Transport Mode
	Present Mode	- Waiting Time
		- Travel Time
		- Trip Cost / Expense
		- Reason
	Criteria for Selection of	- Intention of Use
	Proposed Mode	- Expectation to the Service
		- Affordable Trip Cost
		- Acceptable Waiting Time

Table A4.14.1 Outline of the Interview

(2) Survey Item

To collect necessary data and information of para-transit users, the interview form was designed to cover user's characteristics and their intention. Interview form is shown in Appendix and the survey results are summarized following sections by questionnaire items. Table A4.14.1 shows outline of the para-transit passenger interview.

A4.14.2 Survey Output

The general characteristics of para-transit passengers and characteristics of their trip mode are tabulated in Table A4.14.2 and summarized below.

(1) General characteristics of para-transit passengers

- a. Just half of interviewees are "Male" and "Female."
- b. Average age of interviewees is 34 years old.
- c. Major occupations of interviewees are "Shop Clerk" with 25% share, followed by "Housewife" with 14% and "Public Servant" with 13%.
- d. Major sector of interviewees are "Construction" with 11.2% share, followed by "Transport" with 10.7% and "Commerce" with 10.1%.
- e. 27.4% of interviewees possess driving license(s).
- f. Average number of daily trips of interviewees is 3.0 trips.
- g. Main purposes of the trips for interviewees are "To Work" with 27.7% share, followed by "Shopping" with 22.0% and "Business" with 20.1%.

(2) Characteristics of trip mode of para-transit passengers

- a. Almost 70% of interviewees use "Motodop" as the main trip mode, while 21% of them use "Cyclo." Meanwhile, about 5% of them use "Motorumok."
- b. Average waiting time and travel time of para-transit passengers for their trip are about 3 minutes and 20 minutes, respectively.

- c. Most of interviewees paid between 1,000 and 1,500 Riels for the trip.
- d. Major reasons for selecting the present mode are "Cheapness" with 26.1% share, followed by "Fastness" with 26.3% and "Convenience" with 20.0%.

(3) Opinion survey on introduction of city bus service

- a. 82% of interviewees answered "I will use" in the case of introduction of city bus service.
- b. 42% of them expect "Safety" for proposed bus service.
- c. 30% of them are willing to pay "500~750" Riels, meanwhile 20% will pay "750~1,000" Riels for proposed bus service.
- d. 61% of them answered that acceptable waiting time will be more than 5 minutes if the city bus service is introduced.

