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## **APPENDIX 3**

### **TRAFFIC DEMAND ANALYSIS**

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## APPENDIX 3 TRAFFIC DEMAND ANALYSIS

### AP 3.1 Current Road Network and Traffic Conditions

#### AP 3.1.1 General Description of Traffic Survey

(1) Introduction of Traffic Survey

Traffic survey was carried out to understand the current traffic situation and issues in Neak Loeung area and neighboring area. As a result of this survey, the collected data and information is used to formulate the future traffic demand model.

(2) Kinds of Traffic Survey

The traffic survey consists of the following five surveys.

- Traffic Count Survey
- Occupant Count Survey
- Passenger Interview Survey
- Truck License Plate Survey
- Willingness to Pay

(3) Outline of the Survey

The relevant traffic survey will be carried out at four (4) survey sites in combination with different types of surveys (see Table AP3.1.1).

**Table AP3.1.1 Survey Locations and Categories**

| Survey Category     | Survey Location   |               |                 |          |
|---------------------|-------------------|---------------|-----------------|----------|
|                     | Neak Loeung Ferry | Kizuna Bridge | National Border |          |
|                     |                   |               | Bavet*1         | Samach*2 |
| Traffic count       | ●                 | ■             | ○               | ○        |
| Occupant count      | ○                 | ○             |                 |          |
| Passenger interview | ○                 | ○             |                 |          |
| Truck license plate | ○                 | ○             | ○               | ○        |
| Willingness to pay  | △                 | △             |                 |          |

Note:\*1) Border of Vietnam, NR 1

\*2) Border of Vietnam, NR 72

\*3) ●: 17 hours survey for 7 days.

■: 17 hours survey for 7 days including 24 hours survey on 1 weekday within the 7 days.

○: survey for 4 days (two weekdays and Saturday & Sunday)

△: one weekday

(4) Survey Period

Figure AP3.1.1 shows the duration of this survey. This survey was carried out from 26<sup>th</sup> May 2004 until 4<sup>th</sup> June 2004. Duration of the survey is different from each survey and each location.

| <b>Neak Loeng</b>   |                                  |                                  |                             |                                 |                             |                             |                             |
|---------------------|----------------------------------|----------------------------------|-----------------------------|---------------------------------|-----------------------------|-----------------------------|-----------------------------|
| Day                 | 1                                | 2                                | 3                           | 4                               | 5                           | 6                           | 7                           |
| Date                | 29-May-04<br>Sat.<br>Non-weekday | 30-May-04<br>Sun.<br>Non-weekday | 31-May-04<br>Mon<br>Weekday | 01-Jun-04<br>Tue<br>Non-weekday | 02-Jun-04<br>Wed<br>Weekday | 03-Jun-04<br>Thu<br>Weekday | 04-Jun-04<br>Fri<br>Weekday |
| Traffic Count       | 5:00 21:00<br>[Bar]              | 5:00 21:00<br>[Bar]              | 5:00 21:00<br>[Bar]         | 5:00 21:00<br>[Bar]             | 5:00 21:00<br>[Bar]         | 5:00 21:00<br>[Bar]         | 5:00 21:00<br>[Bar]         |
| Occupant Count      | 5:00 21:00<br>[Bar]              | 5:00 21:00<br>[Bar]              | 5:00 21:00<br>[Bar]         | 5:00 21:00<br>[Bar]             |                             |                             |                             |
| Passenger Interview | 5:00 21:00<br>[Bar]              | 5:00 21:00<br>[Bar]              | 5:00 21:00<br>[Bar]         | 5:00 21:00<br>[Bar]             |                             |                             |                             |
| Truck License Plate | 5:00 21:00<br>[Bar]              | 5:00 21:00<br>[Bar]              | 5:00 21:00<br>[Bar]         | 5:00 21:00<br>[Bar]             |                             |                             |                             |
| Willingness to Pay  |                                  |                                  |                             |                                 |                             | 5:00 21:00<br>[Bar]         |                             |

| <b>Kizuna Bridge</b> |                                  |                                  |                             |                                 |                             |                             |                             |
|----------------------|----------------------------------|----------------------------------|-----------------------------|---------------------------------|-----------------------------|-----------------------------|-----------------------------|
| Day                  | 1                                | 2                                | 3                           | 4                               | 5                           | 6                           | 7                           |
| Date                 | 29-May-04<br>Sat.<br>Non-weekday | 30-May-04<br>Sun.<br>Non-weekday | 31-May-04<br>Mon<br>Weekday | 01-Jun-04<br>Tue<br>Non-weekday | 02-Jun-04<br>Wed<br>Weekday | 03-Jun-04<br>Thu<br>Weekday | 04-Jun-04<br>Fri<br>Weekday |
| Traffic Count        | 5:00 21:00<br>[Bar]              | 5:00 21:00<br>[Bar]              | 5:00 21:00<br>[Bar]         | 5:00 21:00<br>[Bar]             | 5:00 21:00<br>[Bar]         | 5:00 21:00<br>[Bar]         | 5:00 21:00<br>[Bar]         |
| Occupant Count       | 5:00 21:00<br>[Bar]              | 5:00 21:00<br>[Bar]              | 5:00 21:00<br>[Bar]         | 5:00 21:00<br>[Bar]             |                             |                             |                             |
| Passenger Interview  | 5:00 21:00<br>[Bar]              | 5:00 21:00<br>[Bar]              | 5:00 21:00<br>[Bar]         | 5:00 21:00<br>[Bar]             |                             |                             |                             |
| Truck License Plate  | 5:00 21:00<br>[Bar]              | 5:00 21:00<br>[Bar]              | 5:00 21:00<br>[Bar]         | 5:00 21:00<br>[Bar]             |                             |                             |                             |
| Willingness to Pay   |                                  |                                  |                             |                                 |                             | 5:00 21:00<br>[Bar]         |                             |

| <b>Bavet National Border</b> |                                  |                                  |                             |                                 |                             |                             |                             |
|------------------------------|----------------------------------|----------------------------------|-----------------------------|---------------------------------|-----------------------------|-----------------------------|-----------------------------|
| Day                          | 1                                | 2                                | 3                           | 4                               | 5                           | 6                           | 7                           |
| Date                         | 29-May-04<br>Sat.<br>Non-weekday | 30-May-04<br>Sun.<br>Non-weekday | 31-May-04<br>Mon<br>Weekday | 01-Jun-04<br>Tue<br>Non-weekday | 02-Jun-04<br>Wed<br>Weekday | 03-Jun-04<br>Thu<br>Weekday | 04-Jun-04<br>Fri<br>Weekday |
| Traffic Count                | 5:00 21:00<br>[Bar]              | 5:00 21:00<br>[Bar]              | 5:00 21:00<br>[Bar]         | 5:00 21:00<br>[Bar]             |                             |                             |                             |
| Truck License Plate          | 5:00 21:00<br>[Bar]              | 5:00 21:00<br>[Bar]              | 5:00 21:00<br>[Bar]         | 5:00 21:00<br>[Bar]             |                             |                             |                             |

| <b>Samach National Border</b> |                                  |                                  |                             |                                 |                             |                             |                             |
|-------------------------------|----------------------------------|----------------------------------|-----------------------------|---------------------------------|-----------------------------|-----------------------------|-----------------------------|
| Day                           | 1                                | 2                                | 3                           | 4                               | 5                           | 6                           | 7                           |
| Date                          | 29-May-04<br>Sat.<br>Non-weekday | 30-May-04<br>Sun.<br>Non-weekday | 31-May-04<br>Mon<br>Weekday | 01-Jun-04<br>Tue<br>Non-weekday | 02-Jun-04<br>Wed<br>Weekday | 03-Jun-04<br>Thu<br>Weekday | 04-Jun-04<br>Fri<br>Weekday |
| Traffic Count                 | 5:00 21:00<br>[Bar]              | 5:00 21:00<br>[Bar]              | 5:00 21:00<br>[Bar]         | 5:00 21:00<br>[Bar]             |                             |                             |                             |
| Truck License Plate           | 5:00 21:00<br>[Bar]              | 5:00 21:00<br>[Bar]              | 5:00 21:00<br>[Bar]         | 5:00 21:00<br>[Bar]             |                             |                             |                             |

Figure AP3.1.1 Duration of Traffic Survey

(5) Survey Location

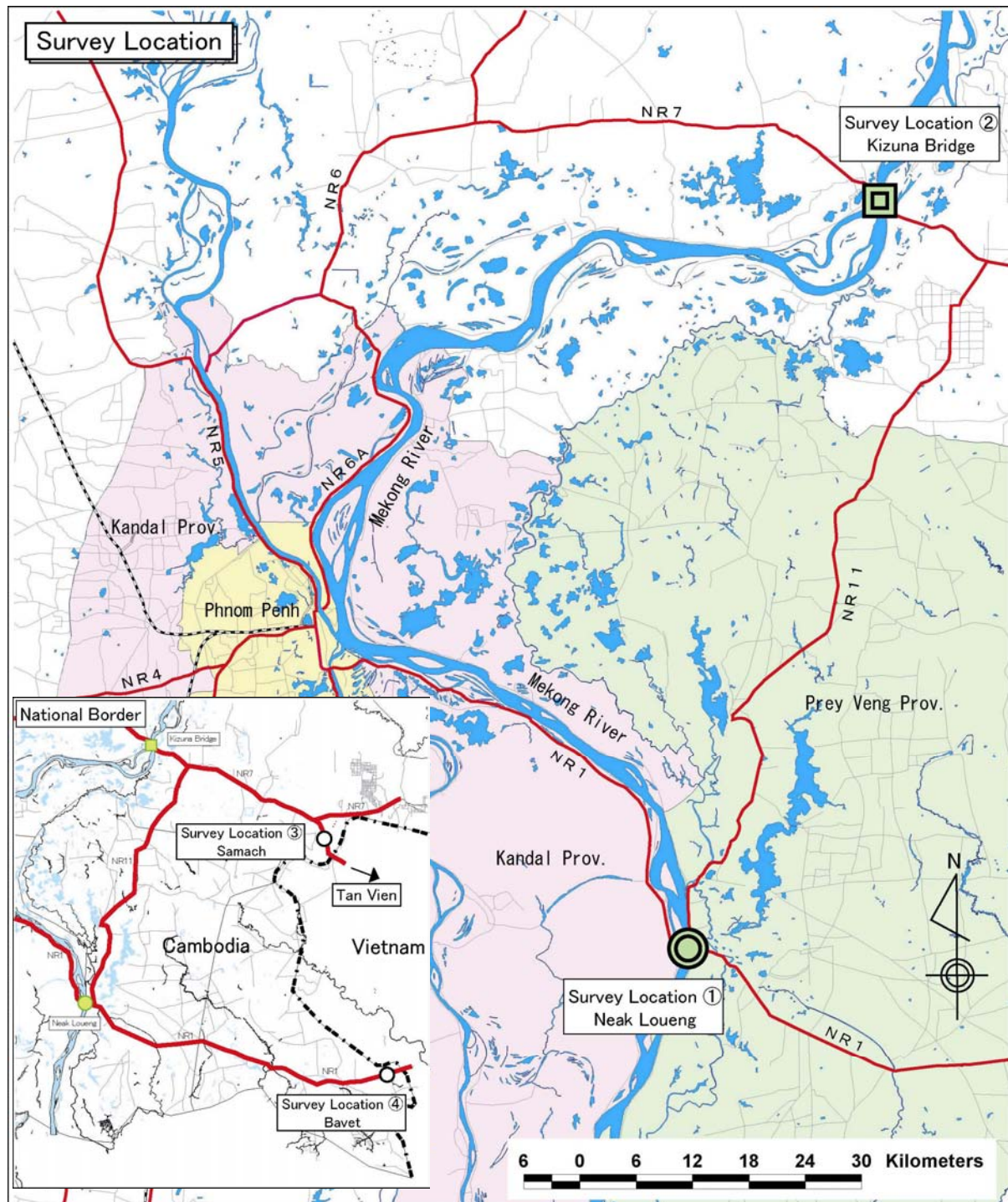


Figure AP3.1.2 Location Map

(6) Survey Form

Passenger Interview Survey

|                  |            |                   |             |       |
|------------------|------------|-------------------|-------------|-------|
| Survey Location: | Direction: | Survey Personnel: | Supervisor: | Date: |
|                  |            |                   |             |       |

FORM OF PASSENGER/DRIVER INTERVIEW SURVEY

At Kizuna Bridge and Neak Loeng

1

Attribute

(1)

Resident

☐

(Fill in with zone code No.)

1

Phnom Penh City ( )

2

Province ( )

3

District ( )

4

Others ( )

(2)

Sex

☐

1

Male

2

Female

(3)

Age

☐

1

14 or less

2

15 – 20

3

21 – 30

4

31 - 40

5

41 - 50

6

51 and more

(4)

Occupation

☐

1

Student

2

House wife

3

Agriculture / forestry / fishery sector

4

Mining / Industry sector

5

Governmental officer

6

Service sector

7

Others ( )

8

No occupation

2

Type of mode

☐

1

Motorbike / Motor Tricycle

2

Motorbike Trailer

3

Sedan / Wagon / Light Van

4

Pick-up / Jeep / Light Truck

5

Short & Long Body Bus

6

Short & Long Body Truck

7

Semi & Full Trailer Truck

8

Bicycle

Passenger Interview Survey

9) Cyclo / Pedal Bike Trailer

10) Pedestrian / Cart

11) Ox / Horse Farm Trailer

3

Purpose of trip

☐

1

To work

2

To school

3

To shop / market

4

To business

5

To others

6

To home

7

Others

4

Origin and destination of trip

☐

(fill in with zone code No.)

4.1

Origin (come from)

☐

(fill in with zone code No.)

1

Phnom Penh City ( )

2

Province ( )

3

District ( )

4

Ho Chi Minh

5

Can Tho

6

Other Vietnam

7

Others ( )

4.2

Destination (go to)

☐

(fill in with zone code No.)

1

Phnom Penh City ( )

2

Province ( )

3

District ( )

4

Ho Chi Minh

5

Can Tho

6

Other Vietnam

7

Others ( )

5

Travel time

What is expected travel time on today trip (from origin to destination)?

1

1.0 hour or less

2

1.1 – 2.1 hours

3

2.0 – 3.0 hours

4

3.1 – 4.0 hours

5

4.1 – 5.0 hours

6

5.1 – 6.0 hours

7

More than 6 hours

8

Unknown

6

Cargo (Truck only / type of mode 6 & 7)

☐

1

Type of cargo

2

Empty (no cargo)

3

Agriculture (rice, corn vegetable, fruits, livestock, etc)

Figure AP3.1.3 Survey Form for Passenger Interview Survey (1/2)



| Survey Location: | Direction: | Survey Personnel: | Supervisor: | Date: |
|------------------|------------|-------------------|-------------|-------|
|                  |            |                   |             |       |

**SURVEY FORM FOR INVESTIGATION ON WILLINGNESS TO PAY  
(FOR KIZUNA BRIDGE)**

- | 1   | Attribute                                                             |
|-----|-----------------------------------------------------------------------|
| (1) | <b>Resident</b> <input type="checkbox"/> (Fill in with zone code No.) |
| 1)  | Phnom Penh City ( )                                                   |
| 2)  | Province ( )                                                          |
| 3)  | District ( )                                                          |
| 4)  | Others ( )                                                            |
| (2) | <b>Sex</b> <input type="checkbox"/>                                   |
| 1)  | Male                                                                  |
| 2)  | Female                                                                |
| (3) | <b>Age</b> <input type="checkbox"/>                                   |
| 1)  | 15 or less                                                            |
| 2)  | 15 - 20                                                               |
| 3)  | 21 - 30                                                               |
| 4)  | 31 - 40                                                               |
| 5)  | 41 - 50                                                               |
| 6)  | 51 and more                                                           |
| (4) | <b>Occupation</b> <input type="checkbox"/>                            |
| 1)  | Student                                                               |
| 2)  | House wife                                                            |
| 3)  | Agriculture / forestry / fishery sector                               |
| 4)  | Mining / Industry sector                                              |
| 5)  | Governmental officer                                                  |
| 6)  | Service sector                                                        |
| 7)  | Others ( )                                                            |
| 8)  | No occupation                                                         |

- | 2  | Type of mode                 | <input type="checkbox"/> |
|----|------------------------------|--------------------------|
| 1) | Motorbike / Motor Tricycle   |                          |
| 2) | Motorbike Trailer            |                          |
| 3) | Sedan / Wagon / Light Van    |                          |
| 4) | Pick-up / Jeep / Light Truck |                          |
| 5) | Short & Long Body Bus        |                          |
| 6) | Short & Long Body Truck      |                          |
| 7) | Semi & Full Trailer Truck    |                          |
| 8) | Bicycle                      |                          |

- 9) Cyclo / Pedal Bike Trailer  
10) Pedestrian / Cart  
11) Ox / Horse Farm Trailer

- 3 Purpose of trip

- 1) To work
- 2) To school
- 3) To shop / market
- 4) To business
- 5) To others
- 6) To home
- 7) Others

- 4
- Origin and destination of trip**

- 4.1 Origin (come from) ☐ (Fill in with zone code No.)

- 1) Phnom Penh City ( )
- 2) Province ( )
- 3) District ( )
- 4) Ho Chi Minh
- 5) Can Tho
- 6) Other Vietnam
- 7) Others ( )

- 4.2 Destination (go to) ☐ (Fill in with zone code No.)
- 1) Phnom Penh City ( )

- 2) Province ( )
- 3) District ( )
- 4) Ho Chi Minh
- 5) Can Tho
- 6) Other Vietnam
- 7) Others ( )

- ## 5 Travel time

What is expected travel time on today trip (from origin to destination)?

- 1) Less than 1.0 hour
- 2) 1.1 – 2.1 hours
- 3) 2.0 – 3.0 hours
- 4) 3.1 – 4.0 hours
- 5) 4.1 – 5.0 hours
- 6) 5.1 – 6.0 hours
- 7) More than 6 hours
- 8) Unknown

#### Figure AP3.1.4 Survey Form for Willingness to Pay at Kizuna Bridge (1/3)

Revised 3v for Kizuna Bridge

6

Average trip frequencies to use this bridge in a week

1

Less than 5 times per a week (go and back is 2 time)

2

5 - 10 times

3

11 - 15 times

4

16 - 20 times

5

21 times and more

6

Not sure

7

Cargo (Truck only / type of mode 6 & 7)

1

Type of cargo

1

Empty (no cargo)

2

Agriculture (rice, corn vegetable, fruits, etc)

3

Forest (log, timber, plywood, etc)

4

Marine (fish, shell, seaweed, etc)

5

Mineral (coal, copper, iron, salt, etc)

6

Metal & machine (steel, generator, car, bike, etc)

7

Chemical (petroleum, alcohol, acid, etc)

8

Light industry/Electronics (machine parts, IC, electronic appliances, etc)

9

Miscellaneous (garment, shoes, etc)

10

Construction (sand, gravel, asphalt, concrete, steel-bar, steel-beam, etc)

11

Others

(2)

Loading capacity of trucks

1

Less than 0.5 ton

2

0.6 - 1.0 ton

3

1.1 - 2.0 ton

4

2.1 - 4.0 ton

5

4.1 - 5.0 ton

6

5.1 - 6.0 ton

7

More than 6.1 ton

(3)

Loading Volume

1

0 (empty)

2

1/4 of capacity

3

1/2 of capacity

4

3/4 of capacity

5

Full capacity

8

Possible alternative route

(1)

Have you ever considered choosing the Neak Loeng route in place of Kuzuna Bridge route?

1

Yes once considered

Why did you choose the Kizuna Bridge route today?

1

Shorter travel time / distance

-3-

Revised 3v for Kizuna Bridge

2

Toll is free

3

Good road condition / comfortable

4

Good security

5

Less cargo damage

6

Night trip is possible

7

No waiting time for ferry

8

Other reasons ( )

2

No

Why did not you consider the Neak Loeng route?

1

Longer travel time / distance

2

Toll is charged

3

Bad road condition / uncomfortable

4

Bad security

5

More cargo damage

6

Night trip is impossible

7

Much waiting time for ferry service

8

Other reasons ( )

(2)

If the following toll was charged to cross Kizuna Bridge with no ferry service, still will you use the bridge?

1

1,000 Riel or less

1 Yes 2 No

2

1,001 - 3,000 Riel

1 Yes 2 No

3

3,001 - 5,000 Riel

1 Yes 2 No

4

5,001 - 7,500 Riel

1 Yes 2 No

5

7,501 - 10,000 Riel

1 Yes 2 No

6

10,000 - 25,000 Riel

1 Yes 2 No

7

25,001 - 50,000 Riel

1 Yes 2 No

8

More than 50,000 Riel

1 Yes 2 No

In case "No", how do you cross the Mekong River?

1

Give up crossing the Mekong River

2

Choose an alternative route such as Neak Loeng through National Rd 11

3

Others ( )

4

Not sure

(3)

If there was a bridge at Neak Loeng

If there was a bridge at Neak Loeng and you can pass it free of charge. Do you choose the Neak Loeng route in place of Kizuna Bridge?

1

Yes

Reason for choice of Neak Loeng route

1

Shorter travel time / distance

2

Toll is free

3

Good road condition / comfortable

-4-

Figure AP3.1.4 Survey Form for Willingness to Pay at Kizuna Bridge (2/3)

AP3-7



Revised 3x for Kizuna Bridge

4) Good security

5) Less cargo damage

6) Night trip is possible

7) No waiting time for ferry

8) Other reasons (    )

2) No ☐

Reason for not choosing the Neak Loeng route

1) Long travel time / distance

2) Bad road condition / uncomfortable

3) Bad security

4) Much cargo damage

5) Few restaurants and rest-places

6) Other reasons (    )

(4) If toll is charge for the use of the new bridge at Neak Loeng, as follows, do you use the Neak Loeng route? (in case above answer is "Yes")

1) 1,000 Riel or less

2) 1,001 – 2,500 Riel

3) 2,501 – 5,000 Riel

4) 5,001 – 7,500 Riel

5) 7,501 – 10,000 Riel

6) 10,001 – 25,000 Riel

7) 25,001 – 50,000 Riel

8) Not sure

1 Yes

2 No

1 Yes

2 No

1 Yes

2 No

1 Yes

2 No

1 Yes

2 No

1 Yes

2 No

1 Yes

2 No

1 Yes

2 No

-5-

Figure AP3.1.4 Survey Form for Willingness to Pay at Kizuna Bridge (3/3)

AP3-8

Revised 2 for Neak Loeung

|                     |            |                   |             |       |
|---------------------|------------|-------------------|-------------|-------|
| 1) Survey Location: | Direction: | Survey Personnel: | Supervisor: | Date: |
|                     |            |                   |             |       |

SURVEY FORM FOR INVESTIGATION ON WILLINGNESS TO PAY  
(FOR NEAK LOEUNG)

1 Attribute

(1) Resident ☐ (Fill in with zone code No.)

1) Phnom Penh City ( )

2) Province ( )

3) District ( )

4) Others ( )

(2) Sex ☐

1) Male

2) Female

(3) Age ☐

1) 14 or less

2) 15 – 20

3) 21 – 30

4) 31 - 40

5) 41 - 50

6) 51 and more

(4) Occupation ☐

1) Student

2) House wife

3) Agriculture / forestry / fishery sector

4) Mining / Industry sector

5) Governmental officer

6) Service sector

7) Others ( )

8) No occupation

2 Type of mode ☐

1) Motorbike / Motor Tricycle

2) Motorbike Trailer

3) Sedan / Wagon / Light Van

4) Pick-up / Jeep / Light Truck

5) Short & Long Body Bus

6) Short & Long Body Truck

7) Semi & Full Trailer Truck

8) Bicycle

Revised 2 for Neak Loeung

9) Cyclo / Pedal Bike Trailer

10) Pedestrian / Cart

11) Ox / Horse Farm Trailer

3 Purpose of trip ☐

1) To work

2) To school

3) To shop / market

4) To business

5) To others

6) To home

7) Others

4 Origin and destination of trip

4.1 Origin (come from) ☐ (Fill in with zone code No.)

1) Phnom Penh City ( )

2) Province ( )

3) District ( )

4) Ho Chi Minh

5) Can Tho

6) Other Vietnam

7) Others ( )

4.2 Destination (go to) ☐ (Fill in with zone code No.)

1) Phnom Penh City ( )

2) Province ( )

3) District ( )

4) Ho Chi Minh

5) Can Tho

6) Other Vietnam

7) Others ( )

5 Travel time

What is expected travel time on today trip (from origin to destination)?

1) 1.0 hour or less

2) 1.1 – 2.1 hours

3) 2.0 – 3.0 hours

4) 3.1 – 4.0 hours

5) 4.1 – 5.0 hours

6) 5.1 – 6.0 hours

7) More than 6 hours

8) Unknown

AP3-9

Figure AP3.1.5 Survey Form for Willingness to Pay at Neak Loeung (1/2)



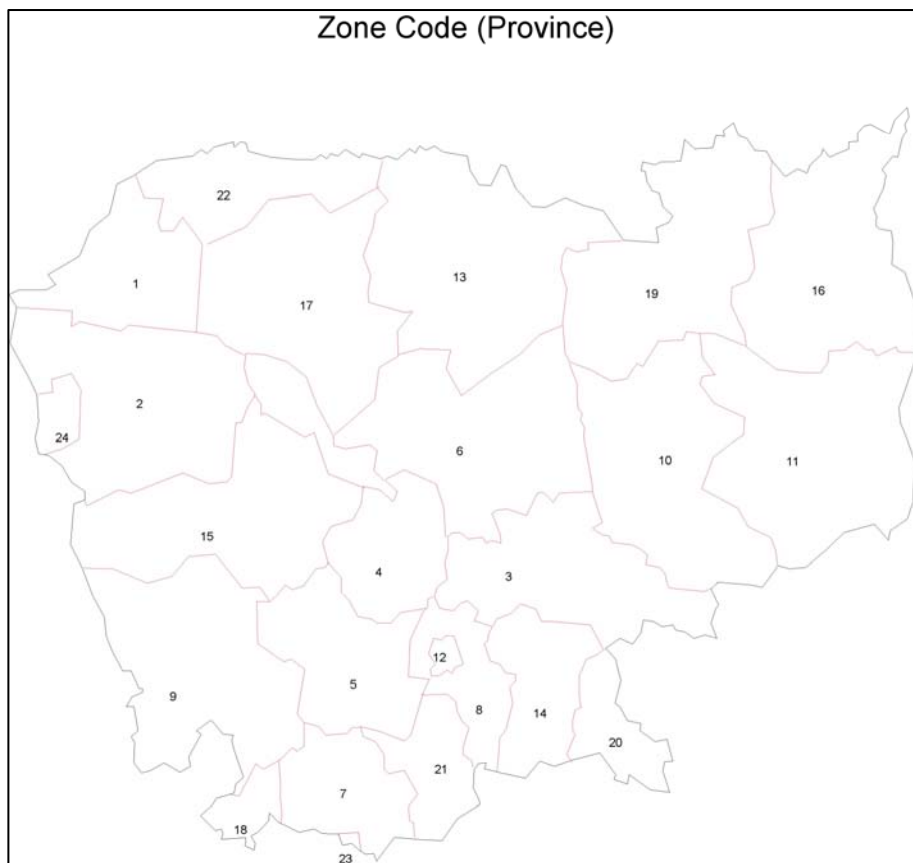
## Traffic Volume Survey

Date :

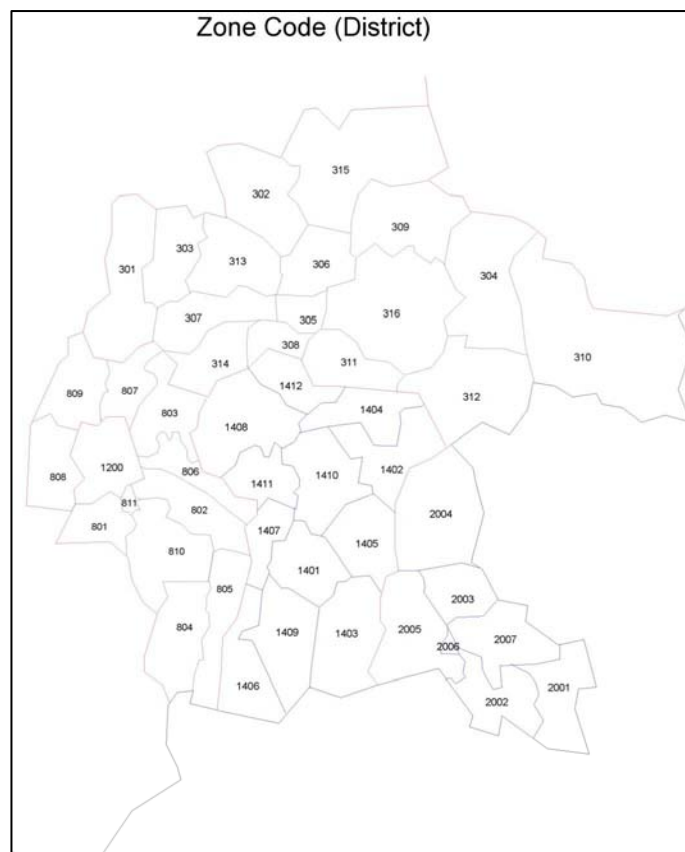
| Direction :               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|---------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Category<br>of<br>Vehicle | I. Motorcycles (MC)                                                               |                                                                                   | II. Light Vehicles (LV)                                                           |                                                                                   | III. Heavy Vehicles (HV)                                                          |                                                                                   |                                                                                    | IV. Pedal Cycles (PC)                                                               |                                                                                     | V. Others (OT)                                                                      |                                                                                     |
|                           | Motorbike/M.<br>Tricycle (1)                                                      | Motorbike<br>Trailer (2)                                                          | Sedan /<br>Wagong /<br>Light Truck<br>(3)                                         | Pick Up /<br>Jeeps / Light<br>Truck (4)                                           | Short & Long<br>Body Bus (5)                                                      | Short & Long<br>Body Truck<br>(6)                                                 | Semi & Full<br>Trailer Truck<br>(7)                                                | Bicycle (8)                                                                         | Cyolo / P.<br>Bike Trailer<br>(9)                                                   | Pedestrian /<br>Cart (10)                                                           | Ox / Horse<br>Farm Trailer<br>(11)                                                  |
|                           |  |  |  |  |  |  |  |  |  |  |  |
| 5:00 - 5:30               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| 5:30 - 6:00               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| 6:00 - 6:30               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| 6:30 - 7:00               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| 7:00 - 7:30               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| 7:30 - 8:00               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| 8:00 - 8:30               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| 8:30 - 9:00               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| 9:00 - 9:30               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| 9:30 - 10:00              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| 10:00 - 10:30             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| 10:30 - 11:00             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| 11:00 - 11:30             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| 11:30 - 12:00             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| 12:00 - 12:30             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| 12:30 - 13:00             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| 13:00 - 13:30             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| 13:30 - 14:00             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| 14:00 - 14:30             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| 14:30 - 15:00             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| 15:00 - 15:30             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| 15:30 - 16:00             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| 16:00 - 16:30             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| 16:30 - 17:00             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| 17:00 - 17:30             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| 17:30 - 18:00             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| 18:00 - 18:30             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| 18:30 - 19:00             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| 19:00 - 19:30             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| 19:30 - 20:00             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| 20:00 - 20:30             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| 20:30 - 21:00             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

**Figure AP3.1.6 Survey Form for Traffic Count Survey**

(7) Zone Distribution



**Figure AP3.1.7 Map of Zone Distribution (Province)**



**Figure AP3.1.8 Map of Zone Distribution (District)**

**Table AP3.1.2 Zone Code**

Zone Code for Residential Place and Origin and Destination

| No. | Province Name     | No. | District         | No. | Province Name        | No. | District         |
|-----|-------------------|-----|------------------|-----|----------------------|-----|------------------|
| 1   | Banteay Mean Chey |     |                  | 9   | Kaoh Kong            |     |                  |
| 2   | Bat Dambang       |     |                  | 10  | Kracheh              |     |                  |
| 3   | Kampong Cham      | 1   | Batheay          | 11  | Mondol Kiri          |     |                  |
|     |                   | 2   | Chamkar Leu      | 12  | Phnom Penh           |     |                  |
|     |                   | 3   | Cheu Preyn       | 13  | Preah Vihear         |     |                  |
|     |                   | 4   | Dambae           | 14  | Prey Veang           | 1   | Ba Phnum         |
|     |                   | 5   | Kampong Cham (u) |     |                      | 2   | Kamchay Mear     |
|     |                   | 6   | Kampong Siem     |     |                      | 3   | Kampong Trabaek  |
|     |                   | 7   | Kang Meas        |     |                      | 4   | Kanhchriech      |
|     |                   | 8   | Kaoh Soutin      |     |                      | 5   | Me Sang          |
|     |                   | 9   | Krouch Chhmar    |     |                      | 6   | Peam Chor        |
|     |                   | 10  | Memot            |     |                      | 7   | Peam Ro          |
|     |                   | 11  | Ou Reang Ov      |     |                      | 8   | Pea Reang        |
|     |                   | 12  | Ponhea Kraek     |     |                      | 9   | Preah Sdach      |
|     |                   | 13  | Prey Chhor       |     |                      | 10  | Prey Veang       |
|     |                   | 14  | Sreai Santhor    |     |                      | 11  | Kampong Leav (U) |
|     |                   | 15  | Stueng Trang     |     |                      | 12  | Sithor Kandal    |
|     |                   | 16  | Tboung Khmum     | 15  | Pousat               |     |                  |
| 4   | Kampong Chhnang   |     |                  | 16  | Rotanak Kiri         |     |                  |
| 5   | Kampong Spueu     |     |                  | 17  | Siem Reap            |     |                  |
| 6   | Kampong Thum      |     |                  | 18  | Krong Preah Sihanouk |     |                  |
| 7   | Kampot            |     |                  | 19  | Stueng Traeng        |     |                  |
| 8   | Kandal            | 1   | Kandal Stueng    | 20  | Svay Rieng           | 1   | Chantrea         |
|     |                   | 2   | Kien Svay        |     |                      | 2   | Kampong Rou      |
|     |                   | 3   | Khsach Kandal    |     |                      | 3   | Rumduol          |
|     |                   | 4   | Kaoh Thum        |     |                      | 4   | Romeas Haek      |
|     |                   | 5   | Leuk Daek        |     |                      | 5   | Svay Chrum       |
|     |                   | 6   | Lvea Aem         |     |                      | 6   | Svay Rieng (U)   |
|     |                   | 7   | Mukh Kampul      |     |                      | 7   | Svay Teab        |
|     |                   | 8   | Angk Snuol       | 21  | Takaev               |     |                  |
|     |                   | 9   | Ponhea Lueu      | 22  | OtdarMean Chey       |     |                  |
|     |                   | 10  | S'ang            | 23  | Krong Kaeb           |     |                  |
|     |                   | 11  | Ta Khmau         | 24  | Krong Pailin         |     |                  |
| 25  | Vietnam           |     |                  |     |                      | 1   | Ho Chi Minh      |
|     |                   |     |                  |     |                      | 2   | Can Tho          |
|     |                   |     |                  |     |                      | 3   | Other Vietnam    |
| 26  | Others            |     |                  |     |                      |     |                  |