Table A4.14.2 Para-Transit Passenger Interview Survey Result

Percentage

Part	General Characteristics	racteristics			Characteristics of Feeeder Trip Mode	ler Trip Mode			Opinion Survey on Introduction of City Bus Se	Š
Main	Items		Number of	Percentage	Items		Vumber of Samples	Percentage		2 8
Main										
Mailer 100,005	Number of s.	amples:	906		Number of samples:		900		Number of samples:	li
Male	Sex		906	100.0%	Trip mode		006	100.0%	Will you use it?	
Pennste 450 50096 Number 140 1678 Number 140 140 140 Number 140 140 Number 140 140 Number 140 140 Number 140		Male	450	50.0%		Car	3	0.3%	Yes	
1.19 2.19 2.15		Female	450	50.0%	Taxi		14	1.6%	No	- 1
19 25 24 25 24 25 25 25 25			900	100.0%	Minibus/P	ass. Van	0	%0.0	What do you expect?	- 1
1029 368 34.28h Track/Trailer 0 0.056 3039 13.79 13.79 Motoropope 2 0.056 3039 170 1.88h Motoropope 2 0.056 3039 170 1.88h Motoropope 2 0.056 5050 10.056 1.00.056 Motoropope 2 0.056 6050 1.00.056 Motoropope 2.0 0.056 Average Age (Years Old) 3.4 1.00 1.00 Freedrance/Srif Employee 2.4 1.00 1.00 Shop Clerk 1.25 1.35 1.00 Shop Clerk 1.00 1.00 1.00 Average Transport 1.00 <td>þ</td> <td>-19</td> <td>55</td> <td>6.1%</td> <td>Pick-up/Ca</td> <td>argo Van</td> <td>2</td> <td>0.2%</td> <td>Convenient</td> <td></td>	þ	-19	55	6.1%	Pick-up/Ca	argo Van	2	0.2%	Convenient	
31.79 31.79 Large Base 0 0.09 4049 171 1.90% Monotecycle 2 0.05% 5059 70 7 7.88 Monotecycle 2 0.05% 60 10 7.0 7.88 Monotecycle 2.0 6.05% 60 11 1.2% No.0 100.0% No.0 10.1% 60 116 1.2% No.0 10.0% No.0 10.0% Frechaesc/Self Employee 116 1.2% No.0 1.0 1.0 Shop Clerk 2.24 2.4% 2.1% No.0 1.0 Pirchiacc/Self Employee 1.0 1.2% No.0 1.0 1.0 Shop Clerk 2.24 2.4% 2.1% 1.0 1.0 1.0 Company Executive 6.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 Company Executive 6.0 1.0 1.0 1.0 1.0 <td< td=""><td></td><td>20 - 29</td><td>308</td><td>34.2%</td><td>Truck/Trai</td><td>ler</td><td>0</td><td>0.0%</td><td>Cheap</td><td>- 1</td></td<>		20 - 29	308	34.2%	Truck/Trai	ler	0	0.0%	Cheap	- 1
Monorycle 2 0.26 Motorycle 2 0.26		30 - 39	285	31.7%	Large Bus		0	0.0%	Fast	H
50 - 59 70 7.8% Motodop 62.6% 69.6% 60 - 5 Average Age (Years Old) 31 1.2% Notodop 4.6% How 60 - 5 Average Age (Years Old) 34 10.0% Notodopumo 4.1 4.6% 60 - 5 116 11.2% Notodopumo 1188 20.5% How Shop Clerk 224 2.4% Average Waiting Time (Minutes) 2.8 1.0% Divier 13 13.9% Average Waiting Time (Minutes) 2.8 1.0% Company Executive 66 6.7% Average Teachine 2.0 10.0% Company Executive 66 6.7% 1.0% 1.0% 1.0% Company Executive 66 6.7% 1.0% 1.0% 1.0% Company Executive 66 6.7% 1.0% 1.0% 1.0% Octastruction 101 1.1.2% 1.0% 1.0% 1.0% Agriculture 87 9.1% 1.0% 1.0% <td< td=""><td></td><td>40 - 49</td><td>171</td><td>19,0%</td><td>Motorcycle</td><td></td><td>2</td><td>0.2%</td><td>Safe</td><td></td></td<>		40 - 49	171	19,0%	Motorcycle		2	0.2%	Safe	
GO. Hotorumo 41 4.6% Average (Years Old) 34 12% Motorumo 41 4.6% Average (Years Old) 34 10.0% How. Part of the control of the c		50 - 59	70	7.8%	Motodop		979	69.6%	Luxury	
Company Executive 224 24.9% Content 224 24.9% Company Executive 226 24.9% Convenient 226		- 09	11	1.2%	Motorumo		41	4.6%	Reliable	١
Public Servant	-	Average Age (Years Old)	34		Cyclo	-	188	20.9%	No idea	- 1
Preclames/Self Employee 116 12.9% Walk Average Weining Time (Minutes) 1.9% Average Weining Time (Minutes) 1.9% 1.9% Housewife 1.23 1.1.2% Average Travel Time (Minutes) 1.9% 1.0.0% Housewife 1.25 1.1.2% 1.2.9% 1.	Occupation		006	100.0%	Bicycle		1	0.1%	How much can you pay?	
Company Executive 224 24.9% Company Executive 13.9% Company Executive 66 7.3% Company Executive 11.7 13.0% 13.		Freelance/Self Employee	116	12.9%	Walk		4	0.4%	- 250 riels	
Housewife 77 8.6% Average Waling Time (Minutes) 2.8 Average Tavel Time (Minutes) 19.6 100.0% Sundam		Shop Clerk	224	24.9%	Others		19	2.1%	250 - 500	
Elouscewife 123 13.9% Average Travel Time (Minutes) 19.6		Driver	77	8.6%	Average Waiting Time	(Minutes)	2.8		500 - 750	- 1
Student Online 112% Trip Cost/Expense 900 10.00% Company Employee 66 7.3% 2.2 2.8% Company Employee 60 7.3% 2.2 2.8% Public Servant 117 13.0% 10.0% 7 0.8% Public Servant 117 13.0% 10.0% 10.0% 10.0% Agriculture 87 9.7% 1.000 2.15 2.1% Mining 28 3.1% 1.000 0 0.0% Industry 82 9.1% 1.000 10.0% 10.0% Conventment Service 59 6.6% 1.000 0 0 0.0% Conventment Services 59 6.6% 10.0% 10.0% 10.0% Finance/Instruction 101 1.1% 1.2% 10.0% 10.0% Finance/Instructed 54 6.0% 10.0% 10.0% 10.0% Finance/Instructed 54 2.1% 10.0% 10.0% <td></td> <td>Housewife</td> <td>125</td> <td>13.9%</td> <td>Average Travel Time (1</td> <td>Minutes)</td> <td>19.6</td> <td></td> <td>750 - 1,000</td> <td></td>		Housewife	125	13.9%	Average Travel Time (1	Minutes)	19.6		750 - 1,000	
Company Executive 66 7.3% 2.50 - 500 25 2.8% Company Employee 60 6.7 7 0.8% Public Servant 117 13.0% 100.0% 100.0% 100.0% Others 90 10.0% 100.0% 100.0% 100.0% 100.0% Agriculture 87 9.7% 1000-1,500 0 0.0% 100.0% Industry 28 3.1% 2.000- 1.000-2,000 0 0.0% Industry 28 10.7% Constituction 10.1 11.2% 2.000- 0 0.0% Constituction 10.1 11.2% Constituction 10.1 Why do you use this? 900 100.0% Why do you use this? 900 100.0% Commerce 59 6.6% Step 6.6% East 1.0% 1.0% 1.0% 1.0% 1.0% 1.0% 1.0% 1.0% 1.0% 1.0% 1.0% 1.0% 1.0% 1.0% 1.0% 1.		Student	101	11.2%	Trip Cost/Expense		8	100.0%	1,000 - 1,500	
Company Employee 60 6.7% 220 - 500 7 0.8% Public Servant 117 1.6% 70 - 500 7 0.8% Others 14 1.6% 750 - 1,000 215 23.9% Why Agriculture 87 9.7% 1,000 - 1,000 566 65.1% Why 0.0% 10.0% Mining 28 3.1% 1,000 - 1,000 0 0.0% Why 0.0% 0.0% 0.0% Why 0.0%		Company Executive	99	7.3%	- 250 riels		25	2.8%	1,500 - 2,000	-