### 3.1.2 Traffic Count Survey

#### (1) Kizuna Bridge

##### 1) 17 Hours Traffic

| Direction                                        | Classification  |       | Type (1) | Type (2) | Type (3) | Type (4) | Type (5) | Type (6) | Type (7) | Type (8) | Type (9) | Type (10) | Type (11) | Total  |
|--------------------------------------------------|-----------------|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-----------|--------|
|                                                  | PCU             |       | 0.50     | 0.75     | 1.00     | 1.50     | 3.00     | 3.00     | 4.50     | -        | -        | -         | -         |        |
| From<br>Kampong<br>Cham<br>To Tbong<br>Khmum     | 29-May          | Sat.  | 3,289    | 84       | 245      | 262      | 159      | 324      | 96       | 413      | 0        | 15        | 4         | 4,891  |
|                                                  | 30-May          | Sun.  | 3,644    | 39       | 243      | 288      | 9        | 299      | 115      | 322      | 0        | 29        | 22        | 5,010  |
|                                                  | 31-May          | Mon.  | 3,131    | 52       | 230      | 229      | 12       | 249      | 72       | 314      | 0        | 6         | 31        | 4,326  |
|                                                  | 1-Jun           | Tue.  | 3,573    | 42       | 195      | 218      | 10       | 232      | 86       | 377      | 1        | 35        | 28        | 4,797  |
|                                                  | 2-Jun           | Wed.  | 3,519    | 40       | 353      | 219      | 9        | 295      | 70       | 347      | 0        | 17        | 40        | 4,909  |
|                                                  | 3-Jun           | Thu.  | 3,533    | 61       | 429      | 228      | 15       | 272      | 74       | 332      | 3        | 38        | 38        | 5,023  |
| From<br>Tboung<br>Khmum<br>To<br>Kampong<br>Cham | 4-Jun           | Fri.  | 3,862    | 36       | 594      | 595      | 10       | 293      | 71       | 286      | 30       | 73        | 21        | 5,871  |
|                                                  | 29-May          | Sat.  | 3,542    | 67       | 362      | 764      | 80       | 350      | 114      | 298      | 3        | 164       | 47        | 5,791  |
|                                                  | 30-May          | Sun.  | 4,364    | 51       | 364      | 923      | 13       | 263      | 180      | 309      | 1        | 148       | 35        | 6,651  |
|                                                  | 31-May          | Mon.  | 3,335    | 58       | 304      | 609      | 15       | 236      | 122      | 318      | 1        | 79        | 35        | 5,112  |
|                                                  | 1-Jun           | Tue.  | 3,460    | 31       | 308      | 788      | 9        | 226      | 113      | 326      | 0        | 97        | 25        | 5,383  |
|                                                  | 2-Jun           | Wed.  | 3,411    | 42       | 244      | 648      | 9        | 306      | 94       | 356      | 0        | 62        | 46        | 5,218  |
| Both                                             | 3-Jun           | Thu.  | 3,288    | 39       | 332      | 658      | 8        | 275      | 76       | 269      | 0        | 88        | 18        | 5,051  |
|                                                  | 4-Jun           | Fri.  | 4,132    | 28       | 293      | 584      | 8        | 335      | 52       | 247      | 0        | 97        | 34        | 5,810  |
|                                                  | 29-May          | Sat.  | 6,831    | 151      | 607      | 1,026    | 239      | 674      | 210      | 711      | 3        | 179       | 51        | 10,682 |
|                                                  | 30-May          | Sun.  | 8,008    | 90       | 607      | 1,211    | 22       | 562      | 295      | 631      | 1        | 177       | 57        | 11,661 |
|                                                  | 31-May          | Mon.  | 6,466    | 110      | 534      | 838      | 27       | 485      | 194      | 632      | 1        | 85        | 66        | 9,438  |
|                                                  | 1-Jun           | Tue.  | 7,033    | 73       | 503      | 1,006    | 19       | 458      | 199      | 703      | 1        | 132       | 53        | 10,180 |
| Both                                             | 2-Jun           | Wed.  | 6,930    | 82       | 597      | 867      | 18       | 601      | 164      | 703      | 0        | 79        | 86        | 10,127 |
|                                                  | 3-Jun           | Thu.  | 6,821    | 100      | 761      | 886      | 23       | 547      | 150      | 601      | 3        | 126       | 56        | 10,074 |
|                                                  | 4-Jun           | Fri.  | 7,994    | 64       | 887      | 1,179    | 18       | 628      | 123      | 533      | 30       | 170       | 55        | 11,681 |
|                                                  | Average Weekday |       | 7,053    | 89       | 695      | 943      | 22       | 565      | 158      | 617      | 9        | 115       | 66        | 10,330 |
| Average Non-weekday                              |                 | 7,291 | 105      | 572      | 1,081    | 93       | 565      | 235      | 682      | 2        | 163      | 54        | 10,841    |        |

##### 2) 24 Hours Traffic

| Direction                                        | Classification |      | Type (1) | Type (2) | Type (3) | Type (4) | Type (5) | Type (6) | Type (7) | Type (8) | Type (9) | Type (10) | Type (11) | Total  |
|--------------------------------------------------|----------------|------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-----------|--------|
|                                                  | PCU            |      | 0.50     | 0.75     | 1.00     | 1.50     | 3.00     | 3.00     | 4.50     | -        | -        | -         | -         |        |
| From<br>Kampong<br>Cham<br>To<br>Kampong<br>Cham | 2-Jun          | Wed. | 3,625    | 40       | 370      | 229      | 9        | 326      | 83       | 358      | 0        | 76        | 40        | 5,156  |
| Both                                             |                |      | 3,546    | 43       | 272      | 710      | 9        | 337      | 96       | 367      | 0        | 77        | 46        | 5,503  |
| 24h/17h                                          |                |      | 7,171    | 83       | 642      | 939      | 18       | 663      | 179      | 725      | 0        | 153       | 86        | 10,659 |
|                                                  |                |      | 1,035    | 1,012    | 1,075    | 1,083    | 1,000    | 1,103    | 1,091    | 1,031    | 1,000    | 1,937     | 1,000     | 1,053  |

##### 3) Unified Classification (17 Hours Traffic)

| Direction                                        | Classification  |       | I     | II         | III        | IV  | V      | Total  | PCU Total |
|--------------------------------------------------|-----------------|-------|-------|------------|------------|-----|--------|--------|-----------|
|                                                  | PCU             |       | MC    | L. Vehicle | H. Vehicle | PC  | Others |        |           |
| From<br>Kampong<br>Cham<br>To Tbong<br>Khmum     | 29-May          | Sat.  | 3,373 | 507        | 579        | 413 | 19     | 4,891  | 4,227     |
|                                                  | 30-May          | Sun.  | 3,683 | 531        | 423        | 322 | 51     | 5,010  | 3,968     |
|                                                  | 31-May          | Mon.  | 3,183 | 459        | 333        | 314 | 37     | 4,326  | 3,285     |
|                                                  | 1-Jun           | Tue.  | 3,615 | 413        | 328        | 378 | 63     | 4,797  | 3,453     |
|                                                  | 2-Jun           | Wed.  | 3,559 | 572        | 374        | 347 | 57     | 4,909  | 3,698     |
|                                                  | 3-Jun           | Thu.  | 3,594 | 657        | 361        | 335 | 76     | 5,023  | 3,777     |
| From<br>Tboung<br>Khmum<br>To<br>Kampong<br>Cham | 4-Jun           | Fri.  | 3,898 | 1,189      | 374        | 316 | 94     | 5,871  | 4,673     |
|                                                  | 29-May          | Sat.  | 3,609 | 1,126      | 544        | 301 | 211    | 5,791  | 5,132     |
|                                                  | 30-May          | Sun.  | 4,415 | 1,287      | 456        | 310 | 183    | 6,651  | 5,607     |
|                                                  | 31-May          | Mon.  | 3,393 | 913        | 373        | 319 | 114    | 5,112  | 4,231     |
|                                                  | 1-Jun           | Tue.  | 3,491 | 1,096      | 348        | 326 | 122    | 5,383  | 4,457     |
|                                                  | 2-Jun           | Wed.  | 3,453 | 892        | 409        | 356 | 108    | 5,218  | 4,321     |
| Both                                             | 3-Jun           | Thu.  | 3,327 | 990        | 359        | 269 | 106    | 5,051  | 4,183     |
|                                                  | 4-Jun           | Fri.  | 4,160 | 877        | 395        | 247 | 131    | 5,810  | 4,519     |
|                                                  | 29-May          | Sat.  | 6,982 | 1,633      | 1,123      | 714 | 230    | 10,682 | 9,359     |
|                                                  | 30-May          | Sun.  | 8,098 | 1,818      | 879        | 632 | 234    | 11,661 | 9,575     |
|                                                  | 31-May          | Mon.  | 6,576 | 1,372      | 706        | 633 | 151    | 9,438  | 7,516     |
|                                                  | 1-Jun           | Tue.  | 7,106 | 1,509      | 676        | 704 | 185    | 10,180 | 7,910     |
| Both                                             | 2-Jun           | Wed.  | 7,012 | 1,464      | 783        | 703 | 165    | 10,127 | 8,019     |
|                                                  | 3-Jun           | Thu.  | 6,921 | 1,647      | 720        | 604 | 182    | 10,074 | 7,961     |
|                                                  | 4-Jun           | Fri.  | 8,058 | 2,066      | 769        | 563 | 225    | 11,681 | 9,192     |
|                                                  | Average Weekday |       | 7,142 | 1,637      | 745        | 626 | 181    | 10,330 | 8,172     |
| Average Non-weekday                              |                 | 7,395 | 1,653 | 893        | 683        | 216 | 10,841 | 8,948  |           |

##### 4) Unified Classification (24 Hours Traffic)

| Direction | Classification |      | I     | II         | III        | IV    | V      | Total  |
|-----------|----------------|------|-------|------------|------------|-------|--------|--------|
|           | PCU            |      | MC    | L. Vehicle | H. Vehicle | PC    | Others |        |
| From KC   | 2-Jun          | Wed. | 3,665 | 599        | 418        | 358   | 116    | 5,156  |
| To KC     |                |      | 3,589 | 982        | 442        | 367   | 123    | 5,503  |
| Both      |                |      | 7,254 | 1,581      | 860        | 725   | 239    | 10,659 |
| 24h / 17h |                |      | 1,035 | 1,080      | 1,098      | 1,031 | 1,448  | 1,053  |

## (2) Neak Loeung

### 1) 17 Hours Traffic

| Direction       | Classification |      | Type (1) | Type (2) | Type (3) | Type (4) | Type (5) | Type (6) | Type (7) | Type (8) | Type (9) | Type (10) | Type (11) | Total  |
|-----------------|----------------|------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-----------|--------|
|                 | PCU            |      | 0.50     | 0.75     | 1.00     | 1.50     | 3.00     | 3.00     | 4.50     | -        | -        | -         | -         |        |
| From Phnom Penh | 29-May         | Sat. | 1,048    | 11       | 295      | 101      | 167      | 96       | 8        | 286      | 0        | 3,806     | 35        | 5,853  |
|                 | 30-May         | Sun. | 1,076    | 14       | 333      | 110      | 201      | 92       | 7        | 279      | 0        | 4,475     | 27        | 6,614  |
|                 | 31-May         | Mon. | 921      | 10       | 267      | 88       | 181      | 95       | 6        | 296      | 0        | 4,348     | 9         | 6,221  |
|                 | 1-Jun          | Tue. | 837      | 6        | 281      | 99       | 172      | 89       | 15       | 305      | 0        | 4,040     | 26        | 5,870  |
|                 | 2-Jun          | Wed. | 750      | 5        | 279      | 97       | 195      | 105      | 8        | 313      | 0        | 3,354     | 4         | 5,110  |
|                 | 3-Jun          | Thu. | 727      | 3        | 231      | 198      | 179      | 86       | 1        | 288      | 0        | 3,682     | 22        | 5,417  |
|                 | 4-Jun          | Fri. | 941      | 8        | 292      | 119      | 152      | 102      | 3        | 281      | 0        | 3,555     | 23        | 5,476  |
| To Phnom Penh   | 29-May         | Sat. | 864      | 7        | 225      | 163      | 167      | 122      | 1        | 311      | 0        | 2,125     | 38        | 4,023  |
|                 | 30-May         | Sun. | 1,175    | 3        | 352      | 267      | 91       | 123      | 2        | 277      | 0        | 2,550     | 18        | 4,858  |
|                 | 31-May         | Mon. | 990      | 14       | 251      | 191      | 118      | 61       | 5        | 297      | 0        | 2,174     | 13        | 4,114  |
|                 | 1-Jun          | Tue. | 826      | 13       | 257      | 281      | 170      | 114      | 1        | 322      | 0        | 1,915     | 29        | 3,928  |
|                 | 2-Jun          | Wed. | 719      | 8        | 261      | 104      | 183      | 103      | 4        | 302      | 0        | 2,414     | 30        | 4,128  |
|                 | 3-Jun          | Thu. | 733      | 4        | 261      | 115      | 215      | 94       | 15       | 265      | 0        | 2,152     | 17        | 3,871  |
|                 | 4-Jun          | Fri. | 815      | 3        | 271      | 123      | 172      | 88       | 10       | 274      | 0        | 2,112     | 23        | 3,891  |
| Both            | 29-May         | Sat. | 1,912    | 18       | 520      | 264      | 334      | 218      | 9        | 597      | 0        | 5,931     | 73        | 9,876  |
|                 | 30-May         | Sun. | 2,251    | 17       | 685      | 377      | 292      | 215      | 9        | 556      | 0        | 7,025     | 45        | 11,472 |
|                 | 31-May         | Mon. | 1,911    | 24       | 518      | 279      | 299      | 156      | 11       | 593      | 0        | 6,522     | 22        | 10,335 |
|                 | 1-Jun          | Tue. | 1,663    | 19       | 538      | 380      | 342      | 203      | 16       | 627      | 0        | 5,955     | 55        | 9,798  |
|                 | 2-Jun          | Wed. | 1,469    | 13       | 540      | 201      | 378      | 208      | 12       | 615      | 0        | 5,768     | 34        | 9,238  |
|                 | 3-Jun          | Thu. | 1,460    | 7        | 492      | 313      | 394      | 180      | 16       | 553      | 0        | 5,834     | 39        | 9,288  |
|                 | 4-Jun          | Fri. | 1,756    | 11       | 563      | 242      | 324      | 190      | 13       | 555      | 0        | 5,667     | 46        | 9,367  |

| Direction | Classification      |  | Type (1) | Type (2) | Type (3) | Type (4) | Type (5) | Type (6) | Type (7) | Type (8) | Type (9) | Type (10) | Type (11) | Total  |
|-----------|---------------------|--|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-----------|--------|
|           | pcu                 |  | 0.50     | 0.75     | 1.00     | 1.50     | 3.00     | 3.00     | 4.50     | -        | -        | -         | -         |        |
| From PP   | Weekday             |  | 835      | 7        | 267      | 126      | 177      | 97       | 5        | 295      | 0        | 3,735     | 15        | 5,559  |
| To PP     |                     |  | 814      | 7        | 261      | 133      | 172      | 87       | 9        | 285      | 0        | 2,213     | 21        | 4,002  |
| From PP   | Non-weekday         |  | 987      | 10       | 303      | 103      | 180      | 92       | 10       | 290      | 0        | 4,107     | 29        | 6,111  |
| To PP     |                     |  | 955      | 8        | 278      | 237      | 143      | 120      | 1        | 303      | 0        | 2,197     | 28        | 4,270  |
| Both      | Average Weekday     |  | 1,649    | 14       | 528      | 259      | 349      | 184      | 14       | 580      | 0        | 5,948     | 36        | 9,561  |
|           | Average Non-weekday |  | 1,942    | 18       | 581      | 340      | 323      | 212      | 11       | 593      | 0        | 6,304     | 57        | 10,381 |

### 2) Unified Classification

| Direction       | Classification |      | I     | II         | III        | IV  | V      | Total  | PCU Total |
|-----------------|----------------|------|-------|------------|------------|-----|--------|--------|-----------|
|                 | PCU            |      | MC    | L. Vehicle | H. Vehicle | PC  | Others |        |           |
| From Phnom Penh | 29-May         | Sat. | 1,059 | 396        | 271        | 286 | 3,841  | 5,853  | 1,804     |
|                 | 30-May         | Sun. | 1,090 | 443        | 300        | 279 | 4,502  | 6,614  | 1,957     |
|                 | 31-May         | Mon. | 931   | 355        | 282        | 296 | 4,357  | 6,221  | 1,722     |
|                 | 1-Jun          | Tue. | 843   | 380        | 276        | 305 | 4,066  | 5,870  | 1,703     |
|                 | 2-Jun          | Wed. | 755   | 376        | 308        | 313 | 3,358  | 5,110  | 1,739     |
|                 | 3-Jun          | Thu. | 730   | 429        | 266        | 288 | 3,704  | 5,417  | 1,693     |
|                 | 4-Jun          | Fri. | 949   | 411        | 257        | 281 | 3,578  | 5,476  | 1,723     |
| To Phnom Penh   | 29-May         | Sat. | 871   | 388        | 290        | 311 | 2,163  | 4,023  | 1,778     |
|                 | 30-May         | Sun. | 1,178 | 619        | 216        | 277 | 2,568  | 4,858  | 1,993     |
|                 | 31-May         | Mon. | 1,004 | 442        | 184        | 297 | 2,187  | 4,114  | 1,603     |
|                 | 1-Jun          | Tue. | 839   | 538        | 285        | 322 | 1,944  | 3,928  | 1,958     |
|                 | 2-Jun          | Wed. | 727   | 365        | 290        | 302 | 2,444  | 4,128  | 1,659     |
|                 | 3-Jun          | Thu. | 737   | 376        | 324        | 265 | 2,169  | 3,871  | 1,798     |
|                 | 4-Jun          | Fri. | 818   | 394        | 270        | 274 | 2,135  | 3,891  | 1,690     |
| Both            | 29-May         | Sat. | 1,930 | 784        | 561        | 597 | 6,004  | 9,876  | 3,582     |
|                 | 30-May         | Sun. | 2,268 | 1,062      | 516        | 556 | 7,070  | 11,472 | 3,950     |
|                 | 31-May         | Mon. | 1,935 | 797        | 466        | 593 | 6,544  | 10,335 | 3,325     |
|                 | 1-Jun          | Tue. | 1,682 | 918        | 561        | 627 | 6,010  | 9,798  | 3,661     |
|                 | 2-Jun          | Wed. | 1,482 | 741        | 598        | 615 | 5,802  | 9,238  | 3,398     |
|                 | 3-Jun          | Thu. | 1,467 | 805        | 590        | 553 | 5,873  | 9,288  | 3,491     |
|                 | 4-Jun          | Fri. | 1,767 | 805        | 527        | 555 | 5,713  | 9,367  | 3,413     |

| Direction | Classification      |  | I     | II         | III        | IV  | V      | Total  | PCU Total |
|-----------|---------------------|--|-------|------------|------------|-----|--------|--------|-----------|
|           | PCU                 |  | MC    | L. Vehicle | H. Vehicle | PC  | Others |        |           |
| From PP   | Weekday             |  | 841   | 393        | 278        | 295 | 3,749  | 5,556  | 1,719     |
| To PP     |                     |  | 822   | 394        | 267        | 285 | 2,234  | 4,002  | 1,687     |
| From PP   | Non-weekday         |  | 997   | 406        | 282        | 290 | 4,136  | 6,111  | 1,821     |
| To PP     |                     |  | 963   | 515        | 264        | 303 | 2,225  | 4,270  | 1,910     |
| Both      | Average Weekday     |  | 1,663 | 787        | 545        | 580 | 5,983  | 9,558  | 3,406     |
|           | Average Non-weekday |  | 1,960 | 921        | 546        | 593 | 6,361  | 10,381 | 3,731     |

### 3) Peak Hour Ratio at Neak Loeung

| Date   | 24-hr Traffic ( | Peak Traffic by | Peak Hour Ratio |
|--------|-----------------|-----------------|-----------------|
| 29-May | 3,759           | 384             | 0.102           |
| 30-May | 4,158           | 433             | 0.104           |
| 31-May | 3,485           | 459             | 0.132           |
| 1-Jun  | 3,847           | 375             | 0.097           |
| 2-Jun  | 3,558           | 375             | 0.105           |
| 3-Jun  | 3,655           | 427             | 0.117           |
| 4-Jun  | 3,580           | 403             | 0.113           |



### (3) Bavet

#### 1) 17 Hours Traffic

| Direction | Classification |      | Type (1) | Type (2) | Type (3) | Type (4) | Type (5) | Type (6) | Type (7) | Type (8) | Type (9) | Type (10) | Type (11) | Total |
|-----------|----------------|------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-----------|-------|
|           | PCU            |      | 0.50     | 0.75     | 1.00     | 1.50     | 3.00     | 3.00     | 4.50     | -        | -        | -         | -         |       |
| From      | 29-May         | Sat. | 2,521    | 16       | 182      | 43       | 10       | 31       | 3        | 751      | 3        | 36        | 36        | 3,632 |
| Phnom     | 30-May         | Sun. | 2,285    | 12       | 241      | 69       | 11       | 37       | 3        | 592      | 1        | 38        | 21        | 3,310 |
| Penh      | 31-May         | Mon. | 2,312    | 13       | 229      | 71       | 10       | 58       | 0        | 764      | 0        | 110       | 24        | 3,591 |
| To Bavet  | 1-Jun          | Tue. | 2,555    | 20       | 251      | 105      | 9        | 37       | 0        | 712      | 1        | 116       | 23        | 3,829 |
| From      | 29-May         | Sat. | 2,194    | 18       | 203      | 39       | 9        | 21       | 1        | 754      | 3        | 27        | 25        | 3,294 |
| Bavet     | 30-May         | Sun. | 2,178    | 46       | 311      | 41       | 2        | 37       | 3        | 660      | 2        | 24        | 22        | 3,326 |
| To Phnom  | 31-May         | Mon. | 1,866    | 38       | 259      | 46       | 10       | 48       | 0        | 688      | 1        | 54        | 19        | 3,029 |
| Penh      | 1-Jun          | Tue. | 2,450    | 46       | 333      | 61       | 11       | 40       | 1        | 657      | 0        | 55        | 39        | 3,693 |
| Both      | 29-May         | Sat. | 4,715    | 34       | 385      | 82       | 19       | 52       | 4        | 1,505    | 6        | 63        | 61        | 6,926 |
|           | 30-May         | Sun. | 4,463    | 58       | 552      | 110      | 13       | 74       | 6        | 1,252    | 3        | 62        | 43        | 6,636 |
|           | 31-May         | Mon. | 4,178    | 51       | 488      | 117      | 20       | 106      | 0        | 1,452    | 1        | 164       | 43        | 6,620 |
|           | 1-Jun          | Tue. | 5,005    | 66       | 584      | 166      | 20       | 77       | 1        | 1,369    | 1        | 171       | 62        | 7,522 |

#### 2) Unified Classification (17 Hours)

| Direction | Classification |      | I     | II         | III        | IV    | V      | Total | PCU Total |
|-----------|----------------|------|-------|------------|------------|-------|--------|-------|-----------|
|           | PCU            |      | MC    | L. Vehicle | H. Vehicle | PC    | Others |       |           |
| From      | 29-May         | Sat. | 2,537 | 225        | 44         | 754   | 72     | 3,632 | 1,656     |
| Phnom     | 30-May         | Sun. | 2,297 | 310        | 51         | 593   | 59     | 3,310 | 1,654     |
| Penh      | 31-May         | Mon. | 2,325 | 300        | 68         | 764   | 134    | 3,591 | 1,705     |
| To Bavet  | 1-Jun          | Tue. | 2,575 | 356        | 46         | 713   | 139    | 3,829 | 1,839     |
| From      | 29-May         | Sat. | 2,212 | 242        | 31         | 757   | 52     | 3,294 | 1,467     |
| Bavet     | 30-May         | Sun. | 2,224 | 352        | 42         | 662   | 46     | 3,326 | 1,627     |
| To Phnom  | 31-May         | Mon. | 1,904 | 305        | 58         | 689   | 73     | 3,029 | 1,464     |
| Penh      | 1-Jun          | Tue. | 2,496 | 394        | 52         | 657   | 94     | 3,693 | 1,842     |
| Both      | 29-May         | Sat. | 4,749 | 467        | 75         | 1,511 | 124    | 6,926 | 3,122     |
|           | 30-May         | Sun. | 4,521 | 662        | 93         | 1,255 | 105    | 6,636 | 3,280     |
|           | 31-May         | Mon. | 4,229 | 605        | 126        | 1,453 | 207    | 6,620 | 3,169     |
|           | 1-Jun          | Tue. | 5,071 | 750        | 98         | 1,370 | 233    | 7,522 | 3,681     |

### (4) Samach

#### 1) 17 Hours Traffic

| Direction | Classification |      | Type (1) | Type (2) | Type (3) | Type (4) | Type (5) | Type (6) | Type (7) | Type (8) | Type (9) | Type (10) | Type (11) | Total |
|-----------|----------------|------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-----------|-------|
|           | PCU            |      | 0.50     | 0.75     | 1.00     | 1.50     | 3.00     | 3.00     | 4.50     | -        | -        | -         | -         |       |
| From      | 29-May         | Sat. | 754      | 11       | 65       | 40       | 0        | 73       | 12       | 132      | 0        | 13        | 1         | 1101  |
| Phnom     | 30-May         | Sun. | 899      | 11       | 56       | 29       | 0        | 96       | 12       | 158      | 1        | 13        | 2         | 1277  |
| Penh      | 31-May         | Mon. | 743      | 13       | 59       | 44       | 0        | 92       | 44       | 180      | 1        | 7         | 1         | 1184  |
| To Samach | 1-Jun          | Tue. | 733      | 19       | 62       | 33       | 0        | 91       | 19       | 174      | 1        | 7         | 1         | 1140  |
| From      | 29-May         | Sat. | 846      | 10       | 58       | 33       | 0        | 108      | 26       | 226      | 0        | 29        | 5         | 1341  |
| Samach    | 30-May         | Sun. | 818      | 12       | 49       | 34       | 0        | 99       | 7        | 265      | 3        | 21        | 1         | 1309  |
| To Phnom  | 31-May         | Mon. | 879      | 18       | 54       | 40       | 0        | 113      | 15       | 199      | 5        | 23        | 1         | 1347  |
| Penh      | 1-Jun          | Tue. | 899      | 16       | 54       | 45       | 0        | 94       | 35       | 186      | 1        | 25        | 1         | 1356  |
| Both      | 29-May         | Sat. | 1,600    | 21       | 123      | 73       | 0        | 181      | 38       | 358      | 0        | 42        | 6         | 2,442 |
|           | 30-May         | Sun. | 1,717    | 23       | 105      | 63       | 0        | 195      | 19       | 423      | 4        | 34        | 3         | 2,586 |
|           | 31-May         | Mon. | 1,622    | 31       | 113      | 84       | 0        | 205      | 59       | 379      | 6        | 30        | 2         | 2,531 |
|           | 1-Jun          | Tue. | 1,632    | 35       | 116      | 78       | 0        | 185      | 54       | 360      | 2        | 32        | 2         | 2,496 |

#### 2) Unified Classification

| Direction | Classification |      | I     | II         | III        | IV  | V      | Total | PCU Total |
|-----------|----------------|------|-------|------------|------------|-----|--------|-------|-----------|
|           | pcu            |      | MC    | L. Vehicle | H. Vehicle | PC  | Others |       |           |
| From      | 29-May         | Sat. | 765   | 105        | 85         | 132 | 14     | 1,101 | 783       |
| Phnom     | 30-May         | Sun. | 910   | 85         | 108        | 159 | 15     | 1,277 | 899       |
| Penh      | 31-May         | Mon. | 756   | 103        | 136        | 181 | 8      | 1,184 | 980       |
| To Samach | 1-Jun          | Tue. | 752   | 95         | 110        | 175 | 8      | 1,140 | 851       |
| From      | 29-May         | Sat. | 856   | 91         | 134        | 226 | 34     | 1,341 | 979       |
| Samach    | 30-May         | Sun. | 830   | 83         | 106        | 268 | 22     | 1,309 | 847       |
| To Phnom  | 31-May         | Mon. | 897   | 94         | 128        | 204 | 24     | 1,347 | 974       |
| Penh      | 1-Jun          | Tue. | 915   | 99         | 129        | 187 | 26     | 1,356 | 1,023     |
| Both      | 29-May         | Sat. | 1,621 | 196        | 219        | 358 | 48     | 2,442 | 1,762     |
|           | 30-May         | Sun. | 1,740 | 168        | 214        | 427 | 37     | 2,586 | 1,746     |
|           | 31-May         | Mon. | 1,653 | 197        | 264        | 385 | 32     | 2,531 | 1,954     |
|           | 1-Jun          | Tue. | 1,667 | 194        | 239        | 362 | 34     | 2,496 | 1,873     |

### 3.1.3 Occupant Count Survey

#### 1) Occupancy Average (weighted average)

| Survey Station | Direction                                     | Date    | Type(1) | Type(2) | Type(3) | Type(4) | Type(5) | Type(6) | Type(7) | Type(8) | Type(9) | Type(10) |
|----------------|-----------------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|
| Neak Loeung    | From Phnom Penh To Prey Veang                 | 29-May  | 2.05    | 2.54    | 4.16    | 10.48   | 14.68   | 3.06    | -       | 1.03    | -       | 1.59     |
|                |                                               | 30-May  | 2.17    | -       | 4.98    | 19.52   | 15.41   | 4.41    | 2.27    | 1.13    | -       | 2.43     |
|                |                                               | 31-May  | 2.16    | -       | 4.11    | 10.40   | 14.30   | 3.41    | 2.09    | 1.13    | -       | 1.71     |
|                |                                               | 1-Jun   | 2.17    | -       | 4.14    | 10.09   | 15.56   | 3.32    | 2.27    | 1.03    | -       | 2.80     |
|                |                                               | Average | 2.14    | 2.54    | 4.37    | 11.54   | 14.97   | 3.55    | 2.22    | 1.08    | -       | 1.93     |
|                | From Prey Veang To Phnom Penh                 | 29-May  | 1.97    | 2.25    | 4.03    | 12.35   | 16.04   | 7.16    | 1.00    | 1.09    | -       | 1.70     |
|                |                                               | 30-May  | 2.15    | 2.78    | 4.38    | 10.49   | 19.80   | 4.36    | 2.00    | 1.12    | -       | 1.63     |
|                |                                               | 31-May  | 2.18    | -       | 4.18    | 15.42   | 17.90   | 3.65    | 2.21    | 1.13    | -       | 1.81     |
|                |                                               | 1-Jun   | 2.25    | 2.00    | 4.11    | 17.28   | 18.29   | 3.22    | 2.46    | 1.06    | -       | 1.43     |
|                |                                               | Average | 2.16    | 2.47    | 4.20    | 13.98   | 18.29   | 4.61    | 2.28    | 1.10    | -       | 1.61     |
| Kizuna Bridge  | From Kampong Cham Dist. To Tboung Khmum Dist. | 29-May  | 2.05    | -       | 10.16   | 8.93    | -       | 4.10    | 5.38    | -       | -       | -        |
|                |                                               | 30-May  | 1.99    | 3.41    | 13.51   | 11.38   | 18.25   | 2.81    | 2.86    | 1.35    | -       | 2.03     |
|                |                                               | 31-May  | 2.02    | 3.65    | 16.04   | 15.76   | 16.60   | 2.60    | 2.74    | 1.24    | -       | 2.26     |
|                |                                               | 1-Jun   | 2.02    | 3.36    | 15.67   | 14.55   | 19.33   | 2.40    | 2.53    | 1.15    | -       | 1.00     |
|                |                                               | Average | 2.02    | 3.47    | 14.37   | 13.17   | 9.73    | 2.58    | 2.99    | 1.25    | -       | 1.86     |
|                | Tboung Khmum Dist. To Kampong Cham Dist       | 29-May  | 1.86    | 3.71    | 11.02   | 6.72    | 16.13   | 2.57    | 1.83    | 1.29    | 1.00    | 1.50     |
|                |                                               | 30-May  | 1.90    | 2.00    | 11.84   | 7.46    | 17.88   | 2.72    | 3.20    | 1.10    | -       | 2.00     |
|                |                                               | 31-May  | 1.84    | 1.72    | 15.06   | 8.73    | 18.75   | 3.21    | 3.00    | 1.02    | -       | 1.69     |
|                |                                               | 1-Jun   | 1.95    | 2.62    | 17.43   | 10.64   | 37.00   | 3.30    | 3.33    | 1.11    | -       | 2.26     |
|                |                                               | Average | 1.89    | 2.32    | 14.79   | 8.95    | 19.08   | 2.99    | 2.88    | 1.11    | 1.00    | 2.04     |

### 3.1.4 Passenger Interview Survey

#### (1) General Characteristics

##### 1) Kizuna Bridge

##### a. Non-weekday by Type of Mode from Kampong Cham to Tboung Khmum

##### Sex by Type of Mode

| Data  | Sex   |        | Total |
|-------|-------|--------|-------|
|       | Male  | Female |       |
| 1     | 1,029 | 277    | 1,306 |
| 2     | 18    | 7      | 25    |
| 3     | 124   | 48     | 172   |
| 4     | 249   | 150    | 399   |
| 5     | 8     | 3      | 11    |
| 6     | 94    | 10     | 104   |
| 7     | 1     |        | 1     |
| 8     | 19    | 23     | 42    |
| 9     | 1     |        | 1     |
| 10    |       | 1      | 1     |
| 11    | 9     | 1      | 10    |
| Total | 1,552 | 520    | 2,072 |

##### Age

|       | Age          |         |         |         |         |             |           | Total |
|-------|--------------|---------|---------|---------|---------|-------------|-----------|-------|
|       | Less than 13 | 15 – 20 | 21 – 30 | 31 – 40 | 41 – 50 | 50 and more | No answer |       |
| 1     | 9            | 150     | 480     | 400     | 198     | 69          |           | 1,306 |
| 2     | 1            | 3       | 10      | 4       | 4       | 3           |           | 25    |
| 3     |              | 6       | 72      | 60      | 24      | 10          |           | 172   |
| 4     | 1            | 36      | 146     | 127     | 65      | 24          |           | 399   |
| 5     |              |         | 7       | 3       |         | 1           |           | 11    |
| 6     |              | 3       | 26      | 51      | 21      | 2           | 1         | 104   |
| 7     |              |         | 1       |         |         |             |           | 1     |
| 8     | 1            | 14      | 10      | 8       | 2       | 7           |           | 42    |
| 9     |              |         |         | 1       |         |             |           | 1     |
| 10    |              |         |         | 1       |         |             |           | 1     |
| 11    |              | 1       | 2       | 2       | 3       | 2           |           | 10    |
| Total | 12           | 213     | 754     | 657     | 317     | 118         | 1         | 2,072 |

##### Occupation

| Data  | Occupation |     |     |    |     |     |     |     | Total |
|-------|------------|-----|-----|----|-----|-----|-----|-----|-------|
|       | 1          | 2   | 3   | 4  | 5   | 6   | 7   | 8   |       |
| 1     | 145        | 96  | 396 | 6  | 230 | 111 | 233 | 89  | 1,306 |
| 2     | 3          | 5   | 5   | 1  | 3   | 2   | 6   |     | 25    |
| 3     | 4          | 15  | 34  | 2  | 12  | 42  | 47  | 16  | 172   |
| 4     | 24         | 43  | 119 | 5  | 37  | 52  | 74  | 45  | 399   |
| 5     |            | 1   |     |    | 1   | 4   | 3   | 2   | 11    |
| 6     |            | 3   | 4   |    | 2   | 61  | 28  | 6   | 104   |
| 7     |            |     |     |    |     |     | 1   |     | 1     |
| 8     | 16         | 1   | 15  |    |     |     | 3   | 7   | 42    |
| 9     |            |     |     |    |     | 1   |     |     | 1     |
| 10    |            | 1   |     |    |     |     |     |     | 1     |
| 11    |            |     | 4   |    | 1   |     | 3   | 2   | 10    |
| Total | 192        | 165 | 577 | 14 | 286 | 273 | 398 | 167 | 2,072 |

##### Occupation

- |                                           |                        |
|-------------------------------------------|------------------------|
| 1 Student                                 | 5 Governmental officer |
| 2 House wife                              | 6 Service sector       |
| 3 Agriculture / forestry / fishery sector | 7 Others               |
| 4 Mining / Industry sector                | 8 No occupation        |