Public Servant 117 13.0% 500 - 750 67 74% Why Others 14 1.6% 760 - 1500 21.5 23.9% Why Agriculture 87 9.7% 100.0% 1.500 - 2.000 0 0.0% Mining 28 9.1% 2.000 - 2.000 0 0.0% Industry 82 9.1% Convenient 0 0.0% Industry 82 9.1% Convenient 22.000 - 2.000 0 0.0% Industry 96 10.7% East 2.000 - 2.000 0 0.0% Government Service 59 6.6% Cheep 242 26.9% Government Service 91 10.1% Rait 9.2 1.0% Finance/Insurance 54 6.6% Safe 84 9.3% Other Services 30 100.0% Weather 34 3.6% Inconst 53 7.4% 8.2% 1.0% For ont have		Company Employee	. 09	6.7%	250 - 500		7	0.8%	2,000 -	- 1
Others 14 1.6% 750 - 1,000 215 23.9% Why Agriculture 900 100.0% 1,000 - 1,500 586 65.1% Why Ministry 82 9.1% 2,000 - 2,000 0 0,0% Industry 82 9.1% Construction 101 11.2% Cheap 24.7 26.9% Construction 101 11.2% Cheap 24.7 26.9% Mby do you use this? 900 100.0% Government Services 59 6.6% Cheap 24.7 26.9% Finance/fusurance 54 6.0% Sate 9.3% Accopany 1.00.0% Finance/fusurance 54 6.0% Reliable 34 9.3% Other Services 900 100.0% Reliable 34 3.8% Flower 11 12.3% Accopany 7 0.8% No of Trips per Day 30 100.0% Accopany 7 0.0% School		Public Servant	117	13.0%	500 - 750		67	7.4%	No idea	- 1
Agriculture 900 100.05% 1,000-1,500 586 65.1% Abriculture 87 9.7% 1,000-2,000 0 0.0% Industry 82 9.1% 1,000-2,000 0 0.0% Construction 101 11.2% 1,000-2,000 0 0.0% Construction 101 11.2% Convenient 180 20.0% Construction 101 11.2% Convenient 180 20.0% Construction 29 10.7% East 23.7 26.3% Construction 29 10.7% East 23.7 26.3% Construction 20 10.0% East 23.7 26.3% Construction 20 10.0% East 23.7 26.3% Construction 20 10.0% East 23.7 26.3% Construction 24 27.4% East 23.4 3.8% Construction 24 27.4% East 23.4 3.8% Construction 24 27.4% East 23.4 3.8% Construction 24 27.7% East 22.2% Construction 25 6.1% East 22.2% Construction 27 28.8% Construction 28 29.1% East 29.2% Construction 27 26.3% 29.2% Construction 27 26.3% 29.2% Convenient 24 27.4% 29.2% 29.2% Convenient 24 27.4% 29.2% C		Others	14	1.6%	750 - 1,00	0	215	23.9%	Why long can you wait?	- 1
Agriculture 87 9.7% 1.500-2,000 0 0.0% Mining 28 3.1% 2000- 0 0.0% Industry 82 9.1% 2000- 0 0.0% Construction 101 11.2% Cheap 20.0% 100.0% Transport 59 6.6% Sector 22.0% 20.0% Government Service 59 6.6% Sate 242 26.9% Government Services 54 6.0% Inxury 9 1.0% Finance/Insurance 54 6.0% Sate 84 9.3% Commerce 59 10.0% Inxury 9 1.0% Finance/Insurance 54 6.0% Inxury 9 1.0% Other Services 302 27.4% Retable 34 3.8% Hance 131 11.2.3% Accopany 7 0.8% Bo not have 53 27.1% No particular reason 0	Sector		006	100.0%	1,000 - 1,5	200	586	65.1%	- 5 Minutes	- 1
funing 28 3.1% 2,000 - 0 0.0% nedustry 82 9.1% Why do you use this? 900 100.0% construction 101 11.2% Convenient 180 20.0% construction 96 10.7% Cheap 242 26.9% ransport 91 10.1% Cheap 242 26.9% connector 91 10.1% Cheap 242 26.3% connector 54 6.0% Reliable 34 3.3% sinance/fusurance 54 6.0% Images Neather 34 3.3% sinance/fusurance 54 27.4% Reliable 34 3.3% sine 247 27.4% Accopany 7 0.8% Ave 249 27.7% No particular reason 0 0.0% Avik 249 27.7% Accopany 7 0.0% Avik 21 23.6% Accopany 0		Agriculture	87	9.7%	1,500 - 2,0	900	0	0.0%	5-10	ĺ