### Residence (Province)

| Data         | Province |    |       |       |    |   |    |    |    |     |    |    |    |    |    |    |       | Total |
|--------------|----------|----|-------|-------|----|---|----|----|----|-----|----|----|----|----|----|----|-------|-------|
|              | 0        | 1  | 3     | 4     | 6  | 7 | 8  | 10 | 11 | 12  | 13 | 14 | 16 | 19 | 20 | 21 |       |       |
| Type of Mode | 1        | 31 |       | 1,155 | 1  | 3 | 2  | 13 | 9  |     | 45 | 1  | 40 | 1  | 1  | 1  | 3     | 1,306 |
|              | 2        |    |       | 23    |    | 1 |    |    |    |     |    |    | 1  |    |    |    |       | 25    |
|              | 3        | 14 |       | 96    | 1  | 1 | 1  | 4  | 17 |     | 20 |    | 17 | 1  |    |    |       | 172   |
|              | 4        | 29 |       | 229   | 2  | 9 | 3  | 13 | 26 | 2   | 56 |    | 26 |    |    | 1  | 3     | 399   |
|              | 5        |    |       | 4     |    |   |    | 2  |    |     | 3  |    | 2  |    |    |    |       | 11    |
|              | 6        | 1  | 1     | 82    |    |   |    | 6  | 2  |     | 6  |    | 6  |    |    |    |       | 104   |
|              | 7        |    |       | 1     |    |   |    |    |    |     |    |    |    |    |    |    |       | 1     |
|              | 8        |    |       | 40    |    |   |    |    |    |     | 2  |    |    |    |    |    |       | 42    |
|              | 9        |    |       | 1     |    |   |    |    |    |     |    |    |    |    |    |    |       | 1     |
|              | 10       |    |       | 1     |    |   |    |    |    |     |    |    |    |    |    |    |       | 1     |
|              | 11       |    |       | 9     | 1  |   |    |    |    |     |    |    |    |    |    |    |       | 10    |
| Total        | 75       | 1  | 1,641 | 5     | 14 | 6 | 38 | 54 | 2  | 132 | 1  | 92 | 2  | 1  | 2  | 6  | 2,072 |       |

### Trip Purpose

| Data         | Trip Purpose |     |     |    |     |     |     | Total |       |
|--------------|--------------|-----|-----|----|-----|-----|-----|-------|-------|
|              | 0            | 1   | 2   | 3  | 4   | 5   | 6   |       |       |
| Type of Mode | 1            |     | 133 | 25 | 24  | 71  | 463 | 590   | 1,306 |
|              | 2            |     | 4   |    |     | 2   | 10  | 9     | 25    |
|              | 3            |     | 3   |    | 3   | 33  | 53  | 80    | 172   |
|              | 4            |     | 35  | 2  | 2   | 43  | 108 | 209   | 399   |
|              | 5            |     |     |    |     | 1   | 2   | 8     | 11    |
|              | 6            | 1   | 2   |    |     | 33  | 46  | 22    | 104   |
|              | 7            |     |     |    |     |     | 1   |       | 1     |
|              | 8            |     | 8   | 2  |     | 3   | 17  | 12    | 42    |
|              | 9            |     |     |    |     | 1   |     |       | 1     |
|              | 10           |     | 1   |    |     |     |     |       | 1     |
|              | 11           |     |     |    | 2   |     | 7   | 1     | 10    |
| Total        | 1            | 186 | 29  | 31 | 187 | 707 | 931 | 2,072 |       |

#### Trip Purpose

- 1 To work
- 2 To school
- 3 to shop / market
- 4 To business
- 5 To others
- 6 To home
- "7 Others" is moved to "5 to others"

### Travel Time

| Data  | Travel Time |     |     |     |    |    |    |   | Total |
|-------|-------------|-----|-----|-----|----|----|----|---|-------|
|       | 1           | 2   | 3   | 4   | 5  | 6  | 7  | 8 |       |
| 1     | 840         | 262 | 117 | 58  | 16 | 4  | 4  | 5 | 1,306 |
| 2     | 16          | 4   | 5   |     |    |    |    |   | 25    |
| 3     | 18          | 28  | 55  | 39  | 24 | 3  | 5  |   | 172   |
| 4     | 74          | 92  | 90  | 80  | 22 | 15 | 23 | 3 | 399   |
| 5     |             | 2   | 7   |     | 2  |    |    |   | 11    |
| 6     | 12          | 23  | 27  | 24  | 11 | 5  | 2  |   | 104   |
| 7     |             | 1   |     |     |    |    |    |   | 1     |
| 8     | 26          | 9   | 1   | 3   | 3  |    |    |   | 42    |
| 9     | 1           |     |     |     |    |    |    |   | 1     |
| 10    | 1           |     |     |     |    |    |    |   | 1     |
| 11    | 5           | 3   | 2   |     |    |    |    |   | 10    |
| Total | 993         | 424 | 304 | 204 | 78 | 27 | 34 | 8 | 2,072 |

#### Travel Time

- 1 1.0h and Less
- 2 1.1–2.1h
- 3 2.0–3.0h
- 4 3.1–4.0h
- 5 4.1–5.0h
- 6 5.1–6.0h
- 7 More than 6.0h
- 8 Unkown

### Type of Cargo

| Data |       | Type of Cargo |    |   |   |   |   |    |    | Total |
|------|-------|---------------|----|---|---|---|---|----|----|-------|
|      |       | 1             | 2  | 3 | 6 | 7 | 9 | 10 | 11 |       |
| Type | 1     |               |    |   |   |   |   |    | 1  | 1     |
|      | 6     | 10            | 31 | 5 | 1 | 1 | 1 | 18 | 32 | 99    |
|      | Total | 10            | 31 | 5 | 1 | 1 | 1 | 18 | 33 | 100   |

#### Type of Cargo

- 1 Empty (no cargo)
- 2 Agreculture (rice, corn, vegetable, fruits, etc)
- 3 Forest (Log, timber, plywood, etc)
- 4 Marine (fish, shell, seaweed, etc)
- 5 Mineral (coal, copper, iron, salt, etc)
- 6 Metal & machine ( steel, generator, car, bike,
- 7 Chemical (petroleum, alcohol, acid, etc)
- 8 Light industry/Electronics (machine parts,IC, electronic appliances, etc)
- 9 Miscellaneous (garment, shoes, etc.)
- 10 Construction (sand, gravel, Asphalt, concrete, steel-bar, steel-beam, etc)
- 11 Others

### Loading Capacity

| Data |       | Loading Capacity |    |    |    |   |   |   | Total |
|------|-------|------------------|----|----|----|---|---|---|-------|
|      |       | 1                | 2  | 3  | 4  | 5 | 6 | 7 |       |
| Type | 1     |                  |    |    |    |   |   | 1 | 1     |
|      | 6     | 5                | 27 | 44 | 13 | 2 | 2 | 6 | 99    |
|      | Total | 5                | 27 | 44 | 13 | 2 | 2 | 7 | 100   |

#### Loading Capacity

- 1 0.5 ton and less
- 2 0.6 – 1.0 ton
- 3 1.1 – 2.0 ton
- 4 2.1 – 4.0 ton
- 5 4.1 – 5.0 ton
- 6 5.1 – 6.0 ton
- 7 More than 6.1 ton

### Loading Volume

| Data |       | Loading Volume |   |    |    |    | Total |
|------|-------|----------------|---|----|----|----|-------|
|      |       | 1              | 2 | 3  | 4  | 5  |       |
| Type | 1     |                |   |    |    | 1  | 1     |
|      | 6     | 10             | 9 | 14 | 22 | 44 | 99    |
|      | Total | 10             | 9 | 14 | 22 | 45 | 100   |

#### Loading Volume

- 1 0 (empty)
- 2 1/4 of capacity
- 3 1/2 of capacity
- 4 3/4 of capacity
- 5 Full capacity

### b. Weekday by Type of Mode from Kampong Cham to Tboung Khmum

#### Sex

| Data         |       | Sex  |        | Total |
|--------------|-------|------|--------|-------|
|              |       | Male | Female |       |
| Type of Mode | 1     | 338  | 87     | 425   |
|              | 2     | 10   | 2      | 12    |
|              | 3     | 36   | 6      | 42    |
|              | 4     | 54   | 19     | 73    |
|              | 5     | 1    | 2      | 3     |
|              | 6     | 20   | 4      | 24    |
|              | 7     | 1    |        | 1     |
|              | 8     | 1    | 9      | 10    |
|              | 11    | 3    |        | 3     |
|              | Total | 464  | 129    | 593   |

## Age

| Data  | Age          |         |         |         |         |             |           | Total |
|-------|--------------|---------|---------|---------|---------|-------------|-----------|-------|
|       | Less than 13 | 15 – 20 | 21 – 30 | 31 – 40 | 41 – 50 | 50 and more | No answer |       |
| 1     | 1            | 43      | 152     | 132     | 53      | 44          |           | 425   |
| 2     |              | 3       | 4       | 4       | 1       |             |           | 12    |
| 3     |              |         | 13      | 21      | 3       | 5           |           | 42    |
| 4     |              | 9       | 30      | 17      | 13      | 3           | 1         | 73    |
| 5     |              |         | 2       |         | 1       |             |           | 3     |
| 6     |              | 1       | 10      | 9       | 4       |             |           | 24    |
| 7     |              |         | 1       |         |         |             |           | 1     |
| 8     | 1            | 7       | 2       |         |         |             |           | 10    |
| 11    |              | 2       | 1       |         |         |             |           | 3     |
| Total | 2            | 65      | 215     | 183     | 75      | 52          | 1         | 593   |

## Occupation

| Data  | Occupation |    |     |   |    |     |    |    | Total |
|-------|------------|----|-----|---|----|-----|----|----|-------|
|       | 1          | 2  | 3   | 4 | 5  | 6   | 7  | 8  |       |
| 1     | 33         | 15 | 144 | 2 | 70 | 67  | 63 | 31 | 425   |
| 2     | 2          | 1  | 4   |   | 2  | 1   | 2  |    | 12    |
| 3     |            | 4  | 13  |   | 1  | 11  | 10 | 3  | 42    |
| 4     | 3          | 6  | 28  |   | 6  | 14  | 13 | 3  | 73    |
| 5     |            | 1  |     |   | 1  |     |    | 1  | 3     |
| 6     | 1          | 1  | 1   | 1 |    | 16  | 4  |    | 24    |
| 7     |            |    |     |   |    |     | 1  |    | 1     |
| 8     | 7          | 1  | 1   |   |    |     |    | 1  | 10    |
| 11    |            |    | 2   |   |    |     |    | 1  | 3     |
| Total | 46         | 29 | 193 | 3 | 80 | 109 | 93 | 40 | 593   |

### Occupation

- 1 Student
- 2 House wife
- 3 Agriculture / forestry / fishery sector
- 4 Mining / Industry sector
- 5 Governmental officer
- 6 Service sector
- 7 Others
- 8 No occupation

## Residence (Province)

| Data  | Province |     |   |   |    |    |    |    |    |    |    | Total |
|-------|----------|-----|---|---|----|----|----|----|----|----|----|-------|
|       | 2        | 3   | 6 | 7 | 8  | 10 | 12 | 14 | 17 | 19 | 20 |       |
| 1     | 1        | 367 | 3 |   | 4  | 10 |    | 26 | 1  | 1  | 1  | 414   |
| 2     |          | 12  |   |   |    |    |    |    |    |    |    | 12    |
| 3     |          | 31  |   | 1 | 1  | 3  |    | 3  |    |    |    | 39    |
| 4     |          | 46  |   | 2 | 4  | 4  | 1  | 9  |    |    | 1  | 67    |
| 5     |          | 1   |   |   | 1  |    |    | 1  |    |    |    | 3     |
| 6     |          | 15  |   |   | 5  |    |    | 2  |    |    |    | 22    |
| 7     |          | 1   |   |   |    |    |    |    |    |    |    | 1     |
| 8     |          | 10  |   |   |    |    |    |    |    |    |    | 10    |
| 11    |          | 3   |   |   |    |    |    |    |    |    |    | 3     |
| Total | 1        | 486 | 3 | 3 | 15 | 17 | 1  | 41 | 1  | 1  | 2  | 571   |

### Trip Purpose

| Data  | Trip Purpose |    |    |    |     |     | Total |
|-------|--------------|----|----|----|-----|-----|-------|
|       | 1            | 2  | 3  | 4  | 5   | 6   |       |
| 1     | 53           | 13 | 16 | 25 | 92  | 226 | 425   |
| 2     | 3            | 1  | 1  |    | 3   | 4   | 12    |
| 3     | 6            |    | 2  | 5  | 10  | 19  | 42    |
| 4     | 4            |    | 2  | 13 | 18  | 36  | 73    |
| 5     |              |    |    | 1  | 1   | 1   | 3     |
| 6     | 1            |    | 2  | 11 | 5   | 5   | 24    |
| 7     |              |    |    |    | 1   |     | 1     |
| 8     |              |    | 1  | 1  | 1   | 7   | 10    |
| 11    |              |    |    |    |     | 3   | 3     |
| Total | 67           | 14 | 24 | 56 | 131 | 301 | 593   |

Trip Purpose

1 To work 4 To business

2 To school 5 To others

3 to shop / market 6 To home

"7 Others" is moved to "5 to others"

### Travel Time

| Data  | Travel Time |     |    |    |    |   |   |   | Total |
|-------|-------------|-----|----|----|----|---|---|---|-------|
|       | 1           | 2   | 3  | 4  | 5  | 6 | 7 | 8 |       |
| 1     | 257         | 111 | 33 | 11 | 7  | 2 | 1 | 3 | 425   |
| 2     | 6           | 4   | 2  |    |    |   |   |   | 12    |
| 3     | 6           | 18  | 9  | 3  | 3  | 2 |   | 1 | 42    |
| 4     | 10          | 19  | 28 | 10 | 3  |   | 1 | 2 | 73    |
| 5     | 2           |     | 1  |    |    |   |   |   | 3     |
| 6     | 4           | 7   | 4  | 7  | 1  |   | 1 |   | 24    |
| 7     |             |     | 1  |    |    |   |   |   | 1     |
| 8     | 9           | 1   |    |    |    |   |   |   | 10    |
| 11    | 2           | 1   |    |    |    |   |   |   | 3     |
| Total | 296         | 161 | 78 | 31 | 14 | 4 | 3 | 6 | 593   |

Travel Time

1 1.0h and Less

2 1.1-2.1h

3 2.0-3.0h

4 3.1-4.0h

5 4.1-5.0h

6 5.1-6.0h

7 More than 6.0h

8 Unkown

### Type of Cargo

| Data   | Type of Cargo |   |   |   |    |    | Total |
|--------|---------------|---|---|---|----|----|-------|
|        | 1             | 2 | 4 | 9 | 10 | 11 |       |
| Type 6 | 9             | 7 | 1 | 1 | 1  | 3  | 22    |
| Total  | 9             | 7 | 1 | 1 | 1  | 3  | 22    |

Type of Cargo

1 Empty (no cargo)

2 Agreculture (rice, corn, vegetable, fruits, etc)

3 Forest (Log, timber, plywood, etc)

4 Marine (fish, shell, seaweed, etc)

5 Mineral (coal, copper, iron, salt, etc)

6 Metal & machine ( steel, generator, car, bike,

7 Chemical (petroleum, alcohol, acid, etc)

8 Light industry/Electronics (machine parts,IC, electronic appliances, etc

9 Miscellaneous (garment, shoes, etc.)

10 Construction (sand, gravel, Asphalt, concrete, steel-bar, steel-beam, etc

11 Others

### Loading Capacity

| Data   | Loading Capacity |   |   |   |   |   |  | Total |
|--------|------------------|---|---|---|---|---|--|-------|
|        | 1                | 2 | 3 | 4 | 6 | 7 |  |       |
| Type 6 | 10               | 2 | 2 | 5 | 2 | 1 |  | 22    |
| Total  | 10               | 2 | 2 | 5 | 2 | 1 |  | 22    |

Loading Capacity

1 0.5 ton and less

2 0.6 – 1.0 ton

3 1.1 – 2.0 ton

4 2.1 – 4.0 ton

5 4.1 – 5.0 ton

6 5.1 – 6.0 ton

7 More than 6.1 ton

### Loading Volume

| Data   | Loading Volume |   |   |    | Total |
|--------|----------------|---|---|----|-------|
|        | 1              | 2 | 4 | 5  |       |
| Type 6 | 9              | 2 | 1 | 10 | 22    |
| Total  | 9              | 2 | 1 | 10 | 22    |

Loading Volume

1 0 (empty)

2 1/4 of capa

3 1/2 of capacity

4 3/4 of capacity

5 Full capacity

### c. Non-weekday by Type of Mode from Tboung Khmum to Kampong Cham

#### Sex

| Data  | Sex   |        |           | Total |
|-------|-------|--------|-----------|-------|
|       | Male  | Female | No answer |       |
| 1     | 1,299 | 315    | 1         | 1,615 |
| 2     | 28    | 2      |           | 30    |
| 3     | 245   | 9      |           | 254   |
| 4     | 215   | 24     |           | 239   |
| 5     | 26    | 1      |           | 27    |
| 6     | 315   | 2      |           | 317   |
| 7     | 24    |        |           | 24    |
| 8     | 9     | 6      |           | 15    |
| 10    | 6     |        |           | 6     |
| 11    | 16    |        |           | 16    |
| Total | 2,183 | 359    | 1         | 2,543 |

#### Age

| Data  | Age          |         |         |         |         |             | Total |
|-------|--------------|---------|---------|---------|---------|-------------|-------|
|       | Less than 13 | 15 – 20 | 21 – 30 | 31 – 40 | 41 – 50 | 50 and more |       |
| 1     | 12           | 170     | 790     | 466     | 159     | 18          | 1,615 |
| 2     |              | 3       | 8       | 17      | 2       |             | 30    |
| 3     | 1            | 5       | 77      | 138     | 31      | 2           | 254   |
| 4     |              | 9       | 109     | 101     | 19      | 1           | 239   |
| 5     |              | 1       | 9       | 10      | 6       | 1           | 27    |
| 6     |              |         | 101     | 163     | 50      | 3           | 317   |
| 7     |              | 1       | 11      | 8       | 4       |             | 24    |
| 8     | 1            | 4       | 7       | 1       | 2       |             | 15    |
| 10    | 1            | 2       |         | 1       | 1       | 1           | 6     |
| 11    | 1            | 2       | 5       | 6       | 2       |             | 16    |
| Total | 16           | 197     | 1,117   | 911     | 276     | 26          | 2,543 |



## Occupation

| Data  | Occupation |    |     |   |     |       |    |   | Total |
|-------|------------|----|-----|---|-----|-------|----|---|-------|
|       | 1          | 2  | 3   | 4 | 5   | 6     | 7  | 8 |       |
| 1     | 171        | 42 | 192 | 4 | 227 | 940   | 35 | 4 | 1,615 |
| 2     | 2          |    | 2   |   | 3   | 21    | 2  |   | 30    |
| 3     | 4          |    | 3   |   | 15  | 229   | 3  |   | 254   |
| 4     | 1          | 5  | 5   |   | 8   | 220   |    |   | 239   |
| 5     | 1          |    |     |   | 3   | 22    |    | 1 | 27    |
| 6     |            |    | 6   | 2 | 1   | 307   | 1  |   | 317   |
| 7     |            |    |     |   |     | 24    |    |   | 24    |
| 8     | 5          | 2  | 2   |   |     | 6     |    |   | 15    |
| 10    |            |    |     |   | 1   | 5     |    |   | 6     |
| 11    |            |    | 2   |   |     | 14    |    |   | 16    |
| Total | 184        | 49 | 212 | 6 | 258 | 1,788 | 41 | 5 | 2,543 |

### Occupation

- 1 Student  
 2 House wife  
 3 Agriculture / forestry / fishery sector  
 4 Mining / Industry sector  
 5 Governmental officer  
 6 Service sector  
 7 Others  
 8 No occupation

## Residence (Province)

| Data  | Province |   |   |       |   |   |   |   |    |    |     |    |     |    |    |    |    | Total |
|-------|----------|---|---|-------|---|---|---|---|----|----|-----|----|-----|----|----|----|----|-------|
|       | 0        | 1 | 2 | 3     | 4 | 5 | 8 | 9 | 10 | 11 | 12  | 13 | 14  | 17 | 18 | 20 | 21 |       |
| 1     |          |   | 1 | 1,543 | 2 | 1 | 1 |   | 9  |    | 9   |    | 45  |    | 2  | 2  |    | 1,615 |
| 2     |          |   |   | 28    |   |   |   |   |    |    |     | 1  | 1   |    |    |    |    | 30    |
| 3     | 3        |   |   | 168   |   |   | 2 | 1 | 23 |    | 37  |    | 19  | 1  |    |    |    | 254   |
| 4     |          |   |   | 197   |   |   | 1 |   | 21 | 1  | 4   |    | 15  |    |    |    |    | 239   |
| 5     | 1        |   |   | 19    |   |   |   |   | 2  |    | 3   |    | 1   |    |    |    | 1  | 27    |
| 6     |          | 2 |   | 223   | 1 | 1 | 4 |   | 10 |    | 53  | 1  | 20  |    |    |    | 1  | 316   |
| 7     |          |   |   | 16    |   |   |   |   | 2  |    | 5   |    |     |    |    |    | 1  | 24    |
| 8     |          |   |   | 15    |   |   |   |   |    |    |     |    |     |    |    |    |    | 15    |
| 10    |          |   |   | 4     |   |   |   |   |    |    |     |    | 2   |    |    |    |    | 6     |
| 11    |          |   |   | 16    |   |   |   |   |    |    |     |    |     |    |    |    |    | 16    |
| Total | 4        | 2 | 1 | 2,229 | 3 | 2 | 8 | 1 | 67 | 1  | 112 | 1  | 103 | 1  | 2  | 2  | 3  | 2,542 |

## Trip Purpose

| Data  | Trip Purpose |     |    |     |     |     | Total |
|-------|--------------|-----|----|-----|-----|-----|-------|
|       | 0            | 1   | 2  | 3   | 4   | 5   |       |
| 1     | 1            | 84  | 73 | 630 | 211 | 231 | 1,615 |
| 2     |              | 1   | 1  | 15  | 6   | 2   | 30    |
| 3     |              | 12  | 3  | 10  | 196 | 28  | 254   |
| 4     |              | 7   | 1  | 11  | 180 | 37  | 239   |
| 5     |              | 2   | 1  |     | 22  | 2   | 27    |
| 6     |              | 1   |    | 6   | 289 | 15  | 317   |
| 7     |              |     |    |     | 21  | 3   | 24    |
| 8     |              |     | 4  | 7   | 1   | 1   | 15    |
| 10    |              |     |    | 1   |     | 5   | 6     |
| 11    |              |     |    | 12  | 3   | 1   | 16    |
| Total | 1            | 107 | 83 | 692 | 929 | 325 | 2,543 |

### Trip Purpose

- 1 To work  
 2 To school  
 3 to shop / market  
 4 To business  
 5 To others  
 6 To home  
 "7 Others" is moved to "5 to others"

### Travel Time

| Data         | Travel Time |     |     |     |    |    |    |   | Total |
|--------------|-------------|-----|-----|-----|----|----|----|---|-------|
|              | 1           | 2   | 3   | 4   | 5  | 6  | 7  | 8 |       |
| Type of Mode |             |     |     |     |    |    |    |   |       |
| 1            | 1,282       | 194 | 102 | 23  | 2  | 4  | 3  | 3 | 1,613 |
| 2            | 15          | 7   | 7   |     |    | 1  |    |   | 30    |
| 3            | 38          | 16  | 75  | 93  | 17 | 12 | 2  | 1 | 254   |
| 4            | 13          | 61  | 75  | 73  | 7  | 6  | 3  |   | 238   |
| 5            | 3           | 1   | 9   | 12  | 1  | 1  |    |   | 27    |
| 6            | 37          | 47  | 62  | 112 | 27 | 14 | 14 | 4 | 317   |
| 7            |             | 5   | 2   | 11  | 3  | 1  | 2  |   | 24    |
| 8            | 8           | 5   |     | 1   |    |    |    | 1 | 15    |
| 10           | 4           | 2   |     |     |    |    |    |   | 6     |
| 11           | 9           | 7   |     |     |    |    |    |   | 16    |
| Total        | 1,409       | 345 | 332 | 325 | 57 | 39 | 24 | 9 | 2,540 |

#### Travel Time

- |   |               |   |                |
|---|---------------|---|----------------|
| 1 | 1.0h and Less | 5 | 4.1–5.0h       |
| 2 | 1.1–2.1h      | 6 | 5.1–6.0h       |
| 3 | 2.0–3.0h      | 7 | More than 6.0h |
| 4 | 3.1–4.0h      | 8 | Unkown         |

### Type of Cargo

| Data         | Type of Cargo |    |    |   |   |   |   |   |    |    | Total |
|--------------|---------------|----|----|---|---|---|---|---|----|----|-------|
|              | 1             | 2  | 3  | 4 | 5 | 6 | 7 | 9 | 10 | 11 |       |
| Type of Mode |               |    |    |   |   |   |   |   |    |    |       |
| 1            |               |    |    |   |   |   |   |   |    | 1  | 1     |
| 2            | 1             | 1  |    |   |   |   |   |   |    | 1  | 3     |
| 3            | 1             |    |    |   |   |   |   |   |    | 2  | 3     |
| 4            |               |    |    |   |   |   |   |   |    | 1  | 1     |
| 5            |               |    |    |   |   |   |   |   |    | 1  | 1     |
| 6            | 76            | 94 | 51 | 3 | 5 | 7 | 1 | 1 | 14 | 47 | 299   |
| 7            | 10            | 3  | 3  | 2 | 1 | 1 |   |   | 3  |    | 23    |
| 11           |               |    | 1  |   |   |   |   |   |    |    | 1     |
| Total        | 88            | 98 | 55 | 5 | 6 | 8 | 1 | 1 | 17 | 53 | 332   |

#### Type of Cargo

- |    |                                                                            |
|----|----------------------------------------------------------------------------|
| 1  | Empty (no cargo)                                                           |
| 2  | Agreculture (rice, corn, vegetable, fruits, etc)                           |
| 3  | Forest (Log, timber, plywood, etc)                                         |
| 4  | Marine (fish, shell, seaweed, etc)                                         |
| 5  | Mineral (coal, copper, iron, salt, etc)                                    |
| 6  | Metal & machine ( steel, generator, car, bike,                             |
| 7  | Chemical (petroleum, alcohol, acid, etc)                                   |
| 8  | Light industry/Electronics (machine parts,IC, electronic appliances, etc)  |
| 9  | Miscellaneous (garment, shoes, etc.)                                       |
| 10 | Construction (sand, gravel, Asphalt, concrete, steel-bar, steel-beam, etc) |
| 11 | Others                                                                     |

### Loading Capacity

| Data         | Loading Capacity |    |    |    |    |    |     | Total |
|--------------|------------------|----|----|----|----|----|-----|-------|
|              | 1                | 2  | 3  | 4  | 5  | 6  | 7   |       |
| Type of Mode |                  |    |    |    |    |    |     |       |
| 1            | 1                | 1  |    |    |    |    |     | 2     |
| 2            | 3                |    |    |    |    |    |     | 3     |
| 3            | 1                | 1  | 1  |    |    |    |     | 3     |
| 4            | 1                |    |    |    |    |    |     | 1     |
| 5            |                  |    |    |    |    |    | 1   | 1     |
| 6            | 12               | 26 | 51 | 33 | 14 | 21 | 103 | 260   |
| 7            |                  |    | 4  | 3  |    | 1  | 8   | 16    |
| 11           | 1                |    |    |    |    |    |     | 1     |
| Total        | 19               | 28 | 56 | 36 | 14 | 22 | 112 | 287   |

#### Loading Capacity

- |   |                  |   |                   |
|---|------------------|---|-------------------|
| 1 | 0.5 ton and less | 5 | 4.1 – 5.0 ton     |
| 2 | 0.6 – 1.0 ton    | 6 | 5.1 – 6.0 ton     |
| 3 | 1.1 – 2.0 ton    | 7 | More than 6.1 ton |
| 4 | 2.1 – 4.0 ton    |   |                   |

### Loading Volume

| Data  | Loading Volume |    |    |    |     | Total |
|-------|----------------|----|----|----|-----|-------|
|       | 1              | 2  | 3  | 4  | 5   |       |
| 1     |                | 1  |    |    | 1   | 2     |
| 2     | 1              | 2  |    |    |     | 3     |
| 3     |                |    | 1  |    | 2   | 3     |
| 4     |                | 1  |    |    |     | 1     |
| 5     |                |    |    |    | 1   | 1     |
| 6     | 50             | 24 | 14 | 17 | 194 | 299   |
| 7     | 8              | 2  |    | 2  | 11  | 23    |
| 11    |                | 1  |    |    |     | 1     |
| Total | 59             | 31 | 15 | 19 | 209 | 333   |

Loading Volume

- 1 0 (empty)                      4 3/4 of capacity  
 2 1/4 of capacity                5 Full capacity  
 3 1/2 of capacity

### d. Weekday by Type of Mode from Tboung Khmum to Kampong Cham

#### Sex

| Data  | Sex  |        | Total |
|-------|------|--------|-------|
|       | Male | Female |       |
| 1     | 483  | 107    | 590   |
| 2     | 4    | 1      | 5     |
| 3     | 85   | 34     | 119   |
| 4     | 128  | 86     | 214   |
| 5     | 2    | 1      | 3     |
| 6     | 32   | 6      | 38    |
| 8     | 6    | 8      | 14    |
| 11    | 4    | 1      | 5     |
| Total | 744  | 244    | 988   |

#### Age

| Data  | Age          |         |         |         |         |             |           | Total |
|-------|--------------|---------|---------|---------|---------|-------------|-----------|-------|
|       | Less than 13 | 15 – 20 | 21 – 30 | 31 – 40 | 41 – 50 | 50 and more | No answer |       |
| 1     | 2            | 45      | 247     | 221     | 60      | 15          |           | 590   |
| 2     |              | 2       | 1       | 1       |         | 1           |           | 5     |
| 3     |              | 5       | 49      | 46      | 14      | 5           |           | 119   |
| 4     |              | 18      | 83      | 66      | 33      | 14          |           | 214   |
| 5     |              |         | 1       | 1       |         | 1           |           | 3     |
| 6     |              |         | 8       | 21      | 8       |             | 1         | 38    |
| 8     | 1            | 4       | 3       | 2       |         | 4           |           | 14    |
| 11    |              | 1       |         | 2       | 1       | 1           |           | 5     |
| Total | 3            | 75      | 392     | 360     | 116     | 41          | 1         | 988   |

## Occupation

| Data  | Occupation |    |     |   |     |     |     |    | Total |
|-------|------------|----|-----|---|-----|-----|-----|----|-------|
|       | 1          | 2  | 3   | 4 | 5   | 6   | 7   | 8  |       |
| 1     | 51         | 26 | 98  | 1 | 73  | 286 | 18  | 36 | 589   |
| 2     | 2          |    | 3   |   |     |     |     |    | 5     |
| 3     | 1          | 13 | 26  | 2 | 6   | 23  | 39  | 9  | 119   |
| 4     | 16         | 24 | 59  | 2 | 23  | 28  | 33  | 29 | 214   |
| 5     |            |    |     |   |     |     | 2   | 1  | 3     |
| 6     |            | 3  | 2   |   |     | 21  | 8   | 4  | 38    |
| 8     | 5          |    | 4   |   |     |     |     | 5  | 14    |
| 11    |            |    | 4   |   |     |     |     | 1  | 5     |
| Total | 75         | 66 | 196 | 5 | 102 | 358 | 100 | 85 | 987   |

### Occupation

- |                                           |                        |
|-------------------------------------------|------------------------|
| 1 Student                                 | 5 Governmental officer |
| 2 House wife                              | 6 Service sector       |
| 3 Agriculture / forestry / fishery sector | 7 Others               |
| 4 Mining / Industry sector                | 8 No occupation        |

## Residence by Province

| Data  | Province |     |   |   |   |    |    |    |    |    |    |    | Total |
|-------|----------|-----|---|---|---|----|----|----|----|----|----|----|-------|
|       | 0        | 3   | 4 | 6 | 7 | 8  | 10 | 11 | 12 | 14 | 16 | 20 |       |
| 1     | 35       | 527 |   |   | 1 | 1  | 3  |    | 11 | 11 | 1  |    | 590   |
| 2     |          | 4   |   | 1 |   |    |    |    |    |    |    |    | 5     |
| 3     | 16       | 71  | 1 |   |   | 3  | 13 |    | 5  | 9  | 1  |    | 119   |
| 4     | 27       | 119 | 2 | 5 |   | 5  | 14 | 2  | 23 | 16 |    | 1  | 214   |
| 5     |          | 2   |   |   |   |    |    |    | 1  |    |    |    | 3     |
| 6     |          | 30  |   |   |   | 3  |    |    | 3  | 2  |    |    | 38    |
| 8     |          | 13  |   |   |   |    |    |    | 1  |    |    |    | 14    |
| 11    |          | 4   | 1 |   |   |    |    |    |    |    |    |    | 5     |
| Total | 78       | 770 | 4 | 6 | 1 | 12 | 30 | 2  | 44 | 38 | 2  | 1  | 988   |

## Trip Purpose

| Data  | Trip Purpose |    |    |     |     |     |     | Total |
|-------|--------------|----|----|-----|-----|-----|-----|-------|
|       | 0            | 1  | 2  | 3   | 4   | 5   | 6   |       |
| 1     |              | 53 | 41 | 190 | 112 | 61  | 133 | 590   |
| 2     |              | 1  |    |     | 1   | 2   | 1   | 5     |
| 3     |              | 2  |    | 3   | 25  | 25  | 64  | 119   |
| 4     |              | 29 | 2  | 2   | 19  | 20  | 142 | 214   |
| 5     |              |    |    |     | 1   | 1   | 1   | 3     |
| 6     | 1            | 1  |    |     | 22  | 6   | 8   | 38    |
| 8     |              | 2  | 2  |     | 3   | 2   | 5   | 14    |
| 11    |              |    |    | 2   |     | 2   | 1   | 5     |
| Total | 1            | 88 | 45 | 197 | 183 | 119 | 355 | 988   |

### Trip Purpose

- |                    |                                      |
|--------------------|--------------------------------------|
| 1 To work          | 4 To business                        |
| 2 To school        | 5 To others                          |
| 3 to shop / market | 6 To home                            |
|                    | "7 Others" is moved to "5 to others" |

### Travel Time

| Data         | Travel Time |     |     |     |    |    |    |   | Total |
|--------------|-------------|-----|-----|-----|----|----|----|---|-------|
|              | 1           | 2   | 3   | 4   | 5  | 6  | 7  | 8 |       |
| Type of Mode |             |     |     |     |    |    |    |   |       |
| 1            | 447         | 84  | 35  | 16  | 1  | 2  | 4  | 1 | 590   |
| 2            | 5           |     |     |     |    |    |    |   | 5     |
| 3            | 8           | 19  | 38  | 26  | 20 | 3  | 5  |   | 119   |
| 4            | 32          | 50  | 51  | 46  | 9  | 6  | 20 |   | 214   |
| 5            |             |     | 2   |     | 1  |    |    |   | 3     |
| 6            | 5           | 6   | 8   | 15  | 3  | 1  |    |   | 38    |
| 8            | 9           | 1   | 1   | 2   | 1  |    |    |   | 14    |
| 11           | 3           |     | 2   |     |    |    |    |   | 5     |
| Total        | 509         | 160 | 137 | 105 | 35 | 12 | 29 | 1 | 988   |

#### Travel Time

- |                 |                  |
|-----------------|------------------|
| 1 1.0h and Less | 5 4.1-5.0h       |
| 2 1.1-2.1h      | 6 5.1-6.0h       |
| 3 2.0-3.0h      | 7 More than 6.0h |
| 4 3.1-4.0h      | 8 Unkown         |

### Type of Cargo

| Data   | Type of Cargo |    |   |   |   |    | Total |
|--------|---------------|----|---|---|---|----|-------|
|        | 1             | 2  | 3 | 5 | 9 | 10 |       |
| Type 6 | 5             | 22 | 1 | 1 | 2 | 6  | 37    |
| Total  | 5             | 22 | 1 | 1 | 2 | 6  | 37    |

#### Type of Cargo

- |                                                                               |  |
|-------------------------------------------------------------------------------|--|
| 1 Empty (no cargo)                                                            |  |
| 2 Agreculture (rice, corn, vegetable, fruits, etc)                            |  |
| 3 Forest (Log, timber, plywood, etc)                                          |  |
| 4 Marine (fish, shell, seaweed, etc)                                          |  |
| 5 Mineral (coal, copper, iron, salt, etc)                                     |  |
| 6 Metal & machine ( steel, generator, car, bike,                              |  |
| 7 Chemical (petroleum, alcohol, acid, etc)                                    |  |
| 8 Light industry/Electronics (machine parts,IC, electronic appliances, etc)   |  |
| 9 Miscellaneous (garment, shoes, etc.)                                        |  |
| 10 Construction (sand, gravel, Asphalt, concrete, steel-bar, steel-beam, etc) |  |
| 11 Others                                                                     |  |

### Loading Capacity

| Data   | Loading Capacity |   | Total |
|--------|------------------|---|-------|
|        | 3                | 4 |       |
| Type 6 | 26               | 9 | 35    |
| Total  | 26               | 9 | 35    |

#### Loading Capacity

- |                    |                     |
|--------------------|---------------------|
| 1 0.5 ton and less | 5 4.1 – 5.0 ton     |
| 2 0.6 – 1.0 ton    | 6 5.1 – 6.0 ton     |
| 3 1.1 – 2.0 ton    | 7 More than 6.1 ton |
| 4 2.1 – 4.0 ton    |                     |

### Loading Volume

| Data   | Loading Ratio |   |   |    | Total |
|--------|---------------|---|---|----|-------|
|        | 1             | 2 | 4 | 5  |       |
| Type 6 | 3             | 2 | 1 | 31 | 37    |
| Total  | 3             | 2 | 1 | 31 | 37    |

#### Loading Volume

- |                   |                   |
|-------------------|-------------------|
| 1 0 (empty)       | 4 3/4 of capacity |
| 2 1/4 of capa     | 5 Full capacity   |
| 3 1/2 of capacity |                   |

## 2) Neak Loeung

### a. Non-weekday by Type of Mode from Phnom Penh to Prey Veang

#### Sex by Type of Mode

| Data  | Sex  |        | Total |
|-------|------|--------|-------|
|       | Male | Female |       |
| 1     | 124  | 1      | 125   |
| 2     | 373  | 18     | 391   |
| 3     | 107  |        | 107   |
| 4     | 192  |        | 192   |
| 5     | 271  | 1      | 272   |
| 6     | 190  |        | 190   |
| 7     | 5    |        | 5     |
| 8     | 86   | 23     | 109   |
| 10    | 130  | 94     | 224   |
| 11    | 19   | 9      | 28    |
| Total | 1497 | 146    | 1643  |

#### Age by Type of Mode

| Data  | Age          |         |         |         |         |             | Total |
|-------|--------------|---------|---------|---------|---------|-------------|-------|
|       | Less than 13 | 15 – 20 | 21 – 30 | 31 – 40 | 41 – 50 | 50 and more |       |
| 1     |              | 59      | 61      | 2       | 2       | 1           | 125   |
| 2     | 2            | 150     | 230     | 8       |         | 1           | 391   |
| 3     |              | 9       | 47      | 43      | 7       | 1           | 107   |
| 4     | 2            | 6       | 89      | 75      | 18      | 2           | 192   |
| 5     |              | 8       | 96      | 153     | 15      |             | 272   |
| 6     |              | 17      | 73      | 82      | 18      |             | 190   |
| 7     |              |         | 1       | 3       | 1       |             | 5     |
| 8     |              | 4       | 57      | 43      | 5       |             | 109   |
| 10    |              | 23      | 92      | 92      | 15      | 2           | 224   |
| 11    | 2            | 1       | 10      | 11      | 3       | 1           | 28    |
| Total | 6            | 277     | 756     | 512     | 84      | 8           | 1,643 |

#### Occupation by Type of Mode

| Data  | Occupation |    |     |    |     |     |     |    | Total |
|-------|------------|----|-----|----|-----|-----|-----|----|-------|
|       | 1          | 2  | 3   | 4  | 5   | 6   | 7   | 8  |       |
| 1     | 14         | 9  | 18  | 1  | 21  | 55  | 6   | 1  | 125   |
| 2     | 32         | 13 | 58  | 3  | 40  | 170 | 73  | 2  | 391   |
| 3     |            |    | 5   |    | 6   | 38  | 55  | 3  | 107   |
| 4     | 4          |    | 1   | 4  | 47  | 67  | 61  | 8  | 192   |
| 5     |            | 1  | 3   | 5  | 3   | 35  | 216 | 9  | 272   |
| 6     |            |    | 3   | 2  | 5   | 25  | 147 | 8  | 190   |
| 7     |            |    |     |    |     | 2   | 3   |    | 5     |
| 8     |            | 1  | 96  | 1  | 1   |     | 3   | 7  | 109   |
| 10    | 8          | 5  | 147 | 3  | 8   | 39  | 5   | 9  | 224   |
| 11    | 1          |    | 20  |    |     | 6   |     | 1  | 28    |
| Total | 59         | 29 | 351 | 19 | 131 | 437 | 569 | 48 | 1,643 |

#### Occupation

- |                                           |                        |
|-------------------------------------------|------------------------|
| 1 Student                                 | 5 Governmental officer |
| 2 House wife                              | 6 Service sector       |
| 3 Agriculture / forestry / fishery sector | 7 Others               |
| 4 Mining / Industry sector                | 8 No occupation        |

### Residence by Province

| Residence by Province |          |    |   |   |   |   |   |    |     |     |       |     |    |    |   |       |
|-----------------------|----------|----|---|---|---|---|---|----|-----|-----|-------|-----|----|----|---|-------|
| Data                  | Province |    |   |   |   |   |   |    |     |     |       |     |    |    |   | Total |
|                       | 0        | 2  | 3 | 4 | 5 | 6 | 7 | 8  | 9   | 12  | 14    | 18  | 20 | 21 |   |       |
| Type of Mode          | 1        | 1  |   |   | 1 |   |   | 21 |     | 87  | 9     |     | 6  |    |   | 125   |
|                       | 2        | 1  |   | 1 | 1 |   |   | 88 |     | 292 | 5     |     | 2  | 1  |   | 391   |
|                       | 3        |    |   |   | 1 |   |   | 4  |     | 96  | 3     |     | 3  |    |   | 107   |
|                       | 4        |    |   |   | 1 |   |   | 2  |     | 187 | 1     |     | 1  |    |   | 192   |
|                       | 5        | 1  |   | 1 | 1 | 2 | 2 | 3  | 1   | 256 | 4     |     |    |    | 1 | 272   |
|                       | 6        | 1  | 2 | 3 | 1 | 2 | 2 | 5  | 6   | 165 |       | 2   | 1  |    |   | 190   |
|                       | 7        |    | 2 |   | 1 |   |   |    |     | 2   |       |     |    |    |   | 5     |
|                       | 8        | 18 |   |   |   |   |   | 1  | 27  | 5   | 50    |     | 8  |    |   | 109   |
|                       | 10       | 2  | 1 |   |   |   |   |    | 37  | 31  | 127   | 1   | 23 | 2  |   | 224   |
|                       | 11       |    |   | 1 |   |   |   |    | 7   | 4   | 12    |     | 4  |    |   | 28    |
|                       | Total    | 24 | 5 | 5 | 5 | 7 | 4 | 6  | 195 | 1   | 1,125 | 211 | 3  | 48 | 4 |       |

### Trip Purpose

| Data  | Trip Purpose |    |     |     |     |     | Total |
|-------|--------------|----|-----|-----|-----|-----|-------|
|       | 1            | 2  | 3   | 4   | 5   | 6   |       |
| 1     | 24           | 1  | 4   | 17  | 35  | 44  | 125   |
| 2     | 41           | 10 | 24  | 32  | 85  | 199 | 391   |
| 3     | 4            |    |     | 78  | 24  | 1   | 107   |
| 4     | 12           |    | 1   | 139 | 39  | 1   | 192   |
| 5     | 1            |    | 1   | 227 | 40  | 3   | 272   |
| 6     |              |    | 2   | 151 | 34  | 3   | 190   |
| 7     |              |    |     | 5   |     |     | 5     |
| 8     | 3            |    | 29  | 8   | 4   | 65  | 109   |
| 10    | 12           |    | 47  | 11  | 29  | 123 | 222   |
| 11    | 3            |    | 5   |     | 4   | 16  | 28    |
| Total | 100          | 11 | 113 | 668 | 294 | 455 | 1,641 |

Trip Purpose

1 To work

2 To school

3 to shop / market

4 To business

5 To others

6 To home

"7 Others" is moved to "5 to others"

### Travel Time

| Data  | Travel Time |     |     |     |    |    |    | Total |
|-------|-------------|-----|-----|-----|----|----|----|-------|
|       | 1           | 2   | 3   | 4   | 5  | 6  | 7  |       |
| 1     | 13          | 83  | 26  | 2   |    |    | 1  | 125   |
| 2     | 61          | 170 | 151 | 7   | 1  |    | 1  | 391   |
| 3     | 1           | 54  | 31  | 7   | 3  | 3  | 8  | 107   |
| 4     | 7           | 91  | 57  | 10  |    | 5  | 22 | 192   |
| 5     | 2           | 28  | 142 | 78  | 10 | 6  | 6  | 272   |
| 6     | 19          | 44  | 59  | 48  | 1  | 7  | 5  | 183   |
| 7     |             | 1   |     | 1   |    | 1  | 2  | 5     |
| 8     | 7           | 86  | 11  | 4   |    |    | 1  | 109   |
| 10    | 43          | 96  | 70  | 13  |    | 1  | 1  | 224   |
| 11    | 3           | 13  | 9   | 2   |    |    |    | 27    |
| Total | 156         | 666 | 556 | 172 | 15 | 23 | 47 | 1,635 |

Travel Time

1 1.0h and Less

2 1.1–2.1h

3 2.0–3.0h

4 3.1–4.0h

5 4.1–5.0h

6 5.1–6.0h

7 More than 6.0h

8 Unkown

## Type of Cargo

| Type of Cargo |   | Type of Cargo |    |    |    |    |    |    |   |    |    | Total |
|---------------|---|---------------|----|----|----|----|----|----|---|----|----|-------|
| Data          |   | 1             | 2  | 3  | 4  | 5  | 6  | 7  | 9 | 10 | 11 |       |
| Type          | 3 | 1             |    |    |    |    |    |    |   |    |    | 1     |
|               | 4 | 2             | 1  |    |    | 1  |    |    |   |    | 1  | 5     |
|               | 5 | 7             |    |    | 1  |    | 1  |    |   |    | 21 | 30    |
|               | 6 | 26            | 39 | 20 | 16 | 26 | 15 | 13 | 2 | 25 | 7  | 189   |
|               | 7 | 1             | 2  | 1  |    |    | 1  |    |   |    |    | 5     |
| Total         |   | 37            | 42 | 21 | 17 | 27 | 17 | 13 | 2 | 25 | 29 | 230   |

### Type of Cargo

- 1 Empty (no cargo)
- 2 Agriculture (rice, corn, vegetable, fruits, etc)
- 3 Forest (Log, timber, plywood, etc)
- 4 Marine (fish, shell, seaweed, etc)
- 5 Mineral (coal, copper, iron, salt, etc)
- 6 Metal & machine ( steel, generator, car, bike,
- 7 Chemical (petroleum, alcohol, acid, etc)
- 8 Light industry/Electronics (machine parts,IC, electronic appliances, etc)
- 9 Miscellaneous (garment, shoes, etc.)
- 10 Construction (sand, gravel, Asphalt, concrete, steel-bar, steel-beam, etc)
- 11 Others

## Loading Capacity

| Data           | Loading Capacity |    |    |    |    |   |   | Total |
|----------------|------------------|----|----|----|----|---|---|-------|
|                | 1                | 2  | 3  | 4  | 5  | 6 | 7 |       |
| Type of Mode 3 |                  |    | 1  |    |    |   |   | 1     |
| 4              |                  | 3  | 2  |    |    |   |   | 5     |
| 5              | 3                | 9  | 14 | 3  |    |   | 1 | 30    |
| 6              | 4                | 7  | 52 | 67 | 56 | 2 | 1 | 189   |
| 7              | 1                |    |    |    | 1  | 1 | 2 | 5     |
| Total          | 8                | 19 | 69 | 70 | 57 | 3 | 4 | 230   |

### Loading Capacity

- 1 0.5 ton and less
- 2 0.6 – 1.0 ton
- 3 1.1 – 2.0 ton
- 4 2.1 – 4.0 ton
- 5 4.1 – 5.0 ton
- 6 5.1 – 6.0 ton
- 7 More than 6.1 ton

## Loading Volume

| Data   | Loading Volume |    |    |    |     | Total |
|--------|----------------|----|----|----|-----|-------|
|        | 1              | 2  | 3  | 4  | 5   |       |
| Type 3 | 1              |    |    |    |     | 1     |
| 4      | 3              | 1  | 1  |    |     | 5     |
| 5      | 25             | 2  | 2  | 1  |     | 30    |
| 6      | 26             | 26 | 28 | 11 | 98  | 189   |
| 7      | 1              |    |    | 1  | 3   | 5     |
| Total  | 56             | 29 | 31 | 13 | 101 | 230   |

### Loading Volume

- 1 0 (empty)
- 2 1/4 of capacity
- 3 1/2 of capacity
- 4 3/4 of capacity
- 5 Full capacity



b. Weekday by Type of Mode from Phnom Penh to Prey Veang

Age by Type of Mode

| Data  | Sex  |        |           | Total |
|-------|------|--------|-----------|-------|
|       | Male | Female | No answer |       |
| 1     | 231  | 11     | 1         | 243   |
| 2     | 24   |        |           | 24    |
| 3     | 44   |        |           | 44    |
| 4     | 114  | 1      |           | 115   |
| 5     | 125  |        |           | 125   |
| 6     | 129  |        |           | 129   |
| 7     | 3    |        |           | 3     |
| 8     | 46   | 9      |           | 55    |
| 10    | 131  | 84     |           | 215   |
| Total | 847  | 105    | 1         | 953   |

Age by Type of Mode

| Data  | Age          |         |         |         |         |             | Total |
|-------|--------------|---------|---------|---------|---------|-------------|-------|
|       | Less than 13 | 15 – 20 | 21 – 30 | 31 – 40 | 41 – 50 | 50 and more |       |
| 1     |              | 78      | 159     | 5       |         |             | 242   |
| 2     |              | 6       | 18      |         |         |             | 24    |
| 3     |              | 1       | 34      | 8       | 1       |             | 44    |
| 4     |              | 6       | 67      | 40      | 2       |             | 115   |
| 5     |              | 3       | 28      | 93      | 1       |             | 125   |
| 6     | 2            | 20      | 49      | 50      | 7       | 1           | 129   |
| 7     |              |         |         | 2       | 1       |             | 3     |
| 8     |              | 5       | 18      | 28      | 4       |             | 55    |
| 10    |              | 30      | 95      | 78      | 11      | 1           | 215   |
| Total | 2            | 149     | 468     | 304     | 27      | 2           | 952   |

Occupation

| Data  | Occupation |   |     |    |    |     |     |     | Total |
|-------|------------|---|-----|----|----|-----|-----|-----|-------|
|       | 1          | 2 | 3   | 4  | 5  | 6   | 7   | 8   |       |
| 1     | 25         | 1 | 25  | 7  | 30 | 124 | 17  | 14  | 243   |
| 2     | 3          |   | 1   |    | 4  | 13  | 2   | 1   | 24    |
| 3     |            |   | 1   | 3  | 2  | 16  | 13  | 9   | 44    |
| 4     | 2          | 1 | 1   | 5  | 23 | 60  | 11  | 12  | 115   |
| 5     |            |   | 7   | 18 | 5  | 37  | 32  | 26  | 125   |
| 6     |            |   | 6   | 16 | 3  | 29  | 43  | 31  | 128   |
| 7     |            |   |     |    |    | 1   | 2   |     | 3     |
| 8     |            |   | 48  | 4  |    |     | 1   | 2   | 55    |
| 10    | 13         | 3 | 132 | 2  | 8  | 37  | 6   | 14  | 215   |
| Total | 43         | 5 | 221 | 55 | 75 | 317 | 127 | 109 | 952   |

Occupation

- |                                           |                        |
|-------------------------------------------|------------------------|
| 1 Student                                 | 5 Governmental officer |
| 2 House wife                              | 6 Service sector       |
| 3 Agriculture / forestry / fishery sector | 7 Others               |
| 4 Mining / Industry sector                | 8 No occupation        |

### Residence by Province

| Residence by Province |          |   |   |   |   |    |     |     |     |     |    |    |       |
|-----------------------|----------|---|---|---|---|----|-----|-----|-----|-----|----|----|-------|
| Data                  | Province |   |   |   |   |    |     |     |     |     |    |    | Total |
|                       | 2        | 3 | 4 | 5 | 6 | 8  | 9   | 12  | 14  | 15  | 16 | 20 |       |
| Type of Mode          | 1        |   |   |   | 1 | 49 |     | 186 | 2   |     |    | 5  | 243   |
|                       | 2        |   |   |   |   | 1  | 1   | 20  | 1   |     |    | 1  | 24    |
|                       | 3        |   |   |   |   | 1  |     | 41  | 2   |     |    |    | 44    |
|                       | 4        |   |   |   | 1 | 2  |     | 109 | 1   |     |    | 2  | 115   |
|                       | 5        |   |   |   | 2 | 2  |     | 117 | 3   |     |    | 1  | 125   |
|                       | 6        | 1 | 2 | 3 | 2 |    | 3   | 115 |     | 2   | 1  |    | 129   |
|                       | 7        | 1 |   |   |   | 1  |     | 1   |     |     |    |    | 3     |
|                       | 8        |   | 1 |   |   | 1  | 13  | 3   | 32  |     |    | 5  | 55    |
|                       | 10       | 1 | 3 |   |   | 1  | 32  | 41  | 108 |     |    | 29 | 215   |
|                       | Total    | 3 | 6 | 3 | 2 | 7  | 103 | 1   | 633 | 149 | 2  | 1  | 43    |

### Trip Purpose

| Data         | Trip Purpose |   |    |     |     |     | Total |
|--------------|--------------|---|----|-----|-----|-----|-------|
|              | 1            | 2 | 3  | 4   | 5   | 6   |       |
| Type of Mode |              |   |    |     |     |     |       |
| 1            | 42           | 5 | 25 | 68  | 95  | 8   | 243   |
| 2            | 5            | 1 | 1  | 7   | 8   | 2   | 24    |
| 3            |              |   | 1  | 21  | 22  |     | 44    |
| 4            | 6            |   | 8  | 38  | 62  |     | 114   |
| 5            | 4            |   | 4  | 96  | 19  | 2   | 125   |
| 6            | 1            |   | 2  | 94  | 32  |     | 129   |
| 7            |              |   |    | 2   | 1   |     | 3     |
| 8            |              |   | 10 | 9   | 14  | 22  | 55    |
| 10           | 23           | 1 | 30 | 15  | 32  | 114 | 215   |
| Total        | 81           | 7 | 81 | 350 | 285 | 148 | 952   |

#### Trip Purpose

- 1 To work
- 2 To school
- 3 to shop / market
- 4 To business
- 5 To others
- 6 To home
- "7 Others" is moved to "5 to others"

### Travel Time

| Data         | Travel Time |     |     |     |    |    |   | Total |
|--------------|-------------|-----|-----|-----|----|----|---|-------|
|              | 1           | 2   | 3   | 4   | 5  | 6  | 7 |       |
| Type of Mode |             |     |     |     |    |    |   |       |
| 1            | 18          | 123 | 97  | 4   |    | 1  |   | 243   |
| 2            | 2           | 8   | 14  |     |    |    |   | 24    |
| 3            |             | 21  | 13  | 7   | 1  | 2  |   | 44    |
| 4            | 1           | 65  | 36  | 9   | 3  | 1  |   | 115   |
| 5            |             | 9   | 67  | 40  | 6  | 3  |   | 125   |
| 6            | 3           | 33  | 55  | 28  | 7  | 2  | 1 | 129   |
| 7            |             |     |     | 1   | 1  | 1  |   | 3     |
| 8            | 1           | 42  | 12  |     |    |    |   | 55    |
| 10           | 11          | 92  | 95  | 12  | 1  | 3  |   | 214   |
| Total        | 36          | 393 | 389 | 101 | 19 | 13 | 1 | 952   |

#### Travel Time

- 1 1.0h and Less
- 2 1.1–2.1h
- 3 2.0–3.0h
- 4 3.1–4.0h
- 5 4.1–5.0h
- 6 5.1–6.0h
- 7 More than 6.0h
- 8 Unkown

### Type of Cargo

| Data  |   | Type of Cargo |    |    |   |    |   |    |    | Total |
|-------|---|---------------|----|----|---|----|---|----|----|-------|
|       |   | 1             | 2  | 3  | 4 | 5  | 6 | 7  | 10 |       |
| Type  | 6 | 54            | 23 | 9  | 5 | 15 | 4 | 10 | 9  | 129   |
|       | 7 |               | 1  | 1  |   |    |   |    | 1  | 3     |
| Total |   | 54            | 24 | 10 | 5 | 15 | 4 | 10 | 10 | 132   |

#### Type of Cargo

- 1 Empty (no cargo)
- 2 Agriculture (rice, corn, vegetable, fruits, etc)
- 3 Forest (Log, timber, plywood, etc)
- 4 Marine (fish, shell, seaweed, etc)
- 5 Mineral (coal, copper, iron, salt, etc)
- 6 Metal & machine ( steel, generator, car, bike,
- 7 Chemical (petroleum, alcohol, acid, etc)
- 8 Light industry/Electronics (machine parts, IC, electronic appliances, etc)
- 9 Miscellaneous (garment, shoes, etc.)
- 10 Construction (sand, gravel, Asphalt, concrete, steel-bar, steel-beam, etc)
- 11 Others

### Loading Capacity

| Data   | Loading Capacity |    |    |   | Total |
|--------|------------------|----|----|---|-------|
|        | 3                | 4  | 5  | 6 |       |
| Type 6 | 51               | 69 | 9  |   | 129   |
| Type 7 |                  |    | 1  | 2 | 3     |
| Total  | 51               | 69 | 10 | 2 | 132   |

#### Loading Capacity

- 1 0.5 ton and less
- 2 0.6 – 1.0 ton
- 3 1.1 – 2.0 ton
- 4 2.1 – 4.0 ton
- 5 4.1 – 5.0 ton
- 6 5.1 – 6.0 ton
- 7 More than 6.1 ton

### Loading Volume

| Data   | Loading Volume |   |    |    |    |   | Total |
|--------|----------------|---|----|----|----|---|-------|
|        | 1              | 2 | 3  | 4  | 5  | 6 |       |
| Type 6 | 49             | 3 | 34 | 30 | 12 | 1 | 129   |
| Type 7 |                |   | 3  |    |    |   | 3     |
| Total  | 49             | 3 | 37 | 30 | 12 | 1 | 132   |

#### Loading Volume

- 1 0 (empty)
- 2 1/4 of capacity
- 3 1/2 of capacity
- 4 3/4 of capacity
- 5 Full capacity

### c. Non-weekday by Type of Mode from Prey Veang to Phnom Penh

#### Sex by Type of Mode

| Data  | Sex   |        | Total |
|-------|-------|--------|-------|
|       | Male  | Female |       |
| 1     | 247   | 46     | 293   |
| 2     | 25    | 4      | 29    |
| 3     | 117   | 6      | 123   |
| 4     | 427   | 20     | 447   |
| 5     | 422   |        | 422   |
| 6     | 211   |        | 211   |
| 7     | 26    |        | 26    |
| 8     | 187   | 30     | 217   |
| 10    | 128   | 118    | 246   |
| 11    | 27    |        | 27    |
| Total | 1,817 | 224    | 2,041 |

### Age by Type of Mode

| Data  | Age          |         |         |         |         |             | Total |
|-------|--------------|---------|---------|---------|---------|-------------|-------|
|       | Less than 13 | 15 – 20 | 21 – 30 | 31 – 40 | 41 – 50 | 50 and more |       |
| 1     |              | 24      | 154     | 92      | 22      | 1           | 293   |
| 2     |              | 1       | 16      | 9       | 3       |             | 29    |
| 3     |              | 3       | 24      | 48      | 45      | 3           | 123   |
| 4     |              | 13      | 63      | 198     | 167     | 6           | 447   |
| 5     |              | 2       | 64      | 291     | 65      |             | 422   |
| 6     |              |         | 97      | 101     | 13      |             | 211   |
| 7     |              |         |         | 18      | 8       |             | 26    |
| 8     |              | 17      | 98      | 70      | 31      | 1           | 217   |
| 10    | 1            | 6       | 118     | 68      | 51      | 2           | 246   |
| 11    |              |         | 9       | 13      | 5       |             | 27    |
| Total | 1            | 66      | 643     | 908     | 410     | 13          | 2,041 |

### Occupation

| Data  | Occupation |   |     |    |     |     |     |    | Total |
|-------|------------|---|-----|----|-----|-----|-----|----|-------|
|       | 1          | 2 | 3   | 4  | 5   | 6   | 7   | 8  |       |
| 1     | 17         | 2 | 220 | 2  | 26  | 24  |     | 2  | 293   |
| 2     | 1          |   | 18  | 2  | 1   | 5   | 2   |    | 29    |
| 3     | 3          |   | 2   |    | 75  | 39  | 4   |    | 123   |
| 4     | 10         |   | 2   | 2  | 131 | 297 | 5   |    | 447   |
| 5     |            |   | 3   | 3  | 4   | 97  | 304 | 11 | 422   |
| 6     |            |   | 14  | 24 | 12  | 129 | 16  | 16 | 211   |
| 7     |            |   |     | 1  |     | 6   | 19  |    | 26    |
| 8     | 9          | 2 | 184 | 9  |     | 9   |     | 4  | 217   |
| 10    | 24         | 5 | 190 | 4  | 9   | 14  |     |    | 246   |
| 11    |            |   | 3   |    |     | 10  | 13  | 1  | 27    |
| Total | 64         | 9 | 636 | 47 | 258 | 630 | 363 | 34 | 2,041 |

#### Occupation

- |                                           |                        |
|-------------------------------------------|------------------------|
| 1 Student                                 | 5 Governmental officer |
| 2 House wife                              | 6 Service sector       |
| 3 Agriculture / forestry / fishery sector | 7 Others               |
| 4 Mining / Industry sector                | 8 No occupation        |

### Residence by Province

| Residence by Province |          |   |   |     |   |   |   |   |     |    |    |     |     |    |    |     |    |       |
|-----------------------|----------|---|---|-----|---|---|---|---|-----|----|----|-----|-----|----|----|-----|----|-------|
| Data                  | Province |   |   |     |   |   |   |   |     |    |    |     |     |    |    |     |    | Total |
|                       | 0        | 2 | 3 | 4   | 5 | 6 | 7 | 8 | 9   | 10 | 12 | 14  | 17  | 18 | 20 | 21  |    |       |
| Type of Mode          | 1        |   |   | 14  |   |   |   |   | 29  | 1  | 3  | 27  | 133 |    |    | 82  | 4  | 293   |
|                       | 2        |   | 1 |     |   |   |   |   | 6   |    |    | 13  | 5   |    |    | 4   |    | 29    |
|                       | 3        | 2 | 2 | 3   |   | 3 | 2 |   | 13  |    | 3  | 66  | 17  |    |    | 11  | 1  | 123   |
|                       | 4        | 1 |   | 23  | 2 | 4 | 1 | 5 | 97  |    | 3  | 147 | 108 | 2  | 1  | 48  | 5  | 447   |
|                       | 5        | 1 |   | 19  |   |   |   |   | 7   |    |    | 179 | 94  |    |    | 122 |    | 422   |
|                       | 6        |   |   | 68  |   |   |   |   | 1   |    | 1  | 8   | 66  |    |    | 67  |    | 211   |
|                       | 7        |   | 1 |     |   |   |   |   |     |    |    | 24  | 1   |    |    |     |    | 26    |
|                       | 8        |   |   | 5   |   |   |   |   | 97  |    |    | 4   | 87  |    |    | 22  | 2  | 217   |
|                       | 10       | 1 |   | 2   |   |   |   |   | 73  |    |    | 7   | 142 |    |    | 20  | 1  | 246   |
|                       | 11       |   |   |     |   |   |   |   | 14  |    |    |     | 13  |    |    |     |    | 27    |
|                       | Total    | 5 | 4 | 134 | 2 | 7 | 3 | 5 | 337 | 1  | 10 | 475 | 666 | 2  | 1  | 376 | 13 | 2,041 |

### Trip Purpose

| Data         | Trip Purpose |    |    |       |     |     | Total |
|--------------|--------------|----|----|-------|-----|-----|-------|
|              | 1            | 2  | 3  | 4     | 5   | 6   |       |
| Type of Mode |              |    |    |       |     |     |       |
| 1            | 180          | 3  | 9  | 21    | 23  | 57  | 293   |
| 2            | 11           |    | 1  | 7     | 4   | 6   | 29    |
| 3            | 37           | 2  | 1  | 44    | 33  | 4   | 121   |
| 4            | 78           | 7  | 22 | 215   | 100 | 17  | 439   |
| 5            | 1            |    | 7  | 394   | 18  | 1   | 421   |
| 6            | 1            |    |    | 196   | 13  | 1   | 211   |
| 7            |              |    |    | 23    | 3   |     | 26    |
| 8            | 17           | 1  | 24 | 91    | 15  | 68  | 216   |
| 10           | 95           | 10 | 14 | 11    | 7   | 109 | 246   |
| 11           |              |    | 19 | 7     | 1   |     | 27    |
| Total        | 420          | 23 | 97 | 1,009 | 217 | 263 | 2,029 |

#### Trip Purpose

- 1 To work  
 2 To school  
 3 to shop / market  
 4 To business  
 5 To others  
 6 To home  
 "7 Others" is moved to "5 to others"

### Travel Time

| Data         | Travel Time |     |     |     |     |    |    |   | Total |
|--------------|-------------|-----|-----|-----|-----|----|----|---|-------|
|              | 1           | 2   | 3   | 4   | 5   | 6  | 7  | 8 |       |
| Type of Mode |             |     |     |     |     |    |    |   |       |
| 1            | 14          | 106 | 118 | 49  | 1   | 1  | 4  |   | 293   |
| 2            | 2           | 3   | 13  | 11  |     |    |    |   | 29    |
| 3            | 1           | 5   | 53  | 55  | 2   | 2  | 3  | 2 | 123   |
| 4            |             | 15  | 257 | 153 | 8   | 4  | 9  | 1 | 447   |
| 5            | 3           |     | 63  | 208 | 145 |    | 1  |   | 420   |
| 6            |             | 4   | 114 | 59  | 6   | 8  | 16 | 4 | 211   |
| 7            |             |     | 3   | 6   | 17  |    |    |   | 26    |
| 8            | 59          | 112 | 40  | 4   |     |    | 2  |   | 217   |
| 10           | 3           | 121 | 114 | 4   | 3   | 1  |    |   | 246   |
| 11           | 23          | 2   | 1   | 1   |     |    |    |   | 27    |
| Total        | 105         | 368 | 776 | 550 | 182 | 16 | 35 | 7 | 2,039 |

#### Travel Time

- 1 1.0h and Less  
 2 1.1–2.1h  
 3 2.0–3.0h  
 4 3.1–4.0h  
 5 4.1–5.0h  
 6 5.1–6.0h  
 7 More than 6.0h  
 8 Unkown

### Type of Cargo

| Data  | Type of Cargo |    |    |   |   |   |   |   |   |    |    | Total |
|-------|---------------|----|----|---|---|---|---|---|---|----|----|-------|
|       | 1             | 2  | 3  | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |       |
| Type  |               |    |    |   |   |   |   |   |   |    |    |       |
| 4     |               |    |    |   |   |   |   |   |   | 1  |    | 1     |
| 6     | 59            | 59 | 28 | 7 | 8 | 4 | 5 | 2 | 2 | 19 | 17 | 210   |
| 7     | 8             | 11 |    |   |   | 2 |   |   |   | 1  | 3  | 25    |
| Total | 67            | 70 | 28 | 7 | 8 | 6 | 5 | 2 | 2 | 21 | 20 | 236   |

#### Type of Cargo

- 1 Empty (no cargo)  
 2 Agriculture (rice, corn, vegetable, fruits, etc)  
 3 Forest (Log, timber, plywood, etc)  
 4 Marine (fish, shell, seaweed, etc)  
 5 Mineral (coal, copper, iron, salt, etc)  
 6 Metal & machine ( steel, generator, car, bike,  
 7 Chemical (petroleum, alcohol, acid, etc)  
 8 Light industry/Electronics (machine parts,IC, electronic appliances, etc)  
 9 Miscellaneous (garment, shoes, etc.)  
 10 Construction (sand, gravel, Asphalt, concrete, steel-bar, steel-beam, etc)  
 11 Others

### Loading Capacity

| Data   | Loading Capacity |    |    |    |    |    | Total |
|--------|------------------|----|----|----|----|----|-------|
|        | 2                | 3  | 4  | 5  | 6  | 7  |       |
| Type 4 |                  | 1  |    |    |    |    | 1     |
| 6      | 8                | 62 | 64 | 21 | 19 | 13 | 187   |
| 7      |                  |    |    | 3  |    | 17 | 20    |
| Total  | 8                | 63 | 64 | 24 | 19 | 30 | 208   |

Loading Capacity  
 1 0.5 ton and less  
 2 0.6 – 1.0 ton  
 3 1.1 – 2.0 ton  
 4 2.1 – 4.0 ton  
 5 4.1 – 5.0 ton  
 6 5.1 – 6.0 ton  
 7 More than 6.1 ton

### Loading Volume

| Data   | Loading Volume |    |    |    |    | Total |
|--------|----------------|----|----|----|----|-------|
|        | 1              | 2  | 3  | 4  | 5  |       |
| Type 4 | 1              |    |    |    |    | 1     |
| 6      | 62             | 11 | 35 | 21 | 81 | 210   |
| 7      | 7              |    | 2  | 6  | 10 | 25    |
| Total  | 70             | 11 | 37 | 27 | 91 | 236   |

Loading Volume  
 1 0 (empty),  
 2 1/4 of ca  
 3 1/2 of capacity  
 4 3/4 of capacity  
 5 Full capacity

### d. Non-weekday by Type of Mode from Tboung Khmum to Kampong Cham

#### Sex by Type of Mode

| Data           | Sex  |        | Total |
|----------------|------|--------|-------|
|                | Male | Female |       |
| Type of Mode 1 | 164  | 37     | 201   |
| 3              | 18   | 1      | 19    |
| 4              | 242  | 10     | 252   |
| 5              | 143  |        | 143   |
| 6              | 104  |        | 104   |
| 7              | 6    |        | 6     |
| 8              | 84   | 10     | 94    |
| 10             | 62   | 65     | 127   |
| 11             | 7    | 8      | 15    |
| Total          | 830  | 131    | 961   |

#### Age by Type of Mode

| Data           | Age     |         |         |         |             | Total |
|----------------|---------|---------|---------|---------|-------------|-------|
|                | 15 – 20 | 21 – 30 | 31 – 40 | 41 – 50 | 50 and more |       |
| Type of Mode 1 | 33      | 108     | 43      | 17      |             | 201   |
| 3              |         | 7       | 8       | 4       |             | 19    |
| 4              | 2       | 58      | 140     | 48      | 4           | 252   |
| 5              |         | 14      | 104     | 25      |             | 143   |
| 6              |         | 38      | 62      | 4       |             | 104   |
| 7              |         |         | 4       | 2       |             | 6     |
| 8              | 6       | 40      | 32      | 16      |             | 94    |
| 10             |         | 69      | 31      | 26      | 1           | 127   |
| 11             |         | 4       | 9       | 2       |             | 15    |
| Total          | 41      | 338     | 433     | 144     | 5           | 961   |

## Occupation

| Data  | Occupation |   |     |   |    |     |     |   | Total |
|-------|------------|---|-----|---|----|-----|-----|---|-------|
|       | 1          | 2 | 3   | 4 | 5  | 6   | 7   | 8 |       |
| 1     | 21         |   | 152 |   | 13 | 15  |     |   | 201   |
| 3     |            |   |     |   | 9  | 10  |     |   | 19    |
| 4     | 4          |   |     |   | 49 | 198 | 1   |   | 252   |
| 5     |            |   |     |   |    | 14  | 129 |   | 143   |
| 6     |            |   |     |   |    | 104 |     |   | 104   |
| 7     |            |   |     |   |    |     | 6   |   | 6     |
| 8     | 7          |   | 74  | 1 |    | 10  |     | 2 | 94    |
| 10    | 14         | 1 | 105 |   | 4  | 3   |     |   | 127   |
| 11    |            |   | 3   |   |    | 4   | 8   |   | 15    |
| Total | 46         | 1 | 334 | 1 | 75 | 358 | 144 | 2 | 961   |

### Occupation

- |                                           |                        |
|-------------------------------------------|------------------------|
| 1 Student                                 | 5 Governmental officer |
| 2 House wife                              | 6 Service sector       |
| 3 Agriculture / forestry / fishery sector | 7 Others               |
| 4 Mining / Industry sector                | 8 No occupation        |