odustry 82 9.1% Why do you use this? 900 100.0% construction 101 11.2% Convenient 180 20.0% ransport 96 10.7% Cheap 242 26.9% ransport 59 6.6% Safe 84 9.3% connecte 91 10.1% East 26.3% 26.3% commerce 91 10.1% East 26.3% 26.3% commerce 90 100.0% Reliable 34 3.8% liter Services 900 100.0% Reliable 34 3.8% store 50 100.0% Weather 34 3.8% Accopany 7 0.8% Accopany 7 0.8% Not 247 2.4% 2.4% Och 100.0% No particular reason 0 0.0% Not 249 2.7% Accopany 7 0.8% Och 200 <td>-</td> <td>Mining</td> <td>28</td> <td>3.1%</td> <td>2,000 -</td> <td></td> <td>0</td> <td>0.0%</td> <td>10 - 15</td> <td>- 1</td>	-	Mining	28	3.1%	2,000 -		0	0.0%	10 - 15	- 1
Construction 10.1 11.2% Convenient 180 20.0% ransport 96 10.7% Cheap 242 26.9% ransport 59 6.6% East 242 26.9% rowenment Service 59 6.6% Safe 84 9.3% commerce 54 6.0% Inviny 9 1.0% chery 33.6% Inviny 9 1.0% chery 247 27.4% Reliable 34 3.8% Ase 247 27.4% Accopany 7 0.8% Ase 50 100.0% Accopany 7 0.8% Ase 249 27.7% Accopany 7 0.8% Asis 249 27.7% Accopany 0 0.0% Asis 249 22.0% Accopany 0 0.0% School 198 22.0% Accopany 0 0.0% School 198		Industry	82	9.1%	-		8	100.0%	15 - 20	- 1
Transport 96 10.7% Cheap 242 26.9% Foverament Service 59 6.6% Fast 237 26.3% Sowerament Services 91 10.1% East 237 26.3% Sommerce 91 10.1% East 237 26.3% Since Finance/Insurance 54 6.0% Insurance/Insurance 84 9.3% Inter Services 302 33.6% Reliable 34 1.0% Inter Services 300 100.0% Reliable 34 3.3% Inter Services 300 100.0% Reliable 34 3.3% Inter Services 300 100.0% Accopany 7 0.8% Action Inter Services 30 100.0% Accopany 7 0.8% Action Inter Services 30 100.0% Accopany Accopany 7 0.8% Action Inter Services 111 12.3% Accopany 7 0.8% Action Inter Serv	.,,	Construction	101	11.2%		14	180	20.0%	20 - 30	- 1
Sovernment Service 59 6.6% Fast 237 26.3% Sommerce 91 10.1% Safe 84 9.3% Summerce 54 6.0% 10.1% Luxuny 9 1.0% Suber Services 302 33.6% Reliable 34 9.3% Stee 900 100.0% Weather 33 3.1% Sound have 653 72.4% Accopany 7 0.8% On out have 653 71.6% No particular reason 0 0.0% Sortine 111 12.3% No particular reason 0 0.0% Sortine 249 27.7% Accopany 0 0.0% School 181 20.1% Accopany Accopany Accopany Aor 249 27.7% Accopany Accopany Accopany School 18 22.0% Accopany Accopany Accopany Aor 21 23.6% Accopany <td></td> <td>Transport</td> <td>96</td> <td>10.7%</td> <td></td> <td></td> <td>242</td> <td>26.9%</td> <td>30-</td> <td>ı</td>		Transport	96	10.7%			242	26.9%	30-	ı
Commerce 91 10.1% Safe 84 9.3% Namece/Insurance 54 6.0% Luxury 9 1.0% Diter Services 302 33.6% Reliable 34 3.8% Stee 90 100.0% Weather 33 3.7% Iave 247 27.4% Accopany 7 0.8% You 100.0% Accopany 7 0.8% Onter Services 30 100.0% 7 0.8% Jon tot lave 653 77.4% 82% Accopany 7 0.8% Aor 11 12.3% Aor 249 27.7% Chool 85 9.4% Social 22.0% Others 55 6.1%		Government Service	65	6.6%	Fast		237	26.3%	No idea	- 1