## Residence by Province

| Residence by Province |          |   |   |   |   |    |   |   |    |    |     |    |     |     |    |     |       |   |     |     |
|-----------------------|----------|---|---|---|---|----|---|---|----|----|-----|----|-----|-----|----|-----|-------|---|-----|-----|
| Data                  | Province |   |   |   |   |    |   |   |    |    |     |    |     |     |    |     | Total |   |     |     |
|                       | 0        | 1 | 2 | 3 | 4 | 5  | 6 | 7 | 8  | 10 | 12  | 14 | 15  | 20  | 21 |     |       |   |     |     |
| Type of Mode          | 1        | 1 | 1 |   |   |    |   | 1 | 11 |    |     | 13 | 94  | 3   | 58 | 3   | 201   |   |     |     |
|                       | 3        | 2 | 1 |   |   |    |   | 1 | 2  | 4  |     | 5  | 2   |     | 2  |     | 19    |   |     |     |
|                       | 4        | 4 |   |   | 1 | 20 | 2 | 3 | 1  | 4  | 36  |    | 1   | 75  | 66 | 1   | 35    | 3 | 252 |     |
|                       | 5        |   |   |   |   | 14 |   |   |    |    | 1   |    | 49  | 31  |    | 48  |       |   | 143 |     |
|                       | 6        |   |   |   |   | 36 |   |   |    |    |     |    |     | 44  |    | 24  |       |   | 104 |     |
|                       | 7        |   |   |   |   |    |   |   |    |    |     | 5  | 1   |     |    |     |       |   | 6   |     |
|                       | 8        |   |   |   |   |    |   |   |    | 38 |     |    |     | 47  |    | 9   |       |   | 94  |     |
|                       | 10       | 1 |   |   |   | 4  |   | 1 | 2  |    | 35  |    | 4   | 77  |    | 3   |       |   | 127 |     |
|                       | 11       |   |   |   |   |    |   |   |    |    | 8   |    |     | 7   |    |     |       |   |     | 15  |
|                       | Total    | 8 | 2 | 1 |   | 90 | 2 | 4 | 4  | 7  | 133 | 1  | 151 | 369 | 4  | 179 | 6     |   |     | 961 |

## Trip Purpose

| Data  | Trip Purpose |    |    |     |    |     | Total |
|-------|--------------|----|----|-----|----|-----|-------|
|       | 1            | 2  | 3  | 4   | 5  | 6   |       |
| 1     | 127          |    | 8  | 5   | 9  | 52  | 201   |
| 3     | 8            |    |    | 5   | 6  |     | 19    |
| 4     | 49           | 4  |    | 199 |    |     | 252   |
| 5     |              | 1  |    | 140 | 2  |     | 143   |
| 6     |              |    |    | 104 |    |     | 104   |
| 7     |              |    |    | 6   |    |     | 6     |
| 8     | 6            | 6  | 22 | 21  | 13 | 26  | 94    |
| 10    | 46           | 5  | 7  |     | 3  | 66  | 127   |
| 11    | 1            |    | 11 |     |    | 3   | 15    |
| Total | 237          | 16 | 48 | 480 | 33 | 147 | 961   |

### Trip Purpose

- |                    |               |
|--------------------|---------------|
| 1 To work          | 4 To business |
| 2 To school        | 5 To others   |
| 3 to shop / market | 6 To home     |
- "7 Others" is moved to "5 to others"

### Travel Time

| Data         | Travel Time |     |     |     |    |   |    | Total |
|--------------|-------------|-----|-----|-----|----|---|----|-------|
|              | 1           | 2   | 3   | 4   | 5  | 6 | 7  |       |
| Type of Mode |             |     |     |     |    |   |    |       |
| 1            | 5           | 89  | 95  | 8   | 1  |   | 2  | 200   |
| 3            |             |     | 7   | 7   |    | 2 | 2  | 18    |
| 4            |             | 11  | 142 | 84  | 5  | 5 | 3  | 250   |
| 5            |             |     | 8   | 51  | 84 |   |    | 143   |
| 6            |             |     | 46  | 53  |    | 1 | 4  | 104   |
| 7            |             |     |     |     | 6  |   |    | 6     |
| 8            | 42          | 35  | 13  | 3   |    |   | 1  | 94    |
| 10           | 1           | 58  | 61  | 2   | 1  | 1 | 3  | 127   |
| 11           | 11          | 3   | 1   |     |    |   |    | 15    |
| Total        | 59          | 196 | 373 | 208 | 97 | 9 | 15 | 957   |

#### Travel Time

- |   |               |   |                |
|---|---------------|---|----------------|
| 1 | 1.0h and Less | 5 | 4.1-5.0h       |
| 2 | 1.1-2.1h      | 6 | 5.1-6.0h       |
| 3 | 2.0-3.0h      | 7 | More than 6.0h |
| 4 | 3.1-4.0h      | 8 | Unkown         |

### Type of Cargo

| Data  |   | Type of Cargo |    |    |   |   |   |   |    |    | Total |
|-------|---|---------------|----|----|---|---|---|---|----|----|-------|
|       |   | 1             | 2  | 3  | 4 | 5 | 6 | 7 | 10 | 11 |       |
| Type  | 6 | 30            | 22 | 16 | 1 | 9 | 1 | 2 | 12 | 11 | 104   |
|       | 7 | 1             | 3  |    |   |   |   |   | 1  | 1  | 6     |
| Total |   | 31            | 25 | 16 | 1 | 9 | 1 | 2 | 13 | 12 | 110   |

#### Type of Cargo

- |    |                                                                            |
|----|----------------------------------------------------------------------------|
| 1  | Empty (no cargo)                                                           |
| 2  | Agriculture (rice, corn, vegetable, fruits, etc)                           |
| 3  | Forest (Log, timber, plywood, etc)                                         |
| 4  | Marine (fish, shell, seaweed, etc)                                         |
| 5  | Mineral (coal, copper, iron, salt, etc)                                    |
| 6  | Metal & machine ( steel, generator, car, bike,                             |
| 7  | Chemical (petroleum, alcohol, acid, etc)                                   |
| 8  | Light industry/Electronics (machine parts,IC, electronic appliances, etc)  |
| 9  | Miscellaneous (garment, shoes, etc.)                                       |
| 10 | Construction (sand, gravel, Asphalt, concrete, steel-bar, steel-beam, etc) |
| 11 | Others                                                                     |

### Loading Capacity

| Data  | Loading Capacity |   |    |    |   | Total |
|-------|------------------|---|----|----|---|-------|
|       | 3                | 4 | 5  | 6  | 7 |       |
| Type  |                  |   |    |    |   |       |
| 6     | 6                | 8 | 24 | 34 | 2 | 74    |
| 7     |                  |   |    |    | 5 | 5     |
| Total | 6                | 8 | 24 | 34 | 7 | 79    |

#### Loading Capacity

- |   |                  |   |                   |
|---|------------------|---|-------------------|
| 1 | 0.5 ton and less | 5 | 4.1 - 5.0 ton     |
| 2 | 0.6 - 1.0 ton    | 6 | 5.1 - 6.0 ton     |
| 3 | 1.1 - 2.0 ton    | 7 | More than 6.1 ton |
| 4 | 2.1 - 4.0 ton    |   |                   |

### Loading Volume

| Data  | Loading Volume |   |    |    |    | Total |
|-------|----------------|---|----|----|----|-------|
|       | 1              | 2 | 3  | 4  | 5  |       |
| Type  |                |   |    |    |    |       |
| 6     | 30             | 5 | 13 | 11 | 45 | 104   |
| 7     | 1              |   |    |    | 5  | 6     |
| Total | 31             | 5 | 13 | 11 | 50 | 110   |

#### Loading Volume

- |   |                 |   |                 |
|---|-----------------|---|-----------------|
| 1 | 0 (empty)       | 4 | 3/4 of capacity |
| 2 | 1/4 of capacity | 5 | Full capacity   |
| 3 | 1/2 of capacity |   |                 |



## (2) OD Matrix

**Table AP3.1.3 Kizuna District OD by Purpose in Kampong Cham Province (Weekday)**

Purpose 1

| O/D    | Destination |    |    |    |    |    |    |    |    |     |  | Total |
|--------|-------------|----|----|----|----|----|----|----|----|-----|--|-------|
| Origin | 5           | 7  | 8  | 9  | 10 | 11 | 12 | 14 | 15 | 16  |  |       |
| 1      |             |    |    | 17 | 17 |    |    |    |    |     |  | 34    |
| 2      | 17          |    |    |    | 11 |    |    |    |    | 34  |  | 62    |
| 4      |             |    |    |    |    |    |    | 17 |    |     |  | 17    |
| 5      |             | 17 | 45 |    | 45 | 45 | 62 |    |    | 413 |  | 627   |
| 6      |             |    | 17 | 17 |    |    |    |    |    | 51  |  | 85    |
| 7      |             |    |    |    |    |    | 17 |    |    |     |  | 17    |
| 10     |             |    |    |    |    |    |    |    | 17 |     |  | 17    |
| 11     |             |    |    |    |    |    |    |    | 17 |     |  | 17    |
| 12     |             |    |    |    |    |    |    |    | 17 |     |  | 17    |
| 13     |             |    |    |    |    |    |    |    |    | 45  |  | 45    |
| Total  | 17          | 17 | 62 | 34 | 73 | 45 | 79 | 17 | 51 | 543 |  | 938   |

Purpose 2

| O/D    | Destination |     |       |
|--------|-------------|-----|-------|
| Origin | 14          | 16  | Total |
| 3      |             | 17  | 17    |
| 5      |             | 186 | 186   |
| 12     | 17          |     | 17    |
| 14     |             | 16  | 16    |
| Total  | 17          | 219 | 236   |

Purpose 3

| O/D    | Destination |    |     |    |    |    |     |  | Total |
|--------|-------------|----|-----|----|----|----|-----|--|-------|
| Origin | 8           | 10 | 11  | 13 | 14 | 15 | 16  |  |       |
| 1      |             |    |     |    |    |    | 16  |  | 16    |
| 2      |             |    |     |    |    |    | 27  |  | 27    |
| 5      | 16          | 16 | 120 |    |    |    | 91  |  | 243   |
| 6      |             |    |     |    |    |    | 68  |  | 68    |
| 7      |             |    |     |    |    |    | 16  |  | 16    |
| 10     |             |    |     | 16 | 16 |    |     |  | 32    |
| 11     |             |    |     |    |    | 16 |     |  | 16    |
| 12     |             |    |     |    | 16 |    |     |  | 16    |
| 13     |             |    |     |    |    |    | 43  |  | 43    |
| 14     |             |    |     |    |    |    | 16  |  | 16    |
| Total  | 16          | 16 | 120 | 16 | 32 | 16 | 277 |  | 493   |

Purpose 4

| O/D    | Destination |    |    |    |    |    |     |  | Total |
|--------|-------------|----|----|----|----|----|-----|--|-------|
| Origin | 5           | 8  | 10 | 11 | 12 | 14 | 16  |  |       |
| 1      |             |    | 16 |    |    |    | 16  |  | 32    |
| 2      |             |    | 31 |    |    |    | 11  |  | 42    |
| 4      | 20          |    |    |    |    |    |     |  | 20    |
| 5      |             |    |    | 11 |    |    | 400 |  | 411   |
| 6      |             |    | 19 |    | 16 |    |     |  | 35    |
| 7      |             | 11 |    |    |    |    | 32  |  | 43    |
| 10     |             |    |    |    |    | 16 |     |  | 16    |
| 13     |             |    |    |    |    |    | 65  |  | 65    |
| 15     |             |    |    |    |    |    | 16  |  | 16    |
| 16     |             |    |    |    |    |    | 19  |  | 19    |
| Total  | 20          | 11 | 66 | 11 | 16 | 16 | 559 |  | 699   |

Purpose 5

| O/D    | Destination |    |    |    |    |     |    |    |    |    |      |  | Total |
|--------|-------------|----|----|----|----|-----|----|----|----|----|------|--|-------|
| Origin | 4           | 6  | 8  | 9  | 10 | 11  | 12 | 13 | 14 | 15 | 16   |  |       |
| 1      |             |    |    | 16 | 19 |     | 32 |    |    |    | 48   |  | 115   |
| 2      |             |    |    |    | 16 | 37  | 16 |    |    |    | 51   |  | 120   |
| 3      | 16          |    | 16 |    |    |     |    |    |    |    |      |  | 32    |
| 5      |             | 36 | 37 | 16 | 47 | 128 | 11 | 16 |    |    | 631  |  | 922   |
| 6      |             |    |    |    |    | 32  | 16 |    |    |    | 76   |  | 124   |
| 7      |             |    | 32 |    |    | 16  | 16 | 16 |    |    | 80   |  | 160   |
| 8      |             |    |    |    | 11 |     |    |    |    | 10 | 16   |  | 37    |
| 9      |             |    |    |    |    |     |    |    |    |    | 16   |  | 16    |
| 10     |             |    |    |    |    |     |    | 16 |    | 10 |      |  | 26    |
| 11     |             |    |    |    |    |     |    | 32 | 16 |    | 16   |  | 64    |
| 12     |             |    |    |    |    |     |    | 19 |    | 32 |      |  | 51    |
| 13     |             |    |    |    |    |     |    |    |    |    | 48   |  | 48    |
| 14     |             |    |    |    |    |     |    |    |    |    | 32   |  | 32    |
| 15     |             |    |    |    |    |     |    |    |    |    | 48   |  | 48    |
| 16     |             |    |    |    |    |     |    |    |    |    | 32   |  | 32    |
| Total  | 16          | 36 | 85 | 32 | 93 | 213 | 91 | 99 | 16 | 52 | 1094 |  | 1827  |

Purpose 6

| O/D    | Destination |    |    |     |    |     |     |     |    |     |    |      |  | Total |
|--------|-------------|----|----|-----|----|-----|-----|-----|----|-----|----|------|--|-------|
| Origin | 4           | 5  | 7  | 8   | 9  | 10  | 11  | 12  | 13 | 14  | 15 | 16   |  |       |
| 1      | 16          | 16 |    | 75  | 16 | 16  | 43  | 16  |    |     |    | 43   |  | 241   |
| 2      |             |    |    |     |    | 16  | 80  |     |    |     |    | 59   |  | 155   |
| 3      |             |    |    |     |    | 16  | 48  | 16  |    |     |    | 48   |  | 128   |
| 4      |             | 16 | 16 |     |    |     |     |     |    |     |    |      |  | 32    |
| 5      |             |    |    | 54  | 64 | 170 | 333 | 107 |    |     | 16 | 2020 |  | 2764  |
| 6      |             |    |    |     |    | 16  |     |     |    | 48  |    | 298  |  | 362   |
| 7      |             |    |    | 16  |    |     | 80  | 16  |    |     |    | 64   |  | 176   |
| 8      |             |    |    |     |    |     |     |     | 16 | 16  |    | 16   |  | 48    |
| 9      |             |    |    |     |    |     |     |     |    |     | 16 |      |  | 16    |
| 10     |             |    |    |     |    |     |     |     |    | 10  |    | 10   |  | 20    |
| 11     |             |    |    |     |    |     |     |     | 58 |     | 10 |      |  | 68    |
| 12     |             |    |    |     |    |     |     |     |    | 32  |    |      |  | 32    |
| 13     |             |    |    |     |    |     |     |     |    |     |    | 90   |  | 90    |
| 14     |             |    |    |     |    |     |     |     |    |     |    | 112  |  | 112   |
| 15     |             |    |    |     |    |     |     |     |    |     |    | 96   |  | 96    |
| 16     |             |    |    |     |    |     |     |     |    |     |    | 16   |  | 16    |
| Total  | 16          | 32 | 16 | 145 | 80 | 234 | 584 | 155 | 74 | 106 | 42 | 2872 |  | 4356  |

**Table AP3.1.4 Kizuna District OD by Purpose in Kampong Cham Province (Non-weekday)**

Purpose 1

| O/D    | Destination |    |    |    |    |    |     |       |
|--------|-------------|----|----|----|----|----|-----|-------|
| Origin | 5           | 8  | 10 | 11 | 12 | 15 | 16  | Total |
| 3      |             |    | 2  |    |    |    | 3   | 5     |
| 4      | 6           |    |    |    |    |    |     | 6     |
| 5      |             | 18 | 15 | 15 | 20 | 6  | 219 | 293   |
| 6      |             |    | 3  |    |    |    | 24  | 27    |
| 8      |             |    |    |    |    | 3  |     | 3     |
| 9      |             |    |    |    |    |    | 3   | 3     |
| 10     |             |    |    |    |    |    | 3   | 3     |
| 13     |             |    |    |    |    |    | 14  | 14    |
| 14     |             |    |    |    |    |    | 3   | 3     |
| 15     |             |    |    |    |    | 3  |     | 3     |
| 16     |             |    |    |    |    |    | 9   | 9     |
| Total  | 6           | 18 | 20 | 15 | 20 | 12 | 278 | 369   |

Purpose 2

| O/D    | Destination |    |    |     |       |
|--------|-------------|----|----|-----|-------|
| Origin | 8           | 11 | 12 | 16  | Total |
| 5      | 9           | 9  | 12 | 282 | 312   |
| 6      |             |    |    | 6   | 6     |
| 16     |             |    |    | 3   | 3     |
| Total  | 9           | 9  | 12 | 291 | 321   |

Purpose 3

| O/D    | Destination |   |    |    |    |    |    |      |       |
|--------|-------------|---|----|----|----|----|----|------|-------|
| Origin | 5           | 7 | 8  | 9  | 10 | 11 | 12 | 16   | Total |
| 1      |             |   |    |    |    |    |    | 3    | 3     |
| 2      |             |   |    |    |    | 4  |    | 4    | 8     |
| 4      | 26          |   |    |    |    |    |    |      | 26    |
| 5      | 8           | 4 | 84 | 12 | 17 | 56 | 83 | 2534 | 2798  |
| 6      |             |   |    |    |    | 4  |    | 68   | 72    |
| 7      |             |   |    |    |    |    |    | 4    | 4     |
| 8      |             |   |    |    |    |    |    | 4    | 4     |
| 13     |             |   |    |    |    |    |    | 2    | 2     |
| Total  | 34          | 4 | 84 | 12 | 17 | 64 | 83 | 2619 | 2917  |

Purpose 4

| O/D    | Destination |   |   |    |    |     |    |     |    |    |      |       |
|--------|-------------|---|---|----|----|-----|----|-----|----|----|------|-------|
| Origin | 4           | 6 | 7 | 8  | 9  | 10  | 11 | 12  | 13 | 15 | 16   | Total |
| 1      | 4           |   |   |    |    | 2   | 3  |     |    |    | 6    | 15    |
| 2      |             |   |   |    |    | 8   |    | 6   |    |    | 43   | 57    |
| 3      | 3           |   |   |    |    | 13  | 5  | 15  |    |    | 28   | 64    |
| 4      | 3           |   |   |    |    |     |    |     |    |    |      | 3     |
| 5      |             | 4 |   |    | 33 | 3   | 77 | 84  | 83 | 3  | 977  | 1264  |
| 6      |             |   |   |    |    | 6   | 3  | 2   |    |    | 60   | 71    |
| 7      |             |   | 4 | 5  |    |     |    |     |    |    | 8    | 17    |
| 9      |             |   |   |    |    |     | 2  |     |    | 2  |      | 4     |
| 10     |             |   |   |    |    |     |    |     | 9  |    |      | 9     |
| 11     |             |   |   |    |    |     |    |     | 8  | 3  |      | 11    |
| 12     |             |   |   |    |    |     |    |     | 8  |    | 2    | 10    |
| 13     |             |   |   |    |    |     |    |     | 3  |    | 36   | 39    |
| 15     |             |   |   |    |    |     |    |     |    | 2  |      | 2     |
| 16     |             |   |   |    |    |     |    |     |    |    | 8    | 8     |
| Total  | 10          | 4 | 4 | 38 | 3  | 106 | 97 | 106 | 31 | 7  | 1168 | 1574  |

Purpose 5

| O/D    | Destination |    |    |    |    |    |    |    |    |    |      |       |
|--------|-------------|----|----|----|----|----|----|----|----|----|------|-------|
| Origin | 4           | 5  | 6  | 8  | 10 | 11 | 12 | 13 | 14 | 15 | 16   | Total |
| 1      |             |    |    |    | 2  |    |    |    |    |    |      | 2     |
| 2      | 8           |    |    |    |    | 12 |    |    |    |    | 18   | 38    |
| 3      |             |    |    |    | 2  |    |    |    |    | 3  | 21   | 26    |
| 5      |             | 32 | 18 | 49 | 44 | 42 | 27 |    |    |    | 1066 | 1278  |
| 6      |             |    | 4  | 8  |    | 4  | 8  |    |    |    | 94   | 118   |
| 7      |             |    |    |    |    |    |    |    |    |    | 4    | 4     |
| 8      |             |    |    |    | 3  |    |    |    |    |    | 4    | 7     |
| 9      |             |    |    |    |    |    |    |    |    |    | 4    | 4     |
| 10     |             |    |    |    |    |    |    |    |    | 3  |      | 10    |
| 11     |             |    |    |    |    |    |    | 25 |    |    |      | 25    |
| 12     |             |    |    |    |    |    | 4  |    |    |    |      | 4     |
| 13     |             |    |    |    |    |    |    |    |    |    | 36   | 36    |
| 14     |             |    |    |    |    |    |    |    | 4  |    |      | 4     |
| 15     |             |    |    |    |    |    |    |    |    |    | 6    | 6     |
| 16     |             |    |    |    |    |    |    |    |    |    | 87   | 87    |
| Total  | 8           | 32 | 22 | 57 | 51 | 58 | 39 | 25 | 4  | 6  | 1347 | 1649  |

Purpose 6

| O/D    | Destination |   |    |    |   |    |    |    |    |    |    |      |       |
|--------|-------------|---|----|----|---|----|----|----|----|----|----|------|-------|
| Origin | 4           | 5 | 6  | 8  | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16   | Total |
| 1      | 4           |   |    |    |   | 3  |    |    |    |    |    | 29   | 36    |
| 2      |             |   |    | 4  |   |    | 4  | 4  |    |    |    | 6    | 18    |
| 3      |             |   |    |    |   |    | 4  |    |    |    |    | 4    | 8     |
| 4      |             |   | 4  |    |   |    |    |    | 8  |    |    |      | 12    |
| 5      |             | 4 | 7  | 36 |   | 41 | 67 | 35 |    | 4  |    | 1311 | 1505  |
| 6      |             |   | 3  | 12 |   | 8  | 8  | 3  |    |    |    | 208  | 242   |
| 7      |             |   |    |    |   |    |    |    |    |    |    | 16   | 16    |
| 8      |             |   |    | 4  |   |    |    | 4  |    |    |    | 4    | 12    |
| 9      |             |   |    |    | 4 |    |    |    |    |    |    |      | 4     |
| 10     |             |   |    |    |   | 4  |    |    | 2  |    |    |      | 6     |
| 11     |             |   |    |    |   |    | 4  |    | 14 |    | 8  | 11   | 37    |
| 12     |             |   |    |    |   |    |    |    | 4  |    |    |      | 4     |
| 13     |             |   |    |    |   |    |    |    |    | 4  |    | 59   | 63    |
| 14     |             |   |    |    |   |    |    |    |    |    |    | 8    | 8     |
| 15     |             |   |    |    |   |    |    |    |    |    | 4  | 16   | 20    |
| 16     |             |   |    |    |   |    |    |    |    |    |    | 32   | 32    |
| Total  | 4           | 4 | 14 | 56 | 4 | 56 | 87 | 46 | 28 | 8  | 12 | 1704 | 2023  |

**Table AP3.1.5 Kizuna Province OD by Purpose (Weekday)**

Purpose 1

| O/D    | Destination |   |    |     |    |    |       |
|--------|-------------|---|----|-----|----|----|-------|
| Origin | 3           | 8 | 10 | 12  | 14 | 20 | Total |
| 3      | 751         | 5 |    | 80  | 68 |    | 904   |
| 4      |             |   | 5  |     |    |    | 5     |
| 7      |             |   |    |     | 5  |    | 5     |
| 10     |             |   |    | 15  |    |    | 15    |
| 11     |             |   |    | 12  |    |    | 12    |
| 12     |             |   |    |     | 5  | 5  | 10    |
| Total  | 751         | 5 | 5  | 107 | 78 | 5  | 951   |

Purpose 2

| O/D    | Destination |    |    |       |
|--------|-------------|----|----|-------|
| Origin | 3           | 12 | 14 | Total |
| 3      | 363         | 46 | 7  | 416   |
| Total  | 363         | 46 | 7  | 416   |

Purpose 3

| O/D    | Destination |    |    |    |    |       |
|--------|-------------|----|----|----|----|-------|
| Origin | 3           | 10 | 12 | 14 | 33 | Total |
| 3      | 1366        | 5  | 28 | 14 | 7  | 1420  |
| 12     |             |    |    | 5  |    | 5     |
| Total  | 1366        | 5  | 28 | 19 | 7  | 1425  |

Purpose 4

| O/D    | Destination |    |    |    |     |     |    |    |       |
|--------|-------------|----|----|----|-----|-----|----|----|-------|
| Origin | 3           | 6  | 8  | 10 | 12  | 14  | 20 | 33 | Total |
| 3      | 1242        | 34 | 49 | 20 | 222 | 131 | 8  | 8  | 1714  |
| 10     |             |    |    |    | 48  |     |    |    | 48    |
| 12     |             |    |    |    |     | 55  |    |    | 55    |
| Total  | 1242        | 34 | 49 | 20 | 270 | 186 | 8  | 8  | 1817  |

Purpose 5

| O/D    | Destination |   |    |    |     |     |    |       |
|--------|-------------|---|----|----|-----|-----|----|-------|
| Origin | 3           | 7 | 8  | 10 | 12  | 14  | 19 | Total |
| 3      | 1441        | 4 | 17 | 28 | 99  | 134 | 8  | 1731  |
| 7      |             |   |    |    |     | 10  |    | 10    |
| 10     |             |   |    |    | 20  |     |    | 20    |
| 12     |             |   |    |    |     | 9   |    | 9     |
| Total  | 1441        | 4 | 17 | 28 | 119 | 153 | 8  | 1770  |

Purpose 6

| O/D    | Destination |   |    |    |    |     |     |    |    |    |       |
|--------|-------------|---|----|----|----|-----|-----|----|----|----|-------|
| Origin | 3           | 4 | 6  | 8  | 10 | 12  | 14  | 16 | 20 | 21 | Total |
| 1      |             | 8 |    |    |    |     |     |    |    |    | 8     |
| 3      | 3386        |   | 10 | 5  | 49 | 571 | 280 | 4  | 4  | 4  | 4313  |
| 4      |             | 5 |    |    |    |     |     |    |    |    | 5     |
| 8      |             |   |    | 10 |    |     |     |    |    |    | 10    |
| 10     |             |   |    |    | 30 | 92  |     |    |    |    | 122   |
| 11     |             |   |    |    |    | 4   |     |    |    |    | 4     |
| 12     |             |   |    |    |    |     | 60  |    |    |    | 60    |
| 14     |             |   |    |    |    |     | 8   |    |    |    | 8     |
| Total  | 3394        | 5 | 10 | 15 | 79 | 667 | 348 | 4  | 4  | 4  | 4530  |

**Table AP3.1.6 Kizuna Province OD by Purpose (Non-weekday)**

Purpose 1

| O/D     | Destination |   |   |   |    |     |    |    |       |
|---------|-------------|---|---|---|----|-----|----|----|-------|
| Origine | 3           | 5 | 6 | 8 | 10 | 12  | 14 | 20 | Total |
| 3       | 665         | 4 | 8 | 1 | 14 | 89  | 15 |    | 796   |
| 4       |             |   |   |   | 1  |     |    |    | 1     |
| 10      |             |   |   |   |    | 19  |    |    | 19    |
| 11      |             |   |   |   |    | 5   |    |    | 5     |
| 12      |             |   |   |   |    |     |    | 1  | 1     |
| Total   | 665         | 4 | 8 | 1 | 15 | 113 | 15 | 1  | 822   |

Purpose 2

| O/D     | Destination |   |    |    |       |
|---------|-------------|---|----|----|-------|
| Origine | 3           | 6 | 12 | 17 | Total |
| 3       | 363         | 3 | 29 | 16 | 411   |
| 10      |             |   | 4  |    | 4     |
| Total   | 363         | 3 | 33 | 16 | 415   |

Purpose 3

| O/D     | Destination |    |    |    |    |    |    |       |
|---------|-------------|----|----|----|----|----|----|-------|
| Origine | 3           | 4  | 10 | 11 | 12 | 14 | 21 | Total |
| 2       | 3           |    |    |    |    |    |    | 3     |
| 3       | 2222        | 11 | 21 | 1  | 17 | 36 |    | 2308  |
| 10      |             |    |    |    | 1  |    |    | 1     |
| 12      |             |    |    |    |    | 5  |    | 5     |
| 14      |             |    |    |    |    | 3  |    | 3     |
| 21      |             |    |    |    |    |    | 3  | 3     |
| Total   | 2225        | 11 | 21 | 1  | 18 | 44 | 3  | 2323  |

Purpose 4

| O/D     | Destination |   |   |    |   |    |     |     |    |     |    |    |    |       |
|---------|-------------|---|---|----|---|----|-----|-----|----|-----|----|----|----|-------|
| Origine | 3           | 4 | 5 | 6  | 7 | 8  | 10  | 12  | 13 | 14  | 17 | 21 | 25 | Total |
| 1       | 6           |   |   |    |   |    |     |     |    |     |    |    |    | 6     |
| 3       | 1381        | 6 | 2 | 16 | 2 | 34 | 99  | 743 | 2  | 127 | 10 | 4  | 4  | 2430  |
| 8       |             |   |   |    |   |    |     |     |    | 2   |    |    |    | 2     |
| 9       |             |   |   |    |   |    |     |     |    | 2   |    |    |    | 2     |
| 10      |             |   |   |    |   |    | 2   | 94  |    |     |    |    |    | 96    |
| 12      |             |   |   |    |   |    |     |     |    | 63  |    |    | 2  | 65    |
| Total   | 1387        | 6 | 2 | 16 | 2 | 34 | 101 | 837 | 2  | 194 | 10 | 4  | 6  | 2601  |

Purpose 5

| O/D     | Destination |   |   |    |    |     |    |     |    |    |    |       |
|---------|-------------|---|---|----|----|-----|----|-----|----|----|----|-------|
| Origine | 3           | 4 | 6 | 8  | 10 | 12  | 13 | 14  | 15 | 20 | 21 | Total |
| 2       | 5           |   |   |    |    |     |    |     |    |    |    | 5     |
| 3       | 1643        | 3 | 7 | 10 | 72 | 127 | 2  | 88  | 3  | 10 | 4  | 1969  |
| 6       |             |   |   |    | 2  |     |    | 2   |    |    |    | 4     |
| 7       |             |   |   |    | 2  |     |    |     |    |    |    | 2     |
| 8       |             |   |   |    |    | 2   |    | 6   |    |    |    | 8     |
| 10      |             |   |   |    | 2  | 54  |    |     |    |    |    | 56    |
| 12      |             |   |   |    |    |     |    | 25  |    |    |    | 25    |
| 14      |             |   |   |    |    |     |    | 3   |    |    |    | 3     |
| Total   | 1648        | 3 | 7 | 10 | 78 | 183 | 2  | 124 | 3  | 10 | 4  | 2072  |

Purpose 6

| O/D     | Destination |   |    |   |    |    |     |     |    |    |       |
|---------|-------------|---|----|---|----|----|-----|-----|----|----|-------|
| Origine | 3           | 4 | 6  | 7 | 8  | 10 | 12  | 14  | 20 | 21 | Total |
| 3       | 2579        | 6 | 13 | 3 | 12 | 57 | 269 | 150 | 3  |    | 3092  |
| 4       |             | 2 |    |   |    |    |     |     |    |    | 2     |
| 7       |             |   |    |   |    | 2  |     |     |    |    | 2     |
| 8       |             |   |    |   | 4  |    |     | 3   |    |    | 7     |
| 10      |             |   |    |   |    | 14 | 63  |     |    |    | 77    |
| 11      |             |   |    |   |    |    | 2   | 2   |    |    | 4     |
| 12      |             |   |    |   |    |    |     | 54  |    | 2  | 56    |
| 14      |             |   |    |   |    |    |     | 9   |    |    | 9     |
| Total   | 2579        | 8 | 13 | 3 | 16 | 73 | 334 | 218 | 3  | 2  | 3249  |

**Table AP3.1.7 Kizuna District OD by Type of Mode in Kampong Cham Province (Weekday)**

Type 1

| O/D    | Destination |    |    |    |     |     |     |     |     |     |     |     |      |       |  |
|--------|-------------|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|------|-------|--|
| Origin | 4           | 5  | 6  | 7  | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16   | Total |  |
| 1      | 16          | 16 |    |    | 64  | 49  | 49  | 32  | 48  |     |     |     | 112  | 386   |  |
| 2      |             | 17 |    |    |     |     | 32  | 96  | 16  |     |     |     | 130  | 291   |  |
| 3      | 16          |    |    |    | 16  |     | 16  | 48  | 16  |     |     |     | 65   | 177   |  |
| 4      |             | 16 |    | 16 |     |     |     |     |     |     | 17  |     |      | 49    |  |
| 5      |             |    | 16 | 17 | 98  | 80  | 162 | 450 | 147 | 16  |     | 16  | 2721 | 3723  |  |
| 6      |             |    |    |    | 17  | 17  | 16  | 32  | 32  |     | 48  |     | 403  | 565   |  |
| 7      |             |    |    |    | 48  |     |     | 96  | 49  | 16  |     |     | 192  | 401   |  |
| 8      |             |    |    |    |     |     |     |     |     | 16  | 16  |     | 32   | 64    |  |
| 9      |             |    |    |    |     |     |     |     |     |     |     | 16  | 16   | 32    |  |
| 10     |             |    |    |    |     |     |     |     |     | 32  | 32  | 17  |      | 81    |  |
| 11     |             |    |    |    |     |     |     |     |     | 80  | 16  | 33  | 16   | 145   |  |
| 12     |             |    |    |    |     |     |     |     |     |     | 65  | 49  |      | 114   |  |
| 13     |             |    |    |    |     |     |     |     |     |     |     |     | 210  | 210   |  |
| 14     |             |    |    |    |     |     |     |     |     |     |     |     | 176  | 176   |  |
| 15     |             |    |    |    |     |     |     |     |     |     |     |     | 160  | 160   |  |
| 16     |             |    |    |    |     |     |     |     |     |     |     |     | 48   | 48    |  |
| Total  | 32          | 49 | 16 | 33 | 243 | 146 | 275 | 754 | 308 | 160 | 194 | 131 | 4281 | 6622  |  |

Type 2

| O/D    | Destination |    |     |    |    |    |    |    |     |       |  |
|--------|-------------|----|-----|----|----|----|----|----|-----|-------|--|
| Origin | 6           | 8  | 10  | 11 | 12 | 13 | 14 | 15 | 16  | Total |  |
| 1      |             | 11 |     | 11 |    |    |    |    | 11  | 33    |  |
| 2      |             |    | 22  | 21 |    |    |    |    | 33  | 76    |  |
| 5      | 20          | 54 | 97  | 55 | 33 |    |    |    | 178 | 437   |  |
| 6      |             |    |     |    |    |    |    |    | 10  | 10    |  |
| 7      |             | 11 |     |    |    |    |    |    |     | 11    |  |
| 8      |             |    | 11  |    |    |    |    | 10 |     | 21    |  |
| 10     |             |    |     |    |    |    | 10 | 10 | 10  | 30    |  |
| 11     |             |    |     |    |    | 10 |    | 10 |     | 20    |  |
| 13     |             |    |     |    |    |    |    |    | 43  | 43    |  |
| Total  | 20          | 76 | 130 | 87 | 33 | 10 | 10 | 30 | 285 | 681   |  |

Type 3

| O/D    | Destination |    |    |     |       |
|--------|-------------|----|----|-----|-------|
| Origin | 5           | 10 | 13 | 16  | Total |
| 1      |             | 19 |    |     | 19    |
| 2      |             | 20 |    | 19  | 39    |
| 4      | 20          |    |    |     | 20    |
| 5      |             | 19 |    | 152 | 171   |
| 6      |             | 19 |    | 20  | 39    |
| 12     |             |    | 19 |     | 19    |
| 13     |             |    |    | 38  | 38    |
| 16     |             |    |    | 19  | 19    |
| Total  | 20          | 77 | 19 | 248 | 364   |

Type 4

| O/D    | Destination |     |       |
|--------|-------------|-----|-------|
| Origin | 11          | 16  | Total |
| 5      | 60          | 474 | 534   |
| 6      |             | 60  | 60    |
| Total  | 60          | 534 | 594   |

Type 5

| O/D    | Destination |     |       |
|--------|-------------|-----|-------|
| Origin | 11          | 16  | Total |
| 5      | 72          | 216 | 288   |
| Total  | 72          | 216 | 288   |

Type All

| O/D    | Destination |    |    |    |     |     |     |     |     |     |     |     |      |       |  |
|--------|-------------|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|------|-------|--|
| Origin | 4           | 5  | 6  | 7  | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16   | Total |  |
| 1      | 16          | 16 |    |    | 75  | 49  | 68  | 43  | 48  |     |     |     | 123  | 438   |  |
| 2      |             | 17 |    |    |     |     | 74  | 117 | 16  |     |     |     | 182  | 406   |  |
| 3      | 16          |    |    |    | 16  |     | 16  | 48  | 16  |     |     |     | 65   | 177   |  |
| 4      |             | 36 |    | 16 |     |     |     |     |     |     | 17  |     |      | 69    |  |
| 5      |             |    | 36 | 17 | 152 | 80  | 278 | 637 | 180 | 16  |     | 16  | 3741 | 5153  |  |
| 6      |             |    |    |    | 17  | 17  | 35  | 32  | 32  |     | 48  |     | 493  | 674   |  |
| 7      |             |    |    |    | 59  |     |     | 96  | 49  | 16  |     |     | 192  | 412   |  |
| 8      |             |    |    |    |     |     | 11  |     |     | 16  | 16  | 10  | 32   | 85    |  |
| 9      |             |    |    |    |     |     |     |     |     |     |     | 16  | 16   | 32    |  |
| 10     |             |    |    |    |     |     |     |     |     | 32  | 42  | 27  | 10   | 111   |  |
| 11     |             |    |    |    |     |     |     |     |     | 90  | 16  | 43  | 16   | 165   |  |
| 12     |             |    |    |    |     |     |     |     |     | 19  | 65  | 49  |      | 133   |  |
| 13     |             |    |    |    |     |     |     |     |     |     |     |     | 291  | 291   |  |
| 14     |             |    |    |    |     |     |     |     |     |     |     |     | 176  | 176   |  |
| 15     |             |    |    |    |     |     |     |     |     |     |     |     | 160  | 160   |  |
| 16     |             |    |    |    |     |     |     |     |     |     |     |     | 67   | 67    |  |
| Total  | 32          | 69 | 36 | 33 | 319 | 146 | 482 | 973 | 341 | 189 | 204 | 161 | 5564 | 8549  |  |

**Table AP3.1.8 Kizuna District OD by Type of Mode in Kampong Cham Province (Non-**

Type 1

| O/D    | Destination |    |    |   |     |    |    |     |     |    |    |    |      |      | Total |
|--------|-------------|----|----|---|-----|----|----|-----|-----|----|----|----|------|------|-------|
| Origin | 4           | 5  | 6  | 7 | 8   | 9  | 10 | 11  | 12  | 13 | 14 | 15 | 16   |      |       |
| 1      | 8           |    |    |   |     |    |    |     |     |    |    |    | 7    | 15   |       |
| 2      | 8           |    |    |   |     | 4  |    | 20  | 4   |    |    |    | 32   | 68   |       |
| 3      |             |    |    |   |     |    |    | 4   |     |    |    |    | 27   | 31   |       |
| 4      |             | 30 | 4  |   |     |    |    |     |     | 8  |    |    |      | 42   |       |
| 5      |             | 28 | 12 | 4 | 187 | 12 | 79 | 216 | 130 |    | 4  | 6  | 5321 | 5999 |       |
| 6      |             |    | 4  |   | 20  |    | 11 | 16  | 8   |    |    |    | 370  | 429  |       |
| 7      |             |    |    | 4 |     |    |    |     |     |    |    |    | 32   | 36   |       |
| 8      |             |    |    |   | 4   |    |    |     | 4   |    |    |    | 12   | 20   |       |
| 9      |             |    |    |   |     | 4  |    |     |     |    |    |    | 7    | 11   |       |
| 10     |             |    |    |   |     |    | 4  |     |     | 4  |    |    | 7    | 15   |       |
| 11     |             |    |    |   |     |    |    | 4   |     | 8  |    | 8  | 8    | 28   |       |
| 12     |             |    |    |   |     |    |    |     | 4   | 4  |    |    |      | 8    |       |
| 13     |             |    |    |   |     |    |    |     |     |    | 4  |    | 88   | 92   |       |
| 14     |             |    |    |   |     |    |    |     |     |    | 4  |    | 11   | 15   |       |
| 15     |             |    |    |   |     |    |    |     |     |    |    | 7  | 20   | 27   |       |
| 16     |             |    |    |   |     |    |    |     |     |    |    |    | 112  | 112  |       |
| Total  | 16          | 58 | 20 | 8 | 215 | 16 | 94 | 260 | 150 | 24 | 12 | 21 | 6054 | 6948 |       |

Type 2

| O/D    | Destination |   |    |     |    |    |    |    |     |  | Total |
|--------|-------------|---|----|-----|----|----|----|----|-----|--|-------|
| Origin | 5           | 6 | 8  | 10  | 11 | 12 | 13 | 15 | 16  |  |       |
| 1      |             |   |    | 5   |    |    |    |    |     |  | 5     |
| 2      |             |   |    | 2   |    |    |    |    | 8   |  | 10    |
| 3      |             |   |    | 6   | 2  |    |    | 3  |     |  | 14    |
| 4      | 2           |   |    |     |    |    |    |    |     |  | 2     |
| 5      |             | 3 | 8  | 91  | 33 | 38 |    |    | 222 |  | 395   |
| 6      |             | 3 |    |     |    | 5  |    |    | 21  |  | 29    |
| 7      |             |   | 2  |     |    |    |    |    |     |  | 2     |
| 8      |             |   |    | 3   |    |    |    |    |     |  | 3     |
| 9      |             |   |    |     | 2  |    |    | 2  |     |  | 4     |
| 10     |             |   |    |     |    |    | 2  | 3  | 3   |  | 8     |
| 11     |             |   |    |     |    |    | 8  |    | 3   |  | 11    |
| 12     |             |   |    |     |    | 2  |    |    |     |  | 2     |
| 13     |             |   |    |     |    |    |    |    | 14  |  | 14    |
| 15     |             |   |    |     |    |    |    | 2  |     |  | 2     |
| 16     |             |   |    |     |    |    |    |    | 9   |  | 9     |
| Total  | 2           | 6 | 10 | 107 | 37 | 43 | 12 | 10 | 283 |  | 510   |

Type 3

| O/D    | Destination |   |    |   |    |    |    |    |    |     |     | Total |
|--------|-------------|---|----|---|----|----|----|----|----|-----|-----|-------|
| Origin | 4           | 5 | 8  | 9 | 10 | 11 | 12 | 13 | 15 | 16  |     |       |
| 1      |             |   |    |   | 2  | 3  |    |    |    | 6   |     | 11    |
| 2      |             |   |    |   | 6  |    | 6  |    |    |     | 31  | 43    |
| 3      |             | 3 |    |   | 11 | 3  | 15 |    |    |     | 26  | 58    |
| 4      | 3           |   |    |   |    |    |    |    |    |     |     | 3     |
| 5      |             |   | 2  | 9 | 3  | 24 | 24 | 52 | 3  |     | 144 | 261   |
| 6      |             |   |    |   | 6  | 3  |    |    |    |     | 19  | 28    |
| 7      |             |   | 3  |   |    |    |    |    |    |     |     | 3     |
| 8      |             |   |    |   |    |    |    |    |    | 3   |     | 3     |
| 10     |             |   |    |   |    |    |    | 5  |    |     |     | 5     |
| 11     |             |   |    |   |    |    |    | 6  | 3  |     |     | 9     |
| 12     |             |   |    |   |    |    |    | 6  |    |     | 2   | 8     |
| 13     |             |   |    |   |    |    |    | 3  |    |     | 20  | 23    |
| 15     |             |   |    |   |    |    |    |    |    |     | 2   | 2     |
| 16     |             |   |    |   |    |    |    |    |    |     | 4   | 4     |
| Total  | 6           | 2 | 12 | 3 | 49 | 33 | 73 | 23 | 6  | 254 |     | 461   |

Type 4

| O/D    | Destination |    |    |     |     | Total |
|--------|-------------|----|----|-----|-----|-------|
| Origin | 8           | 12 | 13 | 16  |     |       |
| 1      |             |    |    | 25  |     | 25    |
| 5      | 25          | 26 |    |     | 433 | 484   |
| 6      |             |    |    | 50  |     | 50    |
| 11     |             |    | 25 |     |     | 25    |
| 13     |             |    |    | 25  |     | 25    |
| Total  | 25          | 26 | 25 | 533 |     | 609   |

Type 5

| O/D    | Destination |    |    |     |     | Total |
|--------|-------------|----|----|-----|-----|-------|
| Origin | 5           | 6  | 12 | 16  |     |       |
| 5      | 14          | 14 | 14 |     | 269 | 311   |
| 16     |             |    |    | 14  |     | 14    |
| Total  | 14          | 14 | 14 | 283 |     | 325   |

Type All

| O/D    | Destination |    |    |   |     |    |     |     |     |    |    |    |      |  |      | Total |
|--------|-------------|----|----|---|-----|----|-----|-----|-----|----|----|----|------|--|------|-------|
| Origin | 4           | 5  | 6  | 7 | 8   | 9  | 10  | 11  | 12  | 13 | 14 | 15 | 16   |  |      |       |
| 1      | 8           |    |    |   |     |    | 7   | 3   |     |    |    |    | 38   |  | 56   |       |
| 2      | 8           |    |    |   | 4   |    | 8   | 20  | 10  |    |    |    | 71   |  | 121  |       |
| 3      | 3           |    |    |   |     |    | 17  | 9   | 15  |    |    | 3  | 56   |  | 103  |       |
| 4      | 3           | 32 | 4  |   |     |    |     |     |     | 8  |    |    |      |  | 47   |       |
| 5      |             | 44 | 29 | 4 | 229 | 15 | 194 | 273 | 260 | 3  | 4  | 6  | 6389 |  | 7450 |       |
| 6      |             |    | 7  |   | 20  |    | 17  | 19  | 13  |    |    |    | 460  |  | 536  |       |
| 7      |             |    |    | 4 | 5   |    |     |     |     |    |    |    | 32   |  | 41   |       |
| 8      |             |    |    |   | 4   |    | 3   |     | 4   |    |    | 3  | 12   |  | 26   |       |
| 9      |             |    |    |   |     | 4  |     | 2   |     |    |    | 2  | 7    |  | 15   |       |
| 10     |             |    |    |   |     |    | 4   |     |     | 11 |    | 3  | 10   |  | 28   |       |
| 11     |             |    |    |   |     |    |     | 4   |     | 47 |    | 11 | 11   |  | 73   |       |
| 12     |             |    |    |   |     |    |     |     | 4   | 12 |    |    | 2    |  | 18   |       |
| 13     |             |    |    |   |     |    |     |     |     | 3  | 4  |    | 147  |  | 154  |       |
| 14     |             |    |    |   |     |    |     |     |     |    | 4  |    | 11   |  | 15   |       |
| 15     |             |    |    |   |     |    |     |     |     |    |    | 9  | 22   |  | 31   |       |
| 16     |             |    |    |   |     |    |     |     |     |    |    |    | 139  |  | 139  |       |
| Total  | 22          | 76 | 40 | 8 | 262 | 19 | 250 | 330 | 306 | 84 | 12 | 37 | 7407 |  | 8853 |       |

**Table AP3.1.9 Kizuna Province OD by Type of Mode (Weekday)**

Type 1

Zone 33: Unknown

| O/D    | Destination |   |    |     |     |    |    |    |       |
|--------|-------------|---|----|-----|-----|----|----|----|-------|
| Origin | 3           | 6 | 10 | 12  | 14  | 19 | 20 | 33 | Total |
| 1      | 8           |   |    |     |     |    |    |    | 8     |
| 3      | 6622        | 8 | 32 | 225 | 367 | 8  | 8  | 15 | 7285  |
| 10     |             |   |    | 56  |     |    |    |    | 56    |
| 11     |             |   |    | 7   |     |    |    |    | 7     |
| 12     |             |   |    |     | 32  |    |    |    | 32    |
| Total  | 6630        | 8 | 32 | 288 | 399 | 8  | 8  | 15 | 7388  |

Type 2

| O/D    | Destination |   |    |   |    |     |     |     |    |    |    |       |
|--------|-------------|---|----|---|----|-----|-----|-----|----|----|----|-------|
| Origin | 3           | 4 | 6  | 7 | 8  | 10  | 12  | 14  | 16 | 20 | 21 | Total |
| 3      | 681         |   | 10 | 4 | 25 | 70  | 597 | 97  | 4  | 4  | 4  | 1496  |
| 4      |             | 5 |    |   |    | 5   |     |     |    |    |    | 10    |
| 7      |             |   |    |   |    |     |     | 15  |    |    |    | 15    |
| 8      |             |   |    |   | 10 |     |     |     |    |    |    | 10    |
| 10     |             |   |    |   |    | 30  | 107 |     |    |    |    | 137   |
| 11     |             |   |    |   |    |     | 9   |     |    |    |    | 9     |
| 12     |             |   |    |   |    |     |     | 78  |    | 5  |    | 83    |
| 14     |             |   |    |   |    |     |     | 8   |    |    |    | 8     |
| Total  | 681         | 5 | 10 | 4 | 35 | 105 | 713 | 198 | 4  | 9  | 4  | 1768  |

Type 3

| O/D    | Destination |    |    |     |     |       |
|--------|-------------|----|----|-----|-----|-------|
| Origin | 3           | 6  | 8  | 12  | 14  | Total |
| 3      | 364         | 26 | 51 | 170 | 170 | 781   |
| 10     |             |    |    | 12  |     | 12    |
| 12     |             |    |    |     | 24  | 24    |
| Total  | 364         | 26 | 51 | 182 | 194 | 817   |

Type 4

| O/D    | Destination |    |       |
|--------|-------------|----|-------|
| Origin | 3           | 12 | Total |
| 3      | 594         | 54 | 648   |
| Total  | 594         | 54 | 648   |

Type 5

| O/D    | Destination |       |
|--------|-------------|-------|
| Origin | 3           | Total |
| 3      | 288         | 288   |
| Total  | 288         | 288   |

Type All

| O/D    | Destination |   |    |   |    |     |      |     |    |    |    |    |    |       |
|--------|-------------|---|----|---|----|-----|------|-----|----|----|----|----|----|-------|
| Origin | 3           | 4 | 6  | 7 | 8  | 10  | 12   | 14  | 16 | 19 | 20 | 21 | 33 | Total |
| 1      | 8           |   |    |   |    |     |      |     |    |    |    |    |    | 8     |
| 3      | 8549        |   | 44 | 4 | 76 | 102 | 1046 | 634 | 4  | 8  | 12 | 4  | 15 | 10498 |
| 4      |             | 5 |    |   |    | 5   |      |     |    |    |    |    |    | 10    |
| 7      |             |   |    |   |    |     |      | 15  |    |    |    |    |    | 15    |
| 8      |             |   |    |   | 10 |     |      |     |    |    |    |    |    | 10    |
| 10     |             |   |    |   |    | 30  | 175  |     |    |    |    |    |    | 205   |
| 11     |             |   |    |   |    |     | 16   |     |    |    |    |    |    | 16    |
| 12     |             |   |    |   |    |     |      | 134 |    |    | 5  |    |    | 139   |
| 14     |             |   |    |   |    |     |      | 8   |    |    |    |    |    | 8     |
| Total  | 8557        | 5 | 44 | 4 | 86 | 137 | 1237 | 791 | 4  | 8  | 17 | 4  | 15 | 10909 |

**Table AP3.1.10 Kizuna Province OD by Type of Mode (Non-weekday)**

Type 1

| O/D     | Destination |   |   |    |   |    |    |     |     |    |    |    |  | Total |
|---------|-------------|---|---|----|---|----|----|-----|-----|----|----|----|--|-------|
| Origine | 3           | 4 | 5 | 6  | 7 | 8  | 10 | 12  | 14  | 15 | 20 | 21 |  |       |
| 2       | 6           |   |   |    |   |    |    |     |     |    |    |    |  | 6     |
| 3       | 6948        | 9 | 4 | 29 | 3 | 12 | 74 | 220 | 276 | 3  | 9  |    |  | 7587  |
| 8       |             |   |   |    |   |    |    |     | 3   |    |    |    |  | 3     |
| 10      |             |   |   |    |   |    |    | 17  |     |    |    |    |  | 17    |
| 11      |             |   |   |    |   |    |    | 4   |     |    |    |    |  | 4     |
| 12      |             |   |   |    |   |    |    |     | 21  |    |    |    |  | 21    |
| 14      |             |   |   |    |   |    |    |     | 9   |    |    |    |  | 9     |
| 21      |             |   |   |    |   |    |    |     |     |    |    | 3  |  | 3     |
| Total   | 6954        | 9 | 4 | 29 | 3 | 12 | 74 | 241 | 309 | 3  | 9  | 3  |  | 7650  |

Type 2

| O/D     | Destination |   |    |   |    |     |    |     |    |     |    |    |  | Total |
|---------|-------------|---|----|---|----|-----|----|-----|----|-----|----|----|--|-------|
| Origine | 3           | 4 | 6  | 7 | 8  | 10  | 11 | 12  | 13 | 14  | 20 | 21 |  |       |
| 3       | 510         | 2 | 10 | 2 | 17 | 103 | 1  | 717 | 2  | 64  | 2  | 4  |  | 1434  |
| 4       |             | 2 |    |   |    | 1   |    |     |    |     |    |    |  | 3     |
| 6       |             |   |    |   |    | 2   |    |     |    | 2   |    |    |  | 4     |
| 7       |             |   |    |   |    | 4   |    |     |    |     |    |    |  | 4     |
| 8       |             |   |    |   | 4  |     |    | 2   |    | 4   |    |    |  | 10    |
| 9       |             |   |    |   |    |     |    |     |    | 2   |    |    |  | 2     |
| 10      |             |   |    |   |    | 18  |    | 189 |    |     |    |    |  | 207   |
| 11      |             |   |    |   |    |     |    | 3   |    | 2   |    |    |  | 5     |
| 12      |             |   |    |   |    |     |    |     |    | 108 | 1  | 2  |  | 111   |
| 14      |             |   |    |   |    |     |    |     |    | 6   |    |    |  | 6     |
| Total   | 510         | 4 | 10 | 2 | 21 | 128 | 1  | 911 | 2  | 188 | 3  | 6  |  | 1786  |

Type 3

| O/D     | Destination |   |   |   |    |    |     |    |    |    |    |    |    | Total |
|---------|-------------|---|---|---|----|----|-----|----|----|----|----|----|----|-------|
| Origine | 3           | 4 | 5 | 6 | 8  | 10 | 12  | 13 | 14 | 17 | 20 | 21 | 25 |       |
| 1       | 6           |   |   |   |    |    |     |    |    |    |    |    |    | 6     |
| 2       | 2           |   |   |   |    |    |     |    |    |    |    |    |    | 2     |
| 3       | 461         | 4 | 2 | 8 | 28 | 16 | 305 | 2  | 65 | 10 | 2  | 4  | 4  | 911   |
| 8       |             |   |   |   |    |    |     |    | 4  |    |    |    |    | 4     |
| 10      |             |   |   |   |    |    | 29  |    |    |    |    |    |    | 29    |
| 12      |             |   |   |   |    |    |     |    | 18 |    |    |    | 2  | 20    |
| Total   | 469         | 4 | 2 | 8 | 28 | 16 | 334 | 2  | 87 | 10 | 2  | 4  | 6  | 972   |

Type 4

| O/D     | Destination |    |    |    |  | Total |
|---------|-------------|----|----|----|--|-------|
| Origine | 3           | 10 | 12 | 17 |  |       |
| 3       | 609         | 48 | 32 | 16 |  | 705   |
| Total   | 609         | 48 | 32 | 16 |  | 705   |

Type 5

| O/D     | Destination |    |    |    |  | Total |
|---------|-------------|----|----|----|--|-------|
| Origine | 3           | 4  | 10 | 14 |  |       |
| 3       | 325         | 11 | 22 | 11 |  | 369   |
| Total   | 325         | 11 | 22 | 11 |  | 369   |

Type All

| O/D     | Destination |    |   |    |   |    |     |    |      |    |     |    |    |    |    |    |  |  | Total |
|---------|-------------|----|---|----|---|----|-----|----|------|----|-----|----|----|----|----|----|--|--|-------|
| Origine | 3           | 4  | 5 | 6  | 7 | 8  | 10  | 11 | 12   | 13 | 14  | 15 | 17 | 20 | 21 | 25 |  |  |       |
| 1       | 6           |    |   |    |   |    |     |    |      |    |     |    |    |    |    |    |  |  | 6     |
| 2       | 8           |    |   |    |   |    |     |    |      |    |     |    |    |    |    |    |  |  | 8     |
| 3       | 8853        | 26 | 6 | 47 | 5 | 57 | 263 | 1  | 1274 | 4  | 416 | 3  | 26 | 13 | 8  | 4  |  |  | 11006 |
| 4       |             | 2  |   |    |   |    | 1   |    |      |    |     |    |    |    |    |    |  |  | 3     |
| 6       |             |    |   |    |   |    | 2   |    |      |    |     | 2  |    |    |    |    |  |  | 4     |
| 7       |             |    |   |    |   |    | 4   |    |      |    |     |    |    |    |    |    |  |  | 4     |
| 8       |             |    |   |    |   | 4  |     |    | 2    |    | 11  |    |    |    |    |    |  |  | 17    |
| 9       |             |    |   |    |   |    |     |    |      |    | 2   |    |    |    |    |    |  |  | 2     |
| 10      |             |    |   |    |   |    | 18  |    | 235  |    |     |    |    |    |    |    |  |  | 253   |
| 11      |             |    |   |    |   |    |     |    | 7    |    | 2   |    |    |    |    |    |  |  | 9     |
| 12      |             |    |   |    |   |    |     |    |      |    | 147 |    |    | 1  | 2  | 2  |  |  | 152   |
| 14      |             |    |   |    |   |    |     |    |      |    | 15  |    |    |    |    |    |  |  | 15    |
| 21      |             |    |   |    |   |    |     |    |      |    |     |    |    |    | 3  |    |  |  | 3     |
| Total   | 8867        | 28 | 6 | 47 | 5 | 61 | 288 | 1  | 1518 | 4  | 595 | 3  | 26 | 14 | 13 | 6  |  |  | 11482 |



**Table AP3.1.1.11 Neak Loeung District OD by Purpose in PP, Kandal, Prey Veang, Svey Rieng (Weekday) (1/2)**

Purpose 1

Zone: 2008, 2009: Unknown district

| O/D    | Destination | 1200 | 1401 | 1402 | 1403 | 1404 | 1405 | 1406 | 1407 | 1408 | 1409 | 1410 | 1411 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | Total |
|--------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| Origin | 1200        |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 8     |
| 800    |             | 4    | 4    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 10    |
| 801    |             | 5    |      |      |      |      |      | 5    |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 293   |
| 802    | 43          | 38   | 5    | 39   | 50   | 15   | 20   | 5    | 3    |      |      | 42   |      | 5    | 10   |      |      |      | 8    | 10   |      |      | 189   |
| 803    | 43          | 5    | 33   |      |      | 33   | 70   |      |      |      |      |      |      |      | 5    |      |      |      |      |      |      |      | 106   |
| 804    |             | 5    | 5    |      |      | 75   | 5    |      |      |      |      | 3    |      |      |      |      |      |      | 3    |      |      |      | 347   |
| 805    |             | 11   | 66   | 42   | 42   | 11   |      |      |      |      |      |      | 42   | 5    | 52   | 42   | 5    | 5    |      |      |      | 4    | 114   |
| 806    | 43          | 5    | 8    | 42   |      |      | 8    | 4    |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 3     |
| 807    |             |      |      |      |      | 3    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1     |
| 808    |             | 1    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 8     |
| 809    |             |      | 4    | 4    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 43    |
| 811    |             | 43   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2231  |
| 1200   |             | 258  | 588  | 292  | 256  | 184  | 172  | 82   | 6    | 57   | 90   | 7    | 31   | 81   | 153  | 72   | 26   | 36   | 33   | 35   | 4    | 7    | 3353  |
| Total  | 129         | 375  | 713  | 419  | 351  | 318  | 280  | 96   | 24   | 57   | 135  | 49   | 41   | 31   | 153  | 72   | 26   | 36   | 33   | 35   | 4    | 7    | 3353  |

Purpose 2

| O/D    | Destination | 1402 | 1403 | 1404 | 1405 | 1406 | 1407 | 2001 | 2002 | 2003 | 2004 | 2005 | Total |
|--------|-------------|------|------|------|------|------|------|------|------|------|------|------|-------|
| Origin | 1402        |      |      |      |      |      |      |      |      |      |      |      | 9     |
| 802    |             | 3    |      |      |      | 6    |      |      |      |      |      |      | 3     |
| 804    |             |      |      |      |      |      |      |      |      |      |      |      | 84    |
| 805    | 42          |      |      |      | 42   |      |      |      |      |      |      |      | 6     |
| 806    | 3           |      | 3    |      |      |      |      |      |      |      |      |      | 1     |
| 810    |             |      |      |      |      | 1    |      |      |      |      |      |      | 180   |
| 1200   | 50          | 44   |      |      | 45   |      | 28   | 3    | 3    | 1    | 3    | 3    | 283   |
| Total  | 98          | 44   | 3    | 87   | 10   | 28   | 3    | 3    | 3    | 1    | 3    | 3    | 283   |

Purpose 3

| O/D    | Destination | 1401 | 1402 | 1403 | 1404 | 1405 | 1406 | 1407 | 1408 | 1410 | 1411 | 2003 | 2004 | 2005 | 2006 | 2007 | 2011 | Total |
|--------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| Origin | 1401        |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 7     |
| 800    |             | 4    |      |      |      |      |      |      |      |      | 3    |      |      |      |      |      |      | 84    |
| 801    |             | 56   | 28   |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 382   |
| 802    | 78          | 174  | 9    |      | 34   |      |      |      |      | 28   |      | 3    |      |      | 56   |      |      | 155   |
| 803    | 47          | 42   | 5    |      | 28   | 5    |      |      |      |      |      |      |      |      | 28   |      |      | 59    |
| 804    |             | 3    |      |      |      |      |      |      |      |      |      | 28   |      |      |      |      |      | 396   |
| 805    | 93          | 64   | 84   | 40   | 9    | 28   | 36   | 28   | 3    |      |      | 5    |      | 4    |      | 6    |      | 61    |
| 806    | 3           |      |      |      |      | 51   |      |      |      |      |      |      |      |      |      |      |      | 6     |
| 808    |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 9     |
| 809    |             |      |      |      |      |      |      |      | 3    |      |      | 3    |      |      |      |      |      | 3     |
| 811    |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 3     |
| 1200   | 12          | 50   | 9    | 3    | 112  | 41   | 31   |      |      | 41   | 28   |      | 8    | 6    | 6    |      | 3    | 350   |
| 1401   |             |      |      |      |      |      | 86   |      |      |      |      |      |      |      |      |      |      | 86    |
| 1402   |             |      |      |      |      |      | 43   |      |      |      |      |      |      |      |      |      |      | 43    |
| 1403   |             |      |      |      |      |      | 86   |      |      |      |      |      |      |      |      |      |      | 86    |
| 1404   |             |      |      |      |      |      | 43   |      |      |      |      |      |      |      |      |      |      | 43    |
| 1405   |             |      |      |      |      |      | 43   |      |      |      |      |      |      |      |      |      |      | 43    |
| 1406   |             |      |      |      |      |      | 43   |      |      |      |      |      |      |      |      |      |      | 43    |
| Total  | 293         | 361  | 116  | 43   | 189  | 125  | 439  | 31   | 72   | 59   | 11   | 8    | 10   | 90   | 6    | 3    | 1856 |       |

Table AP3.1.11 Neak Loeung District OD by Purpose in PP, Kandal, Prey Veang, Svey Rieng (Weekday) (2/2)

Purpose 4

Zone: 2008, 2009, Unknown district

| O/D    | Destination | 1400 | 1401 | 1402 | 1403 | 1404 | 1405 | 1406 | 1407 | 1408 | 1409 | 1410 | 1411 | 1412 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | Total |
|--------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| Origin | 1200        |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 15    |
| 800    |             | 4    |      |      | 1    | 4    | 3    |      |      |      |      |      | 3    |      |      |      |      |      |      |      |      |      |      |      |      |      | 36    |
| 801    |             |      |      |      |      | 3    | 28   |      |      |      |      |      |      | 5    |      |      |      |      |      |      |      |      |      |      |      |      | 36    |
| 802    |             | 34   | 36   |      | 6    |      | 11   | 6    |      | 3    |      | 3    | 4    |      |      | 1    |      | 1    | 3    | 28   | 5    |      |      |      |      |      | 125   |
| 803    |             | 28   | 28   | 6    | 3    |      | 6    | 11   |      |      |      | 5    |      |      |      |      |      | 2    | 1    |      |      |      |      |      |      |      | 59    |
| 805    | 5           |      | 11   | 3    |      | 3    | 1    |      | 28   |      |      |      |      |      |      |      |      | 2    | 1    | 1    |      | 3    |      |      |      |      | 55    |
| 806    |             | 4    | 3    |      | 3    |      | 5    |      | 3    |      |      | 28   |      |      |      |      |      |      |      | 3    | 1    |      | 3    |      |      |      | 53    |
| 808    |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1    |      |      |      |      |      |      | 2     |
| 809    |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1    |      |      |      |      |      |      | 1     |
| 810    |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 4     |
| 811    |             |      | 3    |      | 2    |      |      |      |      |      |      |      | 1    | 3    |      |      | 0    |      |      |      |      |      |      |      |      |      | 6     |
| 1200   |             | 1    | 48   | 150  | 92   | 52   | 101  | 92   | 94   | 9    | 15   | 72   | 8    | 1    | 38   | 98   | 80   | 27   | 135  | 54   | 36   | 10   | 9    | 30   | 3    | 4    | 1259  |
| Total  | 5           | 1    | 90   | 231  | 107  | 62   | 145  | 109  | 125  | 12   | 15   | 109  | 18   | 6    | 38   | 99   | 84   | 31   | 168  | 61   | 36   | 13   | 13   | 30   | 3    | 4    | 1615  |

Purpose 5

| O/D    | Destination | 1400 | 1401 | 1402 | 1403 | 1404 | 1405 | 1406 | 1407 | 1408 | 1409 | 1410 | 1411 | 1412 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | Total |
|--------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| Origin | 1200        |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 13    |
| 800    |             | 4    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 31    |
| 801    |             |      |      |      |      |      |      | 28   |      |      |      |      |      |      |      |      |      |      |      | 3    | 3    |      |      |      |      |      | 51    |
| 802    |             | 4    | 4    |      | 1    | 1    | 5    |      | 28   |      |      |      |      |      |      |      |      |      |      |      |      | 3    |      |      |      |      | 12    |
| 803    | 5           |      |      |      | 3    | 3    | 1    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 32    |
| 804    |             |      | 28   |      |      |      |      | 4    |      |      |      |      |      |      |      |      |      |      |      | 7    |      |      |      |      |      |      | 68    |
| 805    |             |      | 29   |      |      |      |      | 4    |      |      |      | 28   |      |      |      |      |      |      | 3    |      |      |      |      |      |      |      | 10    |
| 806    |             |      | 4    |      |      |      |      | 3    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 7     |
| 807    | 5           |      | 2    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 4     |
| 809    |             |      |      |      |      |      |      |      | 4    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 30    |
| 811    |             |      | 28   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 4     |
| 1200   |             | 2    | 123  | 125  | 116  | 81   | 156  | 86   | 69   | 43   | 10   | 34   | 36   | 12   | 42   | 48   | 25   | 9    | 26   | 57   | 52   | 8    |      | 9    | 2    | 1171 |       |
| Total  | 10          | 2    | 133  | 218  | 120  | 85   | 162  | 125  | 101  | 43   | 10   | 62   | 36   | 12   | 42   | 53   | 28   | 12   | 29   | 67   | 55   | 8    | 5    | 9    | 2    | 1429 |       |

Purpose 6

| O/D    | Destination | 1400 | 1401 | 1402 | 1403 | 1404 | 1405 | 1406 | 1407 | 1408 | 1409 | 1410 | 1411 | 1412 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2010 | 2012 | Total |      |    |
|--------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|------|----|
| Origin | 1200        |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      | 35 |
| 800    |             |      | 12   | 8    |      |      | 6    | 9    |      |      |      |      |      |      |      |      |      |      |      | 27   |      |      |      |      |       | 102  |    |
| 801    |             | 42   | 3    |      |      |      | 30   |      |      |      |      |      |      |      |      |      |      |      |      | 1    |      |      |      |      |       | 1157 |    |
| 802    |             | 249  | 269  | 96   | 107  | 183  | 116  | 3    |      |      | 74   |      | 27   | 27   |      |      | 5    |      |      |      |      |      |      |      |       | 356  |    |
| 803    |             | 69   | 42   | 50   |      | 69   | 69   | 5    |      |      | 42   |      | 5    |      |      |      |      |      |      |      |      |      |      |      |       | 122  |    |
| 804    | 27          | 84   | 5    |      |      |      |      |      |      |      | 6    |      |      |      |      |      |      |      | 37   | 8    | 4    |      |      |      |       | 626  |    |
| 805    |             | 200  | 92   | 99   | 27   | 72   |      |      | 42   |      | 45   |      |      |      |      |      |      |      |      | 27   |      |      |      |      |       | 324  |    |
| 806    |             | 42   | 95   | 69   | 45   | 42   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       | 7    |    |
| 807    |             | 4    | 3    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       | 48   |    |
| 808    |             |      |      |      |      |      |      | 42   | 3    |      |      |      |      |      |      |      | 3    |      |      |      |      |      |      |      |       | 4    |    |
| 809    |             |      | 4    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       | 50   |    |
| 1200   |             | 237  | 415  | 421  | 188  | 301  | 341  | 226  | 70   | 70   | 194  | 27   | 27   | 85   | 145  | 145  | 66   | 85   | 85   | 62   | 27   | 35   |      |      |       | 3252 |    |
| 1402   |             |      |      |      |      |      |      |      |      |      |      |      |      |      | 43   |      |      |      |      |      |      |      |      |      |       | 43   |    |
| Total  | 27          | 927  | 940  | 743  | 370  | 673  | 607  | 234  | 115  | 70   | 408  | 27   | 59   | 112  | 188  | 153  | 71   | 122  | 148  | 66   | 27   | 35   | 4    |      |       | 6126 |    |

**Table AP23.1.12Neak Loeung District OD by Purpose in PP, Kandal, Prey Veang, Svey Rieng (Non-weekday) (1/2)**

Purpose 1

Zone: 2008, 2009, 2010, 2012: Unknown

| O/D    | Destination | 804 | 805 | 1401 | 1402 | 1403 | 1404 | 1405 | 1406 | 1407 | 1408 | 1409 | 1410 | 1411 | 1412 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2012 | Total |
|--------|-------------|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| Origin | 804         |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 60    |
| 801    |             |     |     |      |      |      | 22   |      |      | 27   |      |      |      |      |      |      | 2    | 2    |      | 5    |      |      |      |      |      |      | 412   |
| 802    |             |     |     | 82   | 30   | 91   | 30   | 13   | 23   | 6    |      |      | 26   |      |      | 12   | 32   | 32   | 6    | 9    | 18   | 34   |      |      |      |      | 63    |
| 803    | 2           | 3   |     |      | 22   | 2    |      |      |      |      |      |      |      | 3    |      | 3    | 8    | 5    |      | 9    |      |      | 6    |      |      |      | 18    |
| 804    |             |     |     |      |      | 4    |      |      |      |      |      |      |      |      |      |      |      |      | 3    | 2    | 3    |      |      |      |      |      | 674   |
| 805    |             |     |     | 126  | 120  | 96   | 55   | 75   | 72   | 6    | 26   | 23   | 1    |      |      | 5    | 31   | 9    | 9    | 11   | 3    |      | 3    |      | 3    |      | 96    |
| 806    |             |     |     |      |      | 26   |      |      |      | 23   |      |      | 23   |      |      |      | 9    | 3    |      |      | 6    | 3    |      |      |      |      | 27    |
| 807    |             |     |     | 4    | 1    |      | 22   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 25    |
| 808    |             |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 3    |      |      |      |      |      |      | 10    |
| 809    |             |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 27    |
| 811    |             |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1     |
| 1200   |             |     |     | 136  | 344  | 155  | 227  | 131  | 237  | 16   | 3    | 33   | 58   | 58   |      | 35   | 146  | 106  | 12   | 120  | 154  | 29   | 26   | 2    | 5    |      | 2033  |
| 1402   |             |     |     |      |      |      |      | 2    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2     |
| 1406   |             |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2     |
| Total  | 2           | 3   | 348 | 543  | 376  | 356  | 221  | 332  | 84   | 29   | 58   | 108  | 61   | 1    | 55   | 228  | 134  | 35   | 154  | 212  | 32   | 38   | 5    | 5    | 3    | 3423 |       |