Inance/Insurance 54 6.0% Luxury 9 1.0% Other Services 302 33.6% Reliable 34 3.8% see 900 100.0% Weather 34 3.8% fave 247 27.4% Weather 33 3.7% fon to have 653 72.6% Accopany 7 0.8% forme 11 12.3% Accopany 0 0.0% forme 111 12.3% Accopany 0 0.0% forme 181 20.1% Accopany 7 0.0% choose 181 20.1% Accopany Accopany Accopany Accopany forme 181 20.1% Accopany Accopany Accopany Accopany forme 182.0% Accopany Accopany Accopany Accopany Accopany forme 249 27.7% Accopany Accopany Accopany Accopany chost		Commerce	16	10.1%	Safe	-	84	93%		
se 30.2 33.6% Reliable 34 3.8% se 90.0 100.0% Weather 33 3.7% fave 247 27.4% 100.0% 7 82.8 for not have 653 72.6% Accopany 7 0.8% for not have 653 77.6% Accopany 7 0.8% of Trips per Day 3.0 100.0% Accopany 7 0.8% forme 11 12.3% Accopany 0 0.00% forme 249 27.7% Accopany 0 0.00% forme 181 20.1% Accopany Accopany Accopany Accopany forme 181 20.1% Accopany Accopany Accopany Accopany forme 249 27.7% Accopany Accopany Accopany Accopany forme 249 27.7% Accopany Accopany Accopany Accopany forme		Finance/Insurance	54	6.0%	Luxury		9	1.0%		
se 900 100.0% Weather 33 3.7% Lave 247 27.4% 7.2.6% 1.00.0% 7 8.2% Luggages 7.2.6% Accopany 7 0.8% Sof Trips per Day 3.0 100.0% 7 0.8% Sof Trips per Day 900 100.0% 7 0.8% Nork 249 27.7% Accopany 0 0.0% Nork 249 27.7% Accopany 0 0.0% Subsiness 181 20.1% Accopany 0 0.0% School 249 27.7% Accopany Accopany 0 0.0% School 181 20.1% Accopany		Other Services	302	33.6%	Reliable		34	3.8%		
Luggages 74 8.2% Accopany 7 0.0% of Trips per Day 3.0 100.0% 7 0.8% of Trips per Day 3.0 100.0% 7 0.8% fome 111 12.3% 0.0% Nork 249 27.7% 0.1% School 85 9.4% Sichol 198 22.0% Others 55 6.1%	Driving Lic	ense	900	100.0%			33	3.7%		
So not have 653 72.6% Accopany 7 0.8% of Trips per Day 3.0 100.0% No particular reason 0 0.0% fome 111 12.3% 0.0% 0.0% Nork 249 27.7% 0.1% School 85 9.4% Social 21 2.3% Shopping 198 22.0% Others 55 6.1%)	Have	247	27.4%			74	8.2%		
of Trips per Day 3.0 No particular reason 0 0.0% fome 111 12.3% 0.0% 100.0%		Do not have	653	72.6%			7	0.8%		
fome 900 100.0% Aork 249 27.7% Susiness 181 20.1% school 85 9.4% social 21 2.3% Shopping 198 22.0% Others 55 6.1%	Average No	o. of Trips per Day	3.0		No partica	ılar reason	0	0.0%		
forme 111 12.3% Nork 249 27.7% ausiness 181 20.1% school 85 9.4% social 21 2.3% Shopping 198 22.0% Others 55 6.1%	Trio Puros	Se	900	100.0%					•	
ss 249 27.7% ss 181 20.1% ss 9.4% ss 6.1%	•	Ноше	111	12.3%						
5.55 181 20.1% 1 85 9.4% 2 21 2.3% sing 198 22.0% s 55 6.1%		Work	249	27.7%						
85 9.4% 21 2.3% 18 22.0% 55 6.1%		Business	181	20.1%			-			
12 2.3% 18 22.0% 55 6.1%		School	85	9.4%	-					
ng 198 22.0% 55 6.1%	_	Social	21	2.3%				4		
55 6.1%		Shopping	198	22.0%						
		Others	55	6.1%					Source: Public Transport Passenger inte	꾩