Purpose 2

| O/D    | Destination | 1401 | 1402 | 1403 | 1404 | 1405 | 1406 | 1407 | 1408 | 1409 | 1410 | 2002 | 2003 | 2009 | Total |
|--------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| Origin | 1401        |      |      |      |      |      |      |      |      |      |      |      |      |      | 3     |
| 800    |             |      |      |      |      |      |      |      |      |      |      |      |      |      | 3     |
| 802    |             |      |      |      |      |      |      |      |      |      |      |      |      |      | 72    |
| 805    |             |      |      | 23   | 3    |      | 23   |      |      |      | 23   | 3    |      |      | 73    |
| 810    |             |      |      |      |      |      |      |      |      |      |      |      |      |      | 1     |
| 1200   | 24          | 9    | 57   | 1    |      | 4    | 23   | 3    |      |      |      |      |      | 1    | 132   |
| 1403   |             |      |      |      |      |      | 2    |      |      |      |      |      |      |      | 2     |
| Total  | 24          | 56   | 80   | 24   | 4    | 23   | 23   | 3    | 13   | 23   | 3    | 1    | 1    | 283  |       |

Purpose 3

| O/D    | Destination | 806 | 1200 | 1401 | 1402 | 1403 | 1404 | 1405 | 1406 | 1407 | 1408 | 1409 | 1410 | 1411 | 1412 | 2002 | 2003 | 2004 | 2005 | 2006 | 2008 | 2009 | Total |  |  |  |      |
|--------|-------------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|--|--|--|------|
| Origin | 806         |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |  |  |  | 166  |
| 801    |             |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |  |  |  | 623  |
| 802    |             |     |      | 50   | 33   | 62   | 50   | 7    | 75   | 288  | 50   |      |      | 4    | 27   | 3    |      |      |      |      |      |      |       |  |  |  | 252  |
| 803    |             |     |      | 23   | 53   | 3    | 2    |      | 2    | 137  |      |      |      |      |      |      | 2    |      |      |      |      |      |       |  |  |  | 131  |
| 804    |             |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 23   |      |      |       |  |  |  | 472  |
| 805    | 2           | 3   | 28   | 116  | 23   | 25   | 77   | 50   | 112  | 25   | 6    | 2    |      |      |      |      |      |      |      |      |      |      |       |  |  |  | 73   |
| 806    |             |     |      | 3    | 3    | 3    |      |      | 27   | 27   | 2    | 4    |      |      |      |      |      |      |      | 2    |      |      |       |  |  |  | 230  |
| 807    |             |     |      |      |      |      |      |      |      | 230  |      |      |      |      |      |      |      |      |      |      |      |      |       |  |  |  | 46   |
| 808    |             |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |  |  |  | 252  |
| 1200   |             |     |      | 25   | 16   | 5    | 35   |      | 7    | 121  | 24   |      |      | 3    | 1    | 2    | 1    | 1    | 7    | 1    |      |      |       |  |  |  | 3    |
| 1405   |             |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |  |  |  | 1    |
| 2005   |             |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |  |  |  | 2249 |
| Total  | 2           | 12  | 128  | 221  | 119  | 135  | 162  | 186  | 1079 | 104  | 12   | 12   | 30   | 4    | 4    | 1    | 3    | 30   | 2    | 3    | 1    |      |       |  |  |  |      |

**Table AP3.1.12 Neak Loeung District OD by Purpose in PP, Kandal, Prey Veang, Svey Rieng (Non-weekday) (2/2)**

Zone: 2003, 2008, 2010, 2012: Unknown

Purpose 4

| O/D   | Destination | 1401 | 1402 | 1403 | 1404 | 1405 | 1406 | 1407 | 1408 | 1409 | 1410 | 1411 | 1412 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | Total |
|-------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 801   | 1400        | 7    | 2    | 27   | 1    | 2    | 2    | 5    | 2    | 7    | 4    | 27   | 1    |      |      |      |      | 2    |      | 0    | 1    |      |      |      |      |      | 41    |
| 802   | 1401        | 61   | 40   | 9    | 2    | 4    | 5    | 5    | 2    | 7    | 4    | 27   | 1    |      |      |      |      | 2    |      | 3    | 6    |      |      |      |      |      | 180   |
| 803   | 1402        | 11   | 8    | 4    | 1    | 1    | 1    | 1    | 1    | 3    | 2    | 1    | 3    | 2    |      |      |      | 4    |      |      |      |      |      |      |      |      | 34    |
| 804   | 1403        | 2    | 1    | 3    | 1    | 3    | 1    | 1    | 1    | 2    | 1    | 2    | 1    | 1    | 1    | 1    | 1    | 2    |      | 3    | 28   |      |      |      |      |      | 12    |
| 805   | 1404        | 6    | 19   | 31   | 3    | 33   | 10   | 53   | 3    | 3    | 2    | 1    | 1    | 1    | 1    | 1    | 1    | 2    |      | 1    |      |      |      |      |      |      | 203   |
| 806   | 1405        | 1    | 1    | 1    | 2    | 2    | 1    | 138  | 3    |      |      |      |      |      |      |      |      | 1    |      | 1    |      |      |      |      |      |      | 9     |
| 807   | 1406        |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1    |      | 2    |      |      |      |      |      |      | 140   |
| 808   | 1407        |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 3     |
| 809   | 1408        |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1     |
| 810   | 1409        |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1     |
| 811   | 1410        |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 3     |
| 1200  | 1411        | 58   | 127  | 66   | 62   | 78   | 107  | 1    | 12   | 36   | 87   | 9    | 6    | 0    | 38   | 136  | 71   | 31   | 52   | 157  | 16   |      |      |      |      |      | 1301  |
| 1403  | 1412        | 3    | 141  | 198  | 139  | 69   | 121  | 127  | 329  | 20   | 47   | 99   | 37   | 8    | 0    | 42   | 142  | 80   | 35   | 57   | 168  | 44   |      |      |      |      | 1931  |
| Total | 1413        |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |

Purpose 5

| O/D    |  | Destination |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
|--------|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| Origin |  | 1401        | 1402 | 1403 | 1404 | 1405 | 1406 | 1407 | 1408 | 1409 | 1410 | 1411 | 1412 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | Total |
| 801    |  |             |      |      | 2    |      |      | 4    |      | 2    |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 8     |
| 802    |  | 24          | 31   |      | 28   | 3    | 7    | 32   |      | 23   | 3    |      |      |      |      | 1    | 30   |      | 2    |      |      |      |      | 3    | 187   |
| 803    |  |             |      |      |      | 1    | 3    | 4    |      |      |      |      |      |      |      | 3    |      | 2    |      |      |      |      |      |      | 10    |
| 804    |  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 3     |
| 805    |  | 11          | 31   | 2    | 51   | 30   | 32   |      | 2    | 4    | 1    |      |      | 1    | 2    | 5    | 1    |      | 1    |      |      |      | 2    |      | 176   |
| 806    |  | 1           |      |      |      |      | 23   |      |      |      |      |      |      |      | 1    | 3    |      |      |      | 1    |      |      |      |      | 29    |
| 807    |  | 2           |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 3    |      |      |      |      |      |      |      | 2     |
| 808    |  |             |      |      |      | 3    |      |      |      |      |      |      |      |      |      |      |      | 1    |      |      |      |      |      |      | 3     |
| 809    |  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 3    |      | 4     |
| 810    |  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1     |
| 1200   |  | 34          | 92   | 58   | 71   | 84   | 103  | 108  | 2    | 37   | 25   | 4    | 3    | 16   | 35   | 21   | 11   | 67   | 29   | 12   | 1    | 3    | 3    | 1    | 820   |
| 2002   |  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1     |
| Total  |  | 70          | 156  | 60   | 152  | 121  | 168  | 148  | 4    | 66   | 29   | 4    | 3    | 18   | 42   | 59   | 12   | 73   | 31   | 12   | 1    | 3    | 8    | 4    | 1244  |

Purpose 6

| O/D   | Destination | 805 | 807 | 810 | 1200 | 1401 | 1402 | 1403 | 1404 | 1405 | 1406 | 1407 | 1408 | 1409 | 1410 | 1411 | 1412 | 1420 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|-------|-------------|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 800   | 805         |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
| 801   | 807         | 5   |     |     | 3    | 29   | 26   | 31   | 29   |      |      | 5    | 23   |      |      |      |      |      |      | 3    |      |      |      |      |      |      |      |      | 132   |
| 802   | 810         | 3   |     |     | 5    | 95   | 215  | 75   | 52   | 156  | 104  | 74   | 46   | 6    | 23   | 28   |      |      | 3    |      | 54   |      | 3    |      | 6    |      |      |      | 948   |
| 803   | 1200        |     |     |     | 2    | 7    | 62   | 4    | 28   | 28   |      | 10   | 28   |      |      |      |      |      | 4    | 2    | 1    |      | 3    |      |      |      |      |      | 179   |
| 804   | 1401        | 3   |     |     |      | 2    | 2    | 25   | 24   |      |      |      |      |      |      |      |      |      | 3    | 23   |      |      |      |      |      |      |      |      | 86    |
| 805   | 1402        | 2   |     |     | 8    | 203  | 339  | 267  | 93   | 216  | 307  | 60   | 103  | 3    | 123  | 24   | 26   |      |      | 28   | 3    | 26   |      | 1    |      |      |      |      | 1831  |
| 806   | 1403        |     |     |     |      | 25   | 23   |      | 1    | 3    | 6    |      |      |      |      |      |      |      |      | 28   | 3    |      |      |      |      |      |      |      | 90    |
| 807   | 1404        |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2     |
| 808   | 1405        |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 6     |
| 809   | 1406        |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1     |
| 810   | 1407        |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1     |
| 811   | 1408        |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 28    |
| 1200  | 1409        |     |     |     |      | 546  | 434  | 346  | 85   | 372  | 330  | 238  | 67   | 217  | 127  | 129  | 2    | 3    | 6    | 82   | 157  | 105  | 185  | 219  | 44   | 2    | 1    | 2    | 3696  |
| 1401  | 1410        |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 9     |
| 1402  | 1411        |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 18    |
| 1403  | 1412        |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 3     |
| 1405  | 1413        |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 3     |
| 2004  | 1414        |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2     |
| Total | 10          | 3   | 3   | 20  | 936  | 1105 | 753  | 288  | 802  | 757  | 333  | 269  | 229  | 273  | 181  | 28   | 3    | 16   | 166  | 215  | 105  | 220  | 228  | 50   | 2    | 1    | 2    | 7058 |       |

**Table AP3.1.13 Neak Loeung Province OD by Purpose (Weekday)**

**Purpose 1**

| Data   | Destination |   |    |      |     |    |       |
|--------|-------------|---|----|------|-----|----|-------|
| Origin | 7           | 8 | 12 | 14   | 20  | 21 | Total |
| 3      | 1           | 9 | 29 |      |     |    | 39    |
| 4      |             |   |    |      | 2   |    | 2     |
| 8      |             |   | 54 | 452  | 90  |    | 596   |
| 12     |             |   |    | 1064 | 204 |    | 1268  |
| 14     |             |   |    |      |     | 18 | 18    |
| 15     |             |   |    |      | 4   |    | 4     |
| 20     |             |   |    |      |     | 6  | 6     |
| Total  | 1           | 9 | 83 | 1516 | 300 | 24 | 1933  |

**Purpose 2**

| Data   | Destination |    |       |
|--------|-------------|----|-------|
| Origin | 14          | 20 | Total |
| 8      | 57          |    | 57    |
| 12     | 85          | 17 | 102   |
| Total  | 142         | 17 | 159   |

**Purpose 3**

| Data   | Destination |      |    |       |
|--------|-------------|------|----|-------|
| Origin | 8           | 14   | 20 | Total |
| 3      | 4           | 1    |    | 5     |
| 8      |             | 643  | 71 | 714   |
| 12     |             | 231  | 26 | 257   |
| 14     |             | 136  |    | 136   |
| Total  | 4           | 1011 | 97 | 1112  |

**Purpose 4**

| Data   | Destination |   |     |     |     |    |       |
|--------|-------------|---|-----|-----|-----|----|-------|
| Origin | 7           | 8 | 12  | 14  | 20  | 21 | Total |
| 1      |             |   |     |     | 2   |    | 2     |
| 2      |             |   |     | 2   |     |    | 2     |
| 3      | 2           | 8 | 176 | 1   |     |    | 187   |
| 5      |             |   |     | 4   | 2   |    | 6     |
| 7      |             |   |     | 2   | 2   |    | 4     |
| 8      |             |   | 4   | 249 | 58  |    | 311   |
| 10     |             |   | 2   |     |     |    | 2     |
| 12     |             |   |     | 675 | 496 | 4  | 1175  |
| 14     |             |   |     |     |     | 2  | 2     |
| Total  | 2           | 8 | 182 | 933 | 560 | 6  | 1691  |

**Purpose 5**

| Data   | Destination |     |     |       |
|--------|-------------|-----|-----|-------|
| Origin | 12          | 14  | 20  | Total |
| 3      | 9           |     |     | 9     |
| 8      | 8           | 152 | 38  | 198   |
| 12     |             | 681 | 237 | 918   |
| Total  | 17          | 833 | 275 | 1125  |

**Purpose 6**

| Data   | Destination |      |     |    |       |
|--------|-------------|------|-----|----|-------|
| Origin | 12          | 14   | 20  | 21 | Total |
| 1      |             | 25   |     |    | 25    |
| 3      | 4           | 68   |     |    | 72    |
| 6      |             | 17   |     |    | 17    |
| 8      | 17          | 1323 | 105 | 17 | 1462  |
| 12     |             | 1460 | 481 |    | 1941  |
| 14     |             |      | 17  |    | 17    |
| 15     |             |      | 4   |    | 4     |
| Total  | 21          | 2893 | 607 | 17 | 3538  |

**Table AP3.1.14 Neak Loeung Province OD by Purpose (Non-weekday)**

Purpose 1

| Data   | Destination |     |     |       |
|--------|-------------|-----|-----|-------|
| Origin | 8           | 14  | 20  | Total |
| 8      | 9           | 112 |     | 121   |
| 12     |             | 372 | 158 | 530   |
| 14     |             | 10  |     | 10    |
| Total  | 9           | 494 | 158 | 661   |

Purpose 2

| Data   | Destination |       |
|--------|-------------|-------|
| Origin | 14          | Total |
| 8      | 8           | 8     |
| 12     | 44          | 44    |
| Total  | 52          | 52    |

Purpose 3

| Data   | Destination |    |       |    |       |
|--------|-------------|----|-------|----|-------|
| Origin | 8           | 12 | 14    | 20 | Total |
| 3      |             |    | 10    |    | 10    |
| 5      |             |    | 1     |    | 1     |
| 7      |             |    | 5     |    | 5     |
| 8      | 5           | 23 | 1,319 | 11 | 1,358 |
| 12     |             |    | 230   | 10 | 240   |
| 14     |             |    | 6     |    | 6     |
| Total  | 5           | 23 | 1,571 | 21 | 1,620 |

Purpose 4

| Data   | Destination |    |       |    |     |    |       |
|--------|-------------|----|-------|----|-----|----|-------|
| Origin | 8           | 12 | 14    | 18 | 20  | 21 | Total |
| 2      |             |    | 2     |    | 1   |    | 3     |
| 3      | 5           | 83 |       |    |     |    | 88    |
| 4      |             |    | 5     |    |     |    | 5     |
| 6      |             |    | 4     |    | 2   |    | 6     |
| 7      |             |    | 4     |    |     |    | 4     |
| 8      |             |    | 187   |    | 65  |    | 252   |
| 9      |             |    | 2     |    |     |    | 2     |
| 12     |             |    | 853   |    | 488 |    | 1,341 |
| 14     |             |    |       | 1  |     | 1  | 2     |
| 18     |             |    |       |    | 1   |    | 1     |
| Total  | 5           | 83 | 1,057 | 1  | 557 | 1  | 1,704 |

Purpose 5

| Data   | Destination |    |     |     |    |       |
|--------|-------------|----|-----|-----|----|-------|
| Origin | 8           | 12 | 14  | 20  | 21 | Total |
| 3      | 2           | 8  |     |     |    | 10    |
| 4      |             |    | 1   |     |    | 1     |
| 5      |             |    | 7   |     |    | 7     |
| 8      |             |    | 288 | 61  |    | 349   |
| 12     |             |    | 592 | 198 |    | 790   |
| 14     |             |    |     |     | 33 | 33    |
| Total  | 2           | 8  | 888 | 259 | 33 | 1,190 |

Purpose 6

| Data   | Destination |    |       |       |       |
|--------|-------------|----|-------|-------|-------|
| Origin | 8           | 12 | 14    | 20    | Total |
| 4      |             |    | 4     |       | 4     |
| 8      | 32          | 40 | 1,230 | 109   | 1,411 |
| 12     |             |    | 2,789 | 890   | 3,679 |
| 14     |             |    | 42    | 18    | 60    |
| Total  | 32          | 40 | 4,065 | 1,017 | 5,154 |

**Table AP3.1.15 Neak Loeung District OD by Type of Mode in PP, Kandal, Prey Veang, SveyRieng (Weekday) (1/2)**

Type 1

Zone 2008 – 2012: Unknown district

| O/D   | Destination | 1401 | 1402 | 1403 | 1404 | 1405 | 1406 | 1407 | 1408 | 1409 | 1410 | 1411 | 1412 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | Total |
|-------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 801   | 5           |      |      |      |      |      | 5    |      |      |      |      |      |      | 5    | 10   |      | 5    | 8    | 15   |      |      |      |      |      |      | 10    |
| 802   | 24          |      | 14   | 16   | 13   | 21   | 28   | 5    |      |      | 8    |      |      | 5    | 5    |      |      |      |      |      |      |      |      |      |      | 172   |
| 803   | 5           |      | 5    | 10   |      | 5    | 8    | 5    |      |      |      |      | 5    |      | 5    | 5    |      |      |      |      |      |      |      |      |      | 53    |
| 804   | 5           |      | 10   |      |      | 5    | 9    |      | 5    |      | 3    |      |      | 5    | 5    |      |      |      |      |      |      |      |      |      |      | 42    |
| 805   | 21          |      | 20   | 18   | 3    | 13   | 4    | 13   | 10   |      | 3    |      |      | 5    | 10   | 5    | 5    | 15   | 17   | 10   | 3    | 4    |      |      |      | 179   |
| 806   | 4           |      | 23   |      |      |      | 8    | 4    |      |      |      |      |      |      |      |      | 4    | 7    |      |      |      | 3    |      |      | 4    | 57    |
| 807   | 4           |      |      |      | 3    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 7     |
| 808   |             |      | 8    |      |      |      |      | 4    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 3     |
| 809   |             |      |      | 4    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 16    |
| 810   |             |      |      |      |      |      |      |      |      | 4    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 4     |
| 1200  | 66          | 140  | 90   | 65   | 63   | 92   | 106  | 63   | 4    | 16   | 47   | 11   | 12   | 40   | 60   | 51   | 41   | 68   | 44   | 58   | 12   |      | 28   | 3    | 4    | 1121  |
| Total | 134         | 220  | 141  | 84   | 136  | 168  | 168  | 94   | 19   | 16   | 65   | 11   | 17   | 50   | 90   | 61   | 55   | 98   | 76   | 68   | 15   | 7    | 28   | 3    | 8    | 1664  |

Type 2

Zone 2008 – 2012: Unknown district

| O/D   | Destination | 1400 | 1401 | 1402 | 1403 | 1404 | 1405 | 1406 | 1407 | 1408 | 1409 | 1410 | 1411 | 1412 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | Total |
|-------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 800   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1     |
| 802   | 1           |      |      |      | 1    |      |      |      |      |      |      |      |      |      |      | 1    | 4    | 3    |      |      |      |      |      |      |      | 11    |
| 805   | 1           |      |      | 6    |      |      | 2    |      |      |      |      |      |      |      |      |      | 1    | 1    | 1    |      |      |      |      |      |      | 12    |
| 806   | 5           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1    |      |      |      |      |      |      | 6     |
| 807   | 2           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2     |
| 808   | 1           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1    | 1    |      |      |      |      |      | 3     |
| 809   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 4    |      |      |      |      |      |      |      |      | 4     |
| 810   |             |      |      |      |      |      |      | 1    |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1    |      |      | 2     |
| 811   |             |      |      | 3    | 2    |      |      |      |      |      |      |      |      |      |      | 2    |      |      |      |      |      |      |      |      |      | 8     |
| 1200  | 2           | 37   | 54   | 39   | 42   | 59   | 69   | 42   | 7    | 8    | 37   | 9    | 31   | 31   | 38   | 52   | 24   | 53   | 38   | 25   | 6    | 5    | 4    | 2    | 683  |       |
| Total | 2           | 47   | 63   | 43   | 42   | 62   | 70   | 42   | 7    | 8    | 38   | 9    | 31   | 31   | 41   | 61   | 28   | 55   | 40   | 25   | 6    | 6    | 4    | 2    | 732  |       |

Type 3

Zone 2008 – 2012: Unknown district

| O/D   | Destination | 1400 | 1401 | 1402 | 1403 | 1404 | 1405 | 1406 | 1407 | 1408 | 1409 | 1410 | 1411 | 1412 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | Total |
|-------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 802   |             |      |      |      | 1    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1    |      |      |      |      | 4     |
| 803   |             |      |      |      |      |      | 1    |      |      |      |      |      |      |      |      |      |      | 0    |      |      |      |      |      |      |      | 1     |
| 805   | 0           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1    |      |      |      |      |      |      |      | 2     |
| 811   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 0    |      |      |      |      |      |      |      |      | 0     |
| 1200  | 1           | 26   | 41   | 30   | 19   | 41   | 28   | 25   | 4    | 6    | 14   | 4    | 4    | 1    | 20   | 38   | 34   | 6    | 45   | 24   | 15   | 4    | 7    | 15   | 3    | 451   |
| Total | 1           | 26   | 42   | 31   | 20   | 42   | 28   | 25   | 4    | 6    | 14   | 5    | 1    | 1    | 20   | 38   | 35   | 6    | 45   | 25   | 15   | 4    | 7    | 15   | 3    | 458   |

Table AP3.1.15 Neak Loeung District OD by Type of Mode in PP, Kandal, Prey Veang, SveyRieng (Weekday) (2/2)

Type 4

| O/D   | Destination | 1200 | 1401 | 1402 | 1403 | 1404 | 1405 | 1406 | 1407 | 1408 | 1409 | 1410 | 1411 | 1412 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2009 | 2010 | 2008 | 2010 | Total |
|-------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 800   |             | 16   | 16   | 8    |      | 4    | 9    | 9    |      |      |      |      | 6    |      |      | 3    |      |      | 3    |      |      |      |      |      |      | 77    |
| 801   |             | 3    | 3    | 3    |      |      | 3    | 3    |      |      |      |      | 3    |      |      |      |      |      |      | 3    |      |      |      |      |      | 17    |
| 802   |             | 3    | 17   | 3    |      | 6    | 20   | 9    | 3    | 6    |      |      |      |      |      |      |      |      |      |      | 3    |      |      | 5    |      | 78    |
| 803   | 5           | 5    | 5    | 12   | 6    | 6    | 8    |      |      |      |      | 5    |      |      |      |      |      |      |      |      |      |      |      |      |      | 47    |
| 804   |             | 3    | 3    |      |      |      |      | 3    |      |      |      | 6    |      |      |      |      |      |      | 3    |      |      |      |      |      |      | 15    |
| 805   | 5           | 3    | 14   |      | 9    | 9    | 9    | 12   | 3    |      |      | 3    |      |      |      |      |      | 3    |      |      |      |      |      |      |      | 46    |
| 806   | 5           | 3    | 6    | 6    | 6    | 5    | 5    | 12   | 3    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 44    |
| 807   | 5           | 3    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 8     |
| 808   |             |      |      |      |      |      | 3    |      |      | 3    |      |      |      |      |      | 3    |      |      |      |      |      |      |      |      |      | 9     |
| 809   |             |      |      |      |      | 3    |      |      |      | 3    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 6     |
| 810   |             |      |      |      |      | 3    |      |      |      |      |      |      | 3    |      |      |      |      |      |      |      |      |      |      |      |      | 6     |
| 811   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 3     |
| 1200  |             | 17   | 31   | 31   | 21   | 27   | 32   | 76   | 17   |      | 9    | 13   |      |      | 6    | 9    | 5    |      |      | 6    |      |      | 6    |      |      | 230   |
| Total | 15          | 47   | 93   | 63   | 58   | 82   | 82   | 76   | 23   | 12   | 9    | 21   | 12   | 5    | 9    | 19   | 8    | 6    | 6    | 12   | 9    | 5    |      | 27   | 5    | 588   |

Type 5

| O/D   | Destination | 1200 | 1401 | 1402 | 1403 | 1404 | 1405 | 1406 | 1407 | 1408 | 1409 | 1410 | 1411 | 1412 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2009 | 2010 | 2008 | 2010 | Total |
|-------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 800   |             | 98   | 28   |      |      |      | 28   | 155  |      |      |      |      |      |      |      |      |      |      |      |      | 27   |      |      |      |      | 236   |
| 801   |             | 375  | 460  | 124  | 138  | 168  | 131  |      | 28   |      |      | 138  |      | 27   | 27   |      |      |      | 28   |      | 56   |      |      |      |      | 1752  |
| 802   |             | 43   | 11   | 42   |      |      | 125  | 139  |      |      |      | 42   |      |      |      |      |      |      |      | 28   |      |      |      |      |      | 670   |
| 803   | 27          | 84   | 28   |      |      |      | 70   |      | 28   |      |      |      | 28   |      |      |      |      |      |      |      |      |      |      |      |      | 285   |
| 804   |             | 279  | 263  | 210  | 97   | 111  | 28   | 56   | 70   |      |      | 70   | 42   |      | 42   | 42   |      |      | 27   |      |      |      |      |      |      | 1337  |
| 805   |             | 42   | 84   | 111  | 42   | 42   | 42   |      |      |      |      | 28   |      |      |      |      |      |      |      |      | 27   |      |      |      |      | 461   |
| 806   | 43          |      |      |      |      |      |      | 42   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 42    |
| 808   |             |      |      |      |      |      |      |      |      |      |      | 43   |      |      |      |      |      |      |      |      |      |      |      |      |      | 43    |
| 810   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 71    |
| 811   |             | 43   | 28   |      |      |      | 680  | 497  | 383  | 113  | 113  | 320  | 82   | 27   | 108  | 233  | 135  | 54   | 109  | 108  | 81   |      | 27   |      |      | 5958  |
| 1200  |             | 532  | 1112 | 784  | 433  |      |      |      | 86   |      |      |      |      |      |      | 43   |      |      |      |      |      |      |      |      |      | 86    |
| 1401  |             |      |      |      |      |      |      |      | 43   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 86    |
| 1402  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 86    |
| 1403  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 43    |
| 1404  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 43    |
| 1405  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 43    |
| 1406  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 43    |
| Total | 156         | 1564 | 2143 | 1271 | 710  | 1252 | 914  | 839  | 183  | 113  | 642  | 152  | 152  | 54   | 135  | 318  | 177  | 54   | 164  | 246  | 81   | 27   | 27   | 27   | 27   | 11222 |

Type All

| O/D   | Destination | 1200 | 1400 | 1401 | 1402 | 1403 | 1404 | 1404 | 1405 | 1406 | 1407 | 1408 | 1409 | 1410 | 1411 | 1412 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2010 | 2011 | 2012 | Total |
|-------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 800   |             | 16   | 16   | 9    |      | 4    | 9    |      | 9    |      |      |      |      |      | 6    |      |      |      | 3    |      | 3    |      |      |      |      |      |      | 78    |
| 801   |             | 103  | 31   | 28   |      | 3    | 28   | 63   |      |      |      |      |      |      |      | 5    |      |      |      |      |      | 30   |      |      |      |      |      | 283   |
| 802   |             | 403  | 491  | 145  | 158  | 238  | 148  | 36   |      |      |      | 6    |      | 147  | 4    | 27   | 32   | 11   | 4    | 8    | 36   | 72   | 3    |      |      |      |      | 2017  |
| 803   |             | 121  | 145  | 64   | 6    | 137  | 155  | 5    |      |      |      |      |      | 47   |      | 5    |      | 5    | 5    |      | 28   |      |      |      |      |      |      | 771   |
| 804   |             | 89   | 41   |      |      |      | 75   | 12   |      |      |      | 5    |      | 28   |      | 28   |      | 5    |      |      |      |      |      |      |      |      |      | 322   |
| 805   |             | 304  | 304  | 228  | 109  | 135  | 32   | 69   |      |      |      | 80   |      | 76   | 42   | 5    | 52   | 49   | 6    | 43   | 20   | 10   | 3    |      |      |      |      | 1576  |
| 806   |             | 54   | 113  | 117  | 48   | 47   | 62   | 7    |      |      |      |      |      | 28   |      |      |      |      |      | 7    | 7    | 28   |      |      |      |      |      | 4568  |
| 807   | 5           | 6    | 3    |      |      | 3    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 17    |
| 808   |             | 1    | 8    | 4    |      | 3    | 42   |      |      |      |      | 3    |      |      |      |      |      |      | 3    |      | 1    | 1    |      |      |      |      |      | 57    |
| 809   |             |      |      |      |      |      | 3    |      |      |      | 4    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 26    |
| 810   |             |      |      |      |      |      | 3    |      |      |      |      |      |      | 47   |      |      |      |      |      |      |      |      |      |      |      |      |      | 55    |
| 811   |             | 43   | 31   | 5    |      |      |      |      |      |      |      |      |      |      |      |      |      | 2    |      |      |      |      |      |      |      |      |      | 82    |
| 1200  |             | 3    | 678  | 1378 | 974  | 580  | 899  | 732  | 530  | 128  | 152  | 431  | 106  | 40   | 199  | 375  | 281  | 130  | 275  | 220  | 185  | 49   | 12   | 74   | 8    | 4    |      | 8443  |
| 1401  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 43   |      |      |      |      |      |      |      |      |      |      | 86    |
| 1402  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 86    |
| 1403  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 86    |
| 1404  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 43    |
| 1405  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 43    |
| 1406  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 43    |
| Total | 171         | 3    | 1818 | 2561 | 1549 | 914  | 1574 | 1256 | 1023 | 225  | 152  | 788  | 189  | 77   | 236  | 496  | 349  | 151  | 368  | 398  | 198  | 52   | 25   | 74   | 8    | 8    |      | 14662 |



**Table AP3.1.16 Neak Loeung District OD by Type of Mode in PP, Kandal, Prey Veang, SveyRieng (Non-weekday) (1/2)**

Type 1

| O/D    | Destination | 806 | 1200 | 1401 | 1402 | 1403 | 1404 | 1405 | 1406 | 1407 | 1408 | 1409 | 1410 | 1411 | 1412 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2012 | Total |
|--------|-------------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| Origin | 805         |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
| 801    | 2           |     |      | 3    |      | 3    | 2    | 3    |      | 10   |      | 2    | 3    |      |      |      | 3    |      |      | 3    |      |      |      |      |      |      | 32    |
| 802    |             |     | 2    | 29   | 27   | 14   | 8    | 29   | 10   | 42   |      | 10   | 3    | 3    |      | 15   | 12   | 11   | 9    | 20   | 15   | 6    |      |      |      |      | 264   |
| 803    | 3           |     | 2    | 9    | 8    | 6    |      | 3    | 3    | 11   |      | 3    | 3    |      | 2    | 6    | 3    | 6    | 3    | 2    | 3    |      | 6    |      |      |      | 39    |
| 804    |             |     |      | 2    |      | 6    |      |      |      | 3    |      |      |      |      |      | 3    | 3    | 3    | 9    | 3    | 3    |      |      |      |      |      | 31    |
| 805    | 2           |     | 2    | 28   | 16   | 11   | 8    | 17   | 14   | 14   | 3    | 3    | 2    |      | 3    | 3    | 0    | 12   | 9    | 9    | 3    | 3    | 3    | 3    | 3    | 3    | 176   |
| 806    |             |     |      | 3    | 7    |      |      | 3    |      |      | 3    | 2    |      |      |      | 9    | 9    | 1    |      | 2    | 6    | 3    |      |      |      |      | 90    |
| 807    |             |     |      | 4    |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 3    |      |      |      |      |      |      |      | 6     |
| 808    |             |     | 2    |      |      |      |      | 3    | 3    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 11    |
| 809    |             |     |      |      | 4    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 3    |      |      |      | 3    |      | 13    |
| 810    |             |     |      |      |      |      |      |      |      |      |      |      |      |      |      | 3    |      |      |      |      |      |      |      |      |      |      | 3     |
| 1200   |             |     |      | 140  | 128  | 85   | 61   | 82   | 60   | 105  | 11   | 53   | 64   | 27   | 6    | 42   | 90   | 63   | 28   | 129  | 86   | 42   | 5    |      | 3    |      | 1310  |
| 1401   |             |     |      |      |      |      |      |      | 3    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 3     |
| 1403   |             |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 3    |      |      |      |      |      |      |      |      |      | 3     |
| 2004   |             |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2    |      |      |      |      |      | 3     |
| Total  | 7           | 2   | 8    | 215  | 188  | 130  | 79   | 140  | 93   | 185  | 17   | 70   | 82   | 30   | 11   | 69   | 134  | 104  | 49   | 165  | 127  | 51   | 17   | 6    | 6    | 3    | 1988  |

Type 2

| O/D    | Destination | 1400 | 1401 | 1402 | 1403 | 1404 | 1405 | 1406 | 1407 | 1408 | 1409 | 1410 | 1411 | 1412 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | Total |
|--------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| Origin | 1400        |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
| 801    |             |      |      |      |      |      |      |      |      | 1    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1     |
| 802    |             |      | 2    |      | 2    |      | 2    | 1    | 1    |      | 1    |      | 1    |      |      | 1    | 3    |      | 1    |      |      |      |      | 1    |      |      | 18    |
| 803    |             |      |      | 2    |      |      | 1    |      | 3    |      |      |      |      |      | 1    | 1    | 2    |      |      |      |      |      |      |      |      |      | 9     |
| 804    |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1    |      |      |      | 1    |      |      |      |      |      |      | 2     |
| 805    |             |      | 1    | 7    |      | 2    | 3    |      |      | 3    |      | 1    |      |      | 1    | 1    | 2    |      | 1    |      |      |      | 1    | 2    |      |      | 26    |
| 806    |             |      | 1    |      |      |      | 1    | 1    |      | 1    |      |      |      |      |      | 1    |      | 1    |      |      |      |      |      |      |      |      | 7     |
| 807    |             |      | 2    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2     |
| 808    |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2    |      |      |      |      |      |      |      | 2     |
| 809    |             |      | 1    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1    |      |      |      |      |      |      |      | 2     |
| 810    |             |      |      |      |      |      |      |      |      |      | 1    |      |      |      |      | 1    |      |      |      |      |      |      |      |      |      |      | 2     |
| 811    |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2     |
| 1200   | 1           | 49   | 87   | 73   | 34   | 44   | 53   | 96   | 10   | 14   | 33   | 8    | 3    | 23   | 76   | 45   | 22   | 47   | 127  | 19   | 3    | 6    | 12   | 2    | 4    |      | 891   |
| 2002   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1    |      |      |      |      |      |      |       |
| 2005   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
| Total  | 1           | 51   | 99   | 77   | 38   | 51   | 55   | 101  | 15   | 15   | 36   | 8    | 4    | 25   | 81   | 52   | 24   | 52   | 130  | 19   | 4    | 7    | 15   | 2    | 4    |      | 966   |

Type 3

| O/D    |      | Destination |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
|--------|------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| Origin | 1401 | 1402        | 1403 | 1404 | 1405 | 1406 | 1407 | 1408 | 1409 | 1410 | 1411 | 1412 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | Total |
| 801    |      |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2     |
| 802    | 1    | 1           | 3    | 1    |      | 1    | 2    |      |      |      | 1    |      |      |      |      |      |      |      |      |      |      |      |      |      | 9     |
| 803    |      |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1    |      |      |      |      |      |      |      | 1     |
| 805    | 1    | 1           |      |      | 1    | 2    |      | 1    |      | 2    |      |      |      |      | 1    | 1    |      |      |      |      | 1    |      |      |      | 11    |
| 806    |      |             |      |      |      |      |      |      |      |      |      |      |      |      | 1    |      |      |      |      |      |      |      |      |      | 1     |
| 807    |      |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1    |      |      |      |      | 1     |
| 811    |      |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1     |
| 1200   | 53   | 74          | 63   | 25   | 37   | 31   | 33   | 5    | 4    | 22   | 2    | 2    | 1    | 35   | 71   | 53   | 30   | 34   | 61   | 12   | 5    | 6    | 1    | 1    | 661   |
| Total  | 55   | 76          | 66   | 26   | 38   | 34   | 35   | 6    | 4    | 25   | 2    | 2    | 1    | 37   | 72   | 54   | 30   | 35   | 62   | 13   | 5    | 6    | 1    | 1    | 686   |

Table AP3.1.16 Neak Loeung District OD by Type of Mode in PP, Kandal, Prey Veang, SveyRieng (Non-weekday) (2/2)

Type 4

| O/D    |     | Destination |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
|--------|-----|-------------|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| Origin | 804 | 805         | 807 | 810 | 1200 | 1400 | 1401 | 1402 | 1403 | 1404 | 1405 | 1406 | 1407 | 1408 | 1409 | 1410 | 1411 | 1420 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2011 | Total |
| 801    | 3   |             |     |     | 3    |      | 3    |      | 6    | 2    |      | 2    | 3    |      |      |      |      |      | 2    | 2    |      |      |      | 2    | 1    | 38    |
| 802    |     | 3           |     |     | 6    | 2    | 14   | 26   | 14   | 1    | 7    | 9    | 6    | 2    | 2    | 8    |      |      |      |      |      |      | 5    | 2    | 3    | 110   |
| 803    | 2   |             |     |     | 3    |      | 9    | 2    | 2    | 3    | 2    | 2    | 6    |      |      |      |      |      | 3    | 2    | 4    | 2    |      | 3    |      | 53    |
| 804    |     |             |     |     | 3    |      | 9    | 17   | 16   | 6    | 10   | 9    | 3    | 10   | 13   | 4    | 2    |      |      |      |      |      | 3    | 5    | 3    | 163   |
| 805    |     |             |     |     | 3    |      | 6    | 4    | 1    | 1    | 1    | 6    | 3    | 2    | 2    |      |      |      | 2    | 4    | 5    | 3    |      |      |      | 20    |
| 806    |     |             |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2     |
| 807    |     |             |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2     |
| 808    |     |             |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2     |
| 809    |     |             |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1     |
| 810    |     |             |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1     |
| 1200   |     |             |     |     |      |      | 14   | 23   | 9    | 15   | 12   | 11   | 15   | 3    |      |      |      |      | 1    |      |      |      | 6    |      |      | 110   |
| 1401   |     |             |     |     |      |      |      | 3    |      |      | 5    |      |      |      |      |      |      | 3    |      |      |      |      |      |      |      | 6     |
| 1402   |     |             |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 6    |      |      |      | 20    |
| 1403   |     |             |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 9     |
| 1404   |     |             |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2     |
| 1405   |     |             |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2     |
| 1406   |     |             |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2     |
| Total  | 2   | 6           | 3   | 3   | 24   | 2    | 64   | 106  | 59   | 30   | 39   | 47   | 42   | 20   | 25   | 12   | 3    | 3    | 5    | 9    | 12   | 5    | 24   | 12   | 3    | 560   |

Type 5

| O/D    |      | Destination |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |  |  |  |  |  |
|--------|------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|--|--|--|--|--|
| Origin | 1401 | 1402        | 1403 | 1404 | 1405 | 1406 | 1407 | 1408 | 1409 | 1410 | 1411 | 1412 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | Total |  |  |  |  |  |
| 800    | 28   | 30          | 74   | 60   | 23   |      | 131  | 23   |      |      |      |      |      |      |      |      |      |      |      | 23    |  |  |  |  |  |
| 801    | 268  | 338         | 220  | 150  | 148  | 193  | 353  | 96   | 23   | 46   | 55   |      | 23   | 78   |      |      | 23   |      |      | 2025  |  |  |  |  |  |
| 802    | 23   | 128         | 23   | 28   | 28   | 135  | 28   |      |      |      | 27   |      |      |      |      |      |      | 23   |      | 397   |  |  |  |  |  |
| 803    |      |             |      |      |      | 54   |      | 54   | 23   |      |      |      | 23   |      |      |      | 23   |      |      | 196   |  |  |  |  |  |
| 804    | 327  | 565         | 322  | 400  | 470  | 714  | 143  | 23   | 120  | 23   | 23   | 74   |      |      |      |      |      | 27   |      | 3056  |  |  |  |  |  |
| 805    | 23   | 23          | 22   | 22   | 50   | 10   |      |      | 23   |      |      |      | 28   |      |      |      |      |      |      | 340   |  |  |  |  |  |
| 806    |      |             |      |      |      | 366  |      |      |      |      |      |      |      |      |      |      |      |      |      | 60    |  |  |  |  |  |
| 807    |      |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 28    |  |  |  |  |  |
| 808    | 28   |             |      |      | 23   | 23   |      |      |      |      |      |      |      |      |      |      |      |      |      | 60    |  |  |  |  |  |
| 811    | 28   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 28    |  |  |  |  |  |
| 1200   | 605  | 763         | 489  | 351  | 488  | 638  | 383  | 102  | 255  | 197  | 166  |      | 175  | 204  | 84   | 213  | 292  | 28   | 23   | 5477  |  |  |  |  |  |
| Total  | 1302 | 1863        | 1240 | 856  | 1171 | 1374 | 1692 | 382  | 301  | 380  | 271  | 23   | 323  | 282  | 84   | 238  | 338  | 55   | 23   | 12212 |  |  |  |  |  |

Type All

| O/D    |     | Destination |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |       |
|--------|-----|-------------|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| Origin | 804 | 805         | 806 | 807 | 810 | 1200 | 1400 | 1401 | 1402 | 1403 | 1404 | 1405 | 1406 | 1407 | 1408 | 1409 | 1410 | 1411 | 1412 | 1420 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | Total |       |
| 801    |     | 5           |     |     |     | 3    |      | 38   | 28   | 83   | 54   | 26   | 2    | 148  | 23   |      | 4    | 3    |      |      |      |      |      | 5    | 2    |      | 5    | 1    |      |      |      |      | 26    |       |
| 802    |     | 3           |     |     |     | 8    | 2    | 312  | 395  | 260  | 162  | 188  | 214  | 403  | 98   | 38   | 60   | 55   |      |      |      | 15   | 36   | 92   | 9    | 26   | 40   | 6    |      |      |      |      | 1     | 3     |
| 803    | 2   |             |     |     |     | 5    |      | 4    | 145  | 3    | 30   | 30   | 5    | 155  | 28   |      |      | 3    | 30   | 2    |      | 4    | 10   | 12   |      | 2    | 12   |      | 6    |      |      |      |       |       |
| 804    |     |             |     |     | 3   |      |      | 372  | 826  | 418  | 250  | 431  | 484  | 231  | 158  | 39   | 129  | 25   | 26   |      |      | 6    | 27   | 3    | 2    |      | 27   |      | 4    |      |      |      |       |       |
| 805    |     |             |     |     | 3   | 11   |      | 28   | 2    | 23   | 57   | 24   | 5    | 91   | 38   | 8    | 4    | 23   |      |      |      | 7    | 85   | 19   | 13   | 37   | 28   | 3    |      | 4    |      |      | 2     |       |
| 806    |     |             |     |     |     | 3    |      | 28   | 2    | 23   | 22   | 22   | 26   | 386  |      |      |      |      |      |      | 1    | 38   |      |      |      |      | 1    |      |      |      |      |      | 3     |       |
| 807    |     |             |     |     |     |      |      | 4    |      | 22   | 1    | 22   | 26   | 26   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 401   |       |
| 808    |     |             |     |     |     | 2    |      |      |      | 1    | 5    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 83    |       |
| 809    |     |             |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 16    |       |
| 810    |     |             |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 6     |       |
| 1200   |     |             |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 3     |       |
| 1400   |     |             |     |     |     | 1    | 821  | 1022 | 682  | 481  | 686  | 784  | 817  | 131  | 328  | 308  | 203  | 11   |      |      |      | 0    | 85   | 400  | 357  | 186  | 425  | 566  | 101  | 36   | 12   | 16   | 3     | 4     |
| 1401   |     |             |     |     |     |      |      | 3    |      |      |      | 5    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 9     |       |
| 1402   |     |             |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 20    |       |
| 1403   |     |             |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 8     |       |
| 1404   |     |             |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 6     |       |
| 1405   |     |             |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 8     |       |
| 1406   |     |             |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 6     |       |
| 2000   |     |             |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2     |       |
| 2004   |     |             |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2     |       |
| 2005   |     |             |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2     |       |
| Total  | 2   | 13          | 2   | 3   | 3   | 32   | 3    | 1647 | 2279 | 1927 | 1024 | 1481 | 1593 | 2839 | 449  | 415  | 534  | 313  | 40   | 3    | 0    | 131  | 605  | 495  | 188  | 507  | 669  | 138  | 49   | 19   | 22   | 6    | 7     | 16188 |

Type 5

| O/D    |      | Destination |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |  |
|--------|------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|--|
| Origin | 1401 | 1402        | 1403 | 1404 | 1405 | 1406 | 1407 | 1408 | 1409 | 1410 | 1411 | 1412 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | Total |  |
| 800    |      |             |      |      |      |      |      |      | 23   |      |      |      |      |      |      |      |      |      |      | 23    |  |
| 801    | 28   | 23          | 74   | 50   | 23   |      | 135  |      |      |      |      |      |      |      |      |      |      |      |      | 333   |  |
| 802    | 268  | 339         | 230  | 150  | 148  | 193  | 353  | 96   | 23   | 48   | 55   |      |      | 23   | 78   |      |      |      |      | 2025  |  |
| 803    | 23   | 126         |      |      | 50   |      | 26   |      |      |      | 27   |      |      |      |      |      |      |      |      | 195   |  |
| 804    |      |             | 23   |      |      |      |      | 28   |      |      |      |      | 23   |      |      |      |      | 23   |      | 108   |  |
| 805    | 327  | 565         | 392  | 232  | 400  | 470  | 214  | 143  | 23   | 120  | 23   | 23   | 23   | 23   | 23   | 23   |      | 27   |      | 3056  |  |
| 806    | 23   | 23          | 22   |      |      | 50   | 50   |      |      |      |      |      | 28   |      |      |      |      |      |      | 219   |  |
| 807    |      |             |      |      |      |      | 368  |      |      |      |      |      |      |      |      |      |      |      |      | 390   |  |
| 808    |      |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 28    |  |
| 809    |      | 22          |      |      |      | 23   | 23   |      |      |      |      |      |      |      |      |      |      |      |      | 68    |  |
| 810    |      |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 28    |  |
| 1200   | 605  | 765         | 409  | 351  | 499  | 658  | 383  | 102  | 255  | 197  | 168  |      | 175  | 204  | 84   | 213  | 292  | 28   | 23   | 5477  |  |
| Total  | 1302 | 1863        | 1240 | 856  | 1171 | 1374 | 1692 | 392  | 301  | 386  | 271  | 23   | 323  | 292  | 84   | 236  | 338  | 55   | 23   | 12712 |  |

Type All

| O/D    |     | Destination |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
|--------|-----|-------------|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| Origin | 804 | 805         | 806 | 807 | 810 | 1200 | 1400 | 1401 | 1402 | 1403 | 1404 | 1405 | 1406 | 1407 | 1408 | 1409 | 1410 | 1411 | 1412 | 1420 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | Total |
| 800    |     |             |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 26    |
| 801    |     | 5           |     |     |     | 3    | 36   | 28   | 83   | 54   | 26   | 2    | 148  | 1    | 4    |      | 5    | 2    |      |      |      |      |      |      |      |      | 5    | 1    |      |      |      |      | 407  | 3     |
| 802    |     | 3           |     |     |     | 8    | 312  | 395  | 260  | 162  | 186  | 214  | 403  | 98   | 36   | 60   | 55   |      |      |      |      | 15   | 36   | 92   | 9    | 26   | 40   | 6    |      |      |      | 1    |      | 2422  |
| 803    | 2   |             |     |     |     | 5    | 145  | 131  | 23   | 153  | 45   | 3    | 152  | 28   | 4    | 3    | 30   | 2    |      |      |      | 4    | 27   | 2    | 2    | 2    | 27   |      |      | 6    |      |      | 538  |       |
| 804    |     |             |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 3     |
| 805    |     |             |     |     |     | 3    | 11   | 63   | 419  | 250  | 431  | 484  | 231  | 159  | 39   | 126  | 25   | 26   |      |      |      | 7    | 86   | 19   | 13   | 37   | 27   | 28   | 3    | 4    | 2    |      | 3429 |       |
| 806    |     | 2           |     |     |     | 3    | 28   | 21   | 29   | 57   | 50   | 6    | 4    | 23   | 6    |      |      |      |      |      |      | 1    | 39   | 9    | 1    | 2    | 7    | 3    |      |      |      |      | 297  |       |
| 807    |     |             |     |     |     |      | 4    | 4    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 401  |       |
| 808    |     |             |     |     |     | 2    | 22   | 1    | 22   | 1    | 26   | 26   | 1    | 368  |      |      |      |      |      |      |      |      |      |      | 1    | 3    | 2    | 1    | 3    |      |      |      | 83   |       |
| 809    |     |             |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 16    |
| 810    |     |             |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 30    |
| 1200   |     |             |     |     |     |      | 28   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 4     |
| 1401   |     |             |     |     |     |      | 1    | 821  | 1022 | 687  | 461  | 666  | 784  | 617  | 131  | 326  | 309  | 203  | 11   |      | 0    | 95   | 400  | 357  | 100  | 425  | 566  | 101  | 36   | 12   | 16   | 3    |      | 8224  |
| 1402   |     |             |     |     |     |      | 3    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 9     |
| 1403   |     |             |     |     |     |      |      | 3    |      |      |      | 5    |      | 3    | 3    |      |      |      |      |      |      |      |      |      |      |      | 6    | 3    |      |      |      |      |      | 26    |
| 1404   |     |             |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 6     |
| 1405   |     |             |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2     |
| 1406   |     |             |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2     |
| 2000   |     |             |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1     |
| 2001   |     |             |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2     |
| 2002   |     |             |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1     |
| 2003   |     |             |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2     |
| 2004   |     |             |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2     |
| 2005   |     |             |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2     |
| 2006   |     |             |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2     |
| 2007   |     |             |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2     |
| 2008   |     |             |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2     |
| 2009   |     |             |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2     |
| 2010   |     |             |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2     |
| 2011   |     |             |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2     |
| 2012   |     |             |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2     |
| Total  | 2   | 13          | 2   | 3   | 3   | 32   | 3    | 1847 | 2279 | 1927 | 1024 | 1431 | 1953 | 2039 | 449  | 415  | 534  | 313  | 40   | 3    | 0    | 131  | 606  | 496  | 188  | 507  | 669  | 138  | 49   | 19   | 22   | 6    | 7    | 16189 |

**Table AP3.1.17 Neak Loeung Province OD by Type of Mode (Weekday)**

| Type 1 |             |    |       |     |    |       |
|--------|-------------|----|-------|-----|----|-------|
| Data   | Destination |    |       |     |    |       |
| Origin | 8           | 12 | 14    | 20  | 21 | Total |
| 1      |             |    | 8     |     |    | 8     |
| 3      | 13          | 19 |       |     |    | 32    |
| 8      |             |    | 316   | 119 |    | 435   |
| 12     |             |    | 746   | 426 | 4  | 1,176 |
| 15     |             |    |       | 8   |    | 8     |
| 20     |             |    |       |     | 4  | 4     |
| Total  | 13          | 19 | 1,070 | 553 | 8  | 1,663 |

| Type 2 |             |   |    |     |     |    |       |
|--------|-------------|---|----|-----|-----|----|-------|
| Data   | Destination |   |    |     |     |    |       |
| Origin | 7           | 8 | 12 | 14  | 20  | 21 | Total |
| 1      |             |   |    |     | 2   |    | 2     |
| 2      |             |   |    | 2   |     |    | 2     |
| 3      | 3           | 8 | 68 |     |     |    | 79    |
| 4      |             |   |    |     | 2   |    | 2     |
| 5      |             |   |    | 4   | 2   |    | 6     |
| 7      |             |   |    | 2   | 2   |    | 4     |
| 8      |             |   |    | 33  | 28  |    | 61    |
| 10     |             |   | 2  |     |     |    | 2     |
| 12     |             |   |    | 371 | 254 |    | 625   |
| 14     |             |   |    |     |     | 2  | 2     |
| 20     |             |   |    |     |     | 2  | 2     |
| Total  | 3           | 8 | 70 | 412 | 290 | 4  | 787   |

Type 3

| Data   | Destination |     |     | Total |
|--------|-------------|-----|-----|-------|
| Origin | 12          | 14  | 20  | Total |
| 3      | 96          | 2   |     | 98    |
| 8      |             | 6   | 4   | 10    |
| 12     |             | 225 | 212 | 437   |
| Total  | 96          | 233 | 216 | 545   |

Type 4

| Data   | Destination |     |    | Total |
|--------|-------------|-----|----|-------|
| Origin | 12          | 14  | 20 | Total |
| 8      | 12          | 352 | 39 | 403   |
| 12     |             | 153 | 24 | 177   |
| Total  | 12          | 505 | 63 | 580   |

Type 5

| Data   | Destination |       |     |    |       |
|--------|-------------|-------|-----|----|-------|
| Origin | 12          | 14    | 20  | 21 | Total |
| 1      |             | 17    |     |    | 17    |
| 3      | 35          | 68    |     |    | 103   |
| 6      |             | 17    |     |    | 17    |
| 8      | 71          | 2,169 | 172 | 17 | 2,429 |
| 12     |             | 2,701 | 545 |    | 3,246 |
| 14     |             | 136   | 17  | 18 | 171   |
| Total  | 106         | 5,108 | 734 | 35 | 5,983 |

| Type All |             |    |     |       |       |    |       |
|----------|-------------|----|-----|-------|-------|----|-------|
| Data     | Destination |    |     |       |       |    |       |
| Origin   | 7           | 8  | 12  | 14    | 20    | 21 | Total |
| 1        |             |    |     | 25    | 2     |    | 27    |
| 2        |             |    |     | 2     |       |    | 2     |
| 3        | 3           | 21 | 218 | 70    |       |    | 312   |
| 4        |             |    |     |       | 2     |    | 2     |
| 5        |             |    |     | 4     | 2     |    | 6     |
| 6        |             |    |     | 17    |       |    | 17    |
| 7        |             |    |     | 2     | 2     |    | 4     |
| 8        |             |    | 83  | 2,876 | 362   | 17 | 3,338 |
| 10       |             |    | 2   |       |       |    | 2     |
| 12       |             |    |     | 4,196 | 1,461 | 4  | 5,661 |
| 14       |             |    |     | 136   | 17    | 20 | 173   |
| 15       |             |    |     |       | 8     |    | 8     |
| 20       |             |    |     |       |       | 6  | 6     |
| Total    | 3           | 21 | 303 | 7,328 | 1,856 | 47 | 9,558 |

**Table AP3.1.18 Neak Loeung Province OD by Type of Mode (Non-weekday)**

Type 1

| Data   | Destination |    |       |     |    |       |
|--------|-------------|----|-------|-----|----|-------|
| Origin | 8           | 12 | 14    | 20  | 21 | Total |
| 3      | 5           | 5  |       |     |    | 10    |
| 4      |             |    | 4     |     |    | 4     |
| 5      |             |    | 5     |     |    | 5     |
| 8      | 17          | 16 | 386   | 24  |    | 443   |
| 12     |             |    | 1,056 | 438 |    | 1,494 |
| 14     |             |    |       |     | 4  | 4     |
| Total  | 22          | 21 | 1,451 | 462 | 4  | 1,960 |

Type 2

| Data   | Destination |     |     |       |
|--------|-------------|-----|-----|-------|
| Origin | 12          | 14  | 20  | Total |
| 3      | 25          |     |     | 25    |
| 4      |             | 3   |     | 3     |
| 8      |             | 8   | 13  | 21    |
| 12     |             | 446 | 426 | 872   |
| Total  | 25          | 457 | 439 | 921   |

Type 3

| Data   | Destination |    |     |    |     |    |       |
|--------|-------------|----|-----|----|-----|----|-------|
| Origin | 8           | 12 | 14  | 18 | 20  | 21 | Total |
| 2      |             |    | 2   |    | 1   |    | 3     |
| 3      | 2           | 61 |     |    |     |    | 63    |
| 4      |             |    | 3   |    |     |    | 3     |
| 5      |             |    | 3   |    |     |    | 3     |
| 6      |             |    | 4   |    | 2   |    | 6     |
| 7      |             |    | 4   |    |     |    | 4     |
| 8      |             |    | 21  |    | 11  |    | 32    |
| 9      |             |    | 2   |    |     |    | 2     |
| 12     |             |    | 281 |    | 146 |    | 427   |
| 14     |             |    |     | 1  |     | 1  | 2     |
| 18     |             |    |     |    | 1   |    | 1     |
| Total  | 2           | 61 | 320 | 1  | 161 | 1  | 546   |

Type 4

| Data   | Destination |    |     |    |       |
|--------|-------------|----|-----|----|-------|
| Origin | 8           | 12 | 14  | 20 | Total |
| 3      |             |    | 10  |    | 10    |
| 7      |             |    | 5   |    | 5     |
| 8      | 29          | 47 | 174 | 54 | 304   |
| 12     |             |    | 186 | 12 | 198   |
| 14     |             |    | 58  | 18 | 76    |
| Total  | 29          | 47 | 433 | 84 | 593   |

Type 5

| Data   | Destination |     |    |       |
|--------|-------------|-----|----|-------|
| Origin | 14          | 20  | 21 | Total |
| 8      | 2,555       | 144 |    | 2,699 |
| 12     | 2,911       | 722 |    | 3,633 |
| 14     |             |     | 29 | 29    |
| Total  | 5,466       | 866 | 29 | 6,361 |

| Type All |             |     |       |    |       |    |        |
|----------|-------------|-----|-------|----|-------|----|--------|
| Data     | Destination |     |       |    |       |    |        |
| Origin   | 8           | 12  | 14    | 18 | 20    | 21 | Total  |
| 2        |             |     | 2     |    | 1     |    | 3      |
| 3        | 7           | 91  | 10    |    |       |    | 108    |
| 4        |             |     | 10    |    |       |    | 10     |
| 5        |             |     | 8     |    |       |    | 8      |
| 6        |             |     | 4     |    | 2     |    | 6      |
| 7        |             |     | 9     |    |       |    | 9      |
| 8        | 46          | 63  | 3,144 |    | 246   |    | 3,499  |
| 9        |             |     | 2     |    |       |    | 2      |
| 12       |             |     | 4,880 |    | 1,744 |    | 6,624  |
| 14       |             |     | 58    | 1  | 18    | 34 | 111    |
| 18       |             |     |       |    | 1     |    | 1      |
| Total    | 53          | 154 | 8,127 | 1  | 2,012 | 34 | 10,381 |

## AP 3.2 Methodology for Traffic Demand Forecast

### AP 3.2.1 Status of implementation of the GMS Cross Border Transport Agreement

STATUS OF IMPLEMENTATION OF THE GMS CROSS-BORDER TRANSPORT AGREEMENT (ICBTA) AND BILATERAL ARRANGEMENTS  
(as of 26 January 2006)

| CBTA BORDER CROSSING POINTS                                                                    |                                                                                                                                            | STATUS OF IMPLEMENTATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | FUTURE STEPS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Phase 1 (2005-2006)                                                                            |                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 1                                                                                              | MOU on the Initiative Implementation of GMS Cross-Border Agreement (ICBTA MOU) at Bavet-Moc Bai checked point: Moc Bai (VIE) - Bavet (CAM) | One-page MOU was signed on 4 July 2005 (Kunming, PRC). MOU planned to be signed by 31 December 2005. Vietnam has finished the internal procedure and ready to sign. Cambodia is waiting the Full Power of Delegation to sign from COM.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | MOU perhaps, to be signed by 31 March 2006. ICBTA to commence by 30 June 2006                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 2                                                                                              | MOU on the Initiative Implementation of GMS Cross-Border Agreement (ICBTA MOU) at Poi Pet-Aranyaprathet (THA)                              | MOU signed on 4 July 2005 (Kunming, PRC). MOU can not implement, except the Bilateral road transport arrangements (MOU) on interim measures for the exchange of traffic rights at Poi Pet-Aranyaprathet. have been finalized.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | ICBTA MOU to commence by 31 December 2005.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                                                                                                | Bilateral road transport arrangements (MOU) on interim measures for the exchange of traffic rights at Poi Pet-Aranyaprathet checked point  | <p>The first draft of Bilateral road transport arrangements (MOU) on interim measures for the exchange of traffic rights at Poi Pet-Aranyaprathet checked point finalized on 2 September 2005.</p> <p>Bilateral Road Transport Arrangements (MOU) on interim measures for the exchange of traffic rights at Poi Pet-Aranyaprathet planned to be signed by 31 December 2005</p> <p>Pending issues:</p> <ul style="list-style-type: none"> <li>THA: concerned on the 150-200 everyday traffic cross-border to Poi Pet areas in Cambodia and suggest CAM side to include as an article in the provision of MOU. Cambodia's position is leaving the provincial/focal authorities along the border both side to consider and arrange another arrangement.</li> <li>For the starting period or interim measures for the exchange of traffic rights at Poi Pet-Aranyaprathet checked point, CAM set out the quota number of permit up to 40 trucks. THA as for more or step forwards to the free market access.</li> <li>Regards to the limited place of the existing checked point at Poi Pet, an additional location for building an administration building for checking point at Poi Pet area have been considered. So far the location point is not agreeable between the two sides</li> </ul> | <p>Bilateral Road Transport Arrangements to be signed by ..... 2006, and entered into force 90 days after its signature.</p> <p>Needed more communications and negotiations between the two sides.</p> <p>In the framework of ACMECS, THA committed to provide the TA for training and capacity building for official at Poi Pet border checkpoint on the implementation of Single Stop and Single Window Inspection, Risk Management, ITC, etc.</p> <p>NTTCC should released the official letter to deal with the above TA to THA side.</p> |
| Phase 2 (2006-2007) Proposed by ADB for countries comments                                     |                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 3                                                                                              | ICBTA MOU Cham Yeam (CAM) - Hat Lek (THA)                                                                                                  | ICBTA needed as Thai Gov't. - financed road in the Southern Coastal Corridor in Cambodia will be completed by 2007                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | As part of the CBTA Implementation RETA, MOU to be negotiated in 2006-2007 for commencement of implementation in 2007. MOU for Poi Pet-Aranyaprathet should be used as a model                                                                                                                                                                                                                                                                                                                                                               |
| Phase 3 (2007-2008) Proposed by ADB for countries comments                                     |                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Proposed Additional Border Crossing Points which need to be included in Protocol 1 of the CBTA |                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

|   |                                     |                                                                                                          |                                                                                                                               |
|---|-------------------------------------|----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| 4 | IICBA MOU Lork (CAM) - Xa Xia (VIE) | Inclusion of this border crossing in the CBTA would be required for the planned ADB loans to CAM and VIE | MOU to be negotiated in 2007-2008 for commencement of implementation in 2008. MOU for Bavel-Moc Bai should be used as a model |
|---|-------------------------------------|----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|

#### BILATERAL AGREEMENT AND PROTOCOLS ON CROSS-BORDER TRANSPORT

|   |                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---|-------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5 | The Bilateral Agreement on Road Transport (Cam-VN)<br><br>Protocol to Bilateral Road Transport Agreement (Cam-VN)                   | Agreement was signed on 06 June 1999 (Hanoi). Vietnam informed on ratification and the readiness for implementation.<br><br>The Agreement can apply once its protocol have been finalized.<br><br>Protocol to Bilateral Road Transport Agreement was signed on 11 October 2005 (Hanoi). Vietnam finished the internal procedure and ready for implementation in January 2006. Cambodia is on the way of preparing and finalizing the internal procedure. | The implement will be start 3 months after the signing.                                                                                                                                                                                                                                                                                                                                                                |
| 7 | The Bilateral Agreement on Cross-Border Transport (Cam-Lao PDR)<br><br>Protocol to Bilateral Road Transport Agreement (Cam-Lao PDR) | Agreement was signed in 01 September 1999 (Vientiane). Lao PDR informed on the on ratification and the readiness for implementation.<br><br>The Agreement can apply once its protocol have been finalized.<br><br>Protocol to Bilateral Road Transport Agreement was not prepared and finalized yet.                                                                                                                                                     | The implement will be start 3 months after the signing.                                                                                                                                                                                                                                                                                                                                                                |
| 8 | Waterway Transportation Agreement (Camb-Vietnam)<br><br>Protocol to Bilateral Waterway Transport Agreement (Cam-Lao PDR)            | Agreement was signed on 13 December 1998 (Hanoi).<br><br>The Agreement can apply once its protocol have been finalized.<br><br>Protocol to Bilateral Waterway Transport Agreement was not finalized yet.                                                                                                                                                                                                                                                 | The negotiation and arrangement on the Protocol to Bilateral Road Transport Agreement should be finalized in 2006.<br><br>The negotiation and arrangement on the Protocol to Bilateral Road Transport Agreement should be finalized in 2006.<br><br>Protocol to Bilateral Road Transport Agreement (Cam-VN) should be used as a model.<br><br>The negotiation on the bilateral waterway transport protocol is ongoing. |

#### STATUS OF IMPLEMENTATION OF THE GMS CROSS-BORDER TRANSPORT AGREEMENT

|   |                                      |                                                                                                                                                                                                                                                                                                                                                                          |                                                                                       |
|---|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 9 | GMS Cross-Border Transport Agreement | Originally signed in 28 November 1998 (Vientiane), by Lao PDR, Thai and Vietnam.<br><br>Amended and access to by Cambodia on 29 November 2001 (Yangon).<br><br>Amended and access to by China on 3 November 2001 (Phnom Penh).<br><br>Amended and access to by Myanmar on 19 September 2002 (Dai, Yunnan Province).<br><br>All GMS countries have been ratified in 2004. | Finalization, signed and operationalization of 20 Annexes and Protocols in July 2008. |
|---|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                        |                                                                                                                                                    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>a- Phase 1:</p> <ul style="list-style-type: none"> <li>-Annex2:Registration of Vehicles in International Traffic.</li> <li>-Annex 4: Facilitation of Frontier Crossing Formalities.</li> <li>-Annex 7: Road Traffic Regulation and Signage.</li> <li>-Annex 11: Road and Bridge Design, Construction Standard and Specification.</li> <li>-Annex 12: Border Crossing and transit Facilities and Services.</li> <li>-Annex 13: Multimodal Carrier Liability Regime.</li> <li>-Annex 15: Commodity Classification System.</li> <li>-Protocol 1: Designation of Corridor Routes and Point of Entry and exit.</li> </ul> | <p>Signed on 7 annexes and 1 Protocol on April 30, 2004 in Phnom Penh.</p> <p>Council of Minister (COM) have approved and on the way to the National Assembly(NA).</p> | <p>Getting the Ratification from the NA – 2006.</p>                                                                                                |
| <p>b-Phase 2:</p> <ul style="list-style-type: none"> <li>Annex1: Transport of Dangerous Goods.</li> <li>Annex 9: Criteria for Licensing Transport Operator for Cross Border</li> <li>Annex 13 a: Criteria for licensing Multimodal Transport Operator for Cross Border</li> <li>Annex 16: Criteria for Driving License.</li> </ul>                                                                                                                                                                                                                                                                                      | <p>Singe On 15 December 2004 in Vientiane, Lao PDR.</p> <p>Council of Minister (COM) have approved and on the way to the National Assembly(NA).</p>                    | <p>Getting the Ratification from the NA – 2006.</p>                                                                                                |
| <p>c-Phase 3:</p> <ul style="list-style-type: none"> <li>Annex 3: Carriage of Perishable Goods.</li> <li>Annex 5: Cross Border Movement of People.</li> <li>Annex 10: Condition of Transport.</li> <li>Protocol 2: Road User Changes in Transit.</li> </ul>                                                                                                                                                                                                                                                                                                                                                             | <p>Singe On 5 July 2005 in Kunming, Yunnan Province, PR China.</p> <p>On the way to COM for approval and submission to NA.</p>                                         | <p>Getting the Ratification from the NA – 2006.</p>                                                                                                |
| <p>d- The Remaining of Phase 3</p> <ul style="list-style-type: none"> <li>Annex 6: Transit and Inland Customs Clearance Regime.</li> <li>Annex 8: Temporary Importation of Motor Vehicles.</li> <li>Annex 14: Container Custom Regime.</li> <li>Protocol3: Frequency and Capacity of Services and Issuance of Quotas and Permits</li> </ul>                                                                                                                                                                                                                                                                             | <p>Finalized on 13 November 2005 in Vientiane, Lao PDR.</p>                                                                                                            | <p>Planning to be singe on 13-14 July 2006 in Beijing, PR China.</p> <p>Requesting the Delegation of Full Power to signed from COM- March 2006</p> |

# **STATUS OF IMPLEMENTATION OF THE ASEAN TRANSPORT AGREEMENT**

## **1-1 Agreements, which were signed before Cambodia to be a member of ASEAN**

Agreement on the recognition of commercial vehicle inspection certificate for goods and public service issued by ASEAN member country.

Agreement on search and rescue.

Agreement on the recognition of domestic driving licenses issued by ASEAN member country.

ASEAN framework agreement on the facilitation of goods in transit ( 16 Dec. 1998).

## **1-2 Agreements, which were signed after Cambodia participated ASEAN:**

Memorandum of Agreement on Designation of ASEAN Highway Network (15 Sep. 1999).

ASEAN framework agreement on the facilitation of goods in transit(16 Dec. 1998).

Protocol 3: Type and Crossing Quantity of Vehicles (15 Sep. 1999, Hanoi).

Protocol 4: Technical Requirement of Vehicle (15 Sept. 1999, Hanoi).

Protocol 5: ASEAN Scheme of Compulsory Motor Vehicle Insurance ( 8 April 2001, KL).

Protocol 8: Sanitary and Phytosanitary Measures ( 27 Oct. 2000, Phnom Penh ).

Protocol 9: Dangerous goods ( 20 Sep. 2002, Jakarta). Ratified.

ASEAN Framework Agreement on Multimodal Transport( 14, November 2005, Vientiane)

## **1-3 Agreements and protocols which are under negotiation and get ready to sign**

Protocol 1: Designation of Transit Transport Route and Facilities ( Ready to sing).

Protocol 2: Designation of Frontier Post.( Under Negotiation).

Protocol 6: Railway Border Post and Inter-Change Station. (Under Negotiation).

Protocol 7: Custom Transit System.( Under Negotiation).

ASEAN Framework Agreement on Facilitation of Inter State Transport. (Ready to sing).



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**APPENDIX 4**

**SELECTION OF OPTIMUM CROSSING ROUTE**

**AND METHOD**

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## APPENDIX 4 SELECTION OF OPTIMUM CROSSING ROUTE AND METHOD

### AP 4.2 Selection of Optimum Crossing Route

#### AP 4.2.1 Evaluation of Weights on Criteria for AHP (1)

The preference of stakeholders to the evaluation criteria is analyzed, based on the AHP method, and the results are presented in Table AP4.2.1 and Figure AP4.2.1.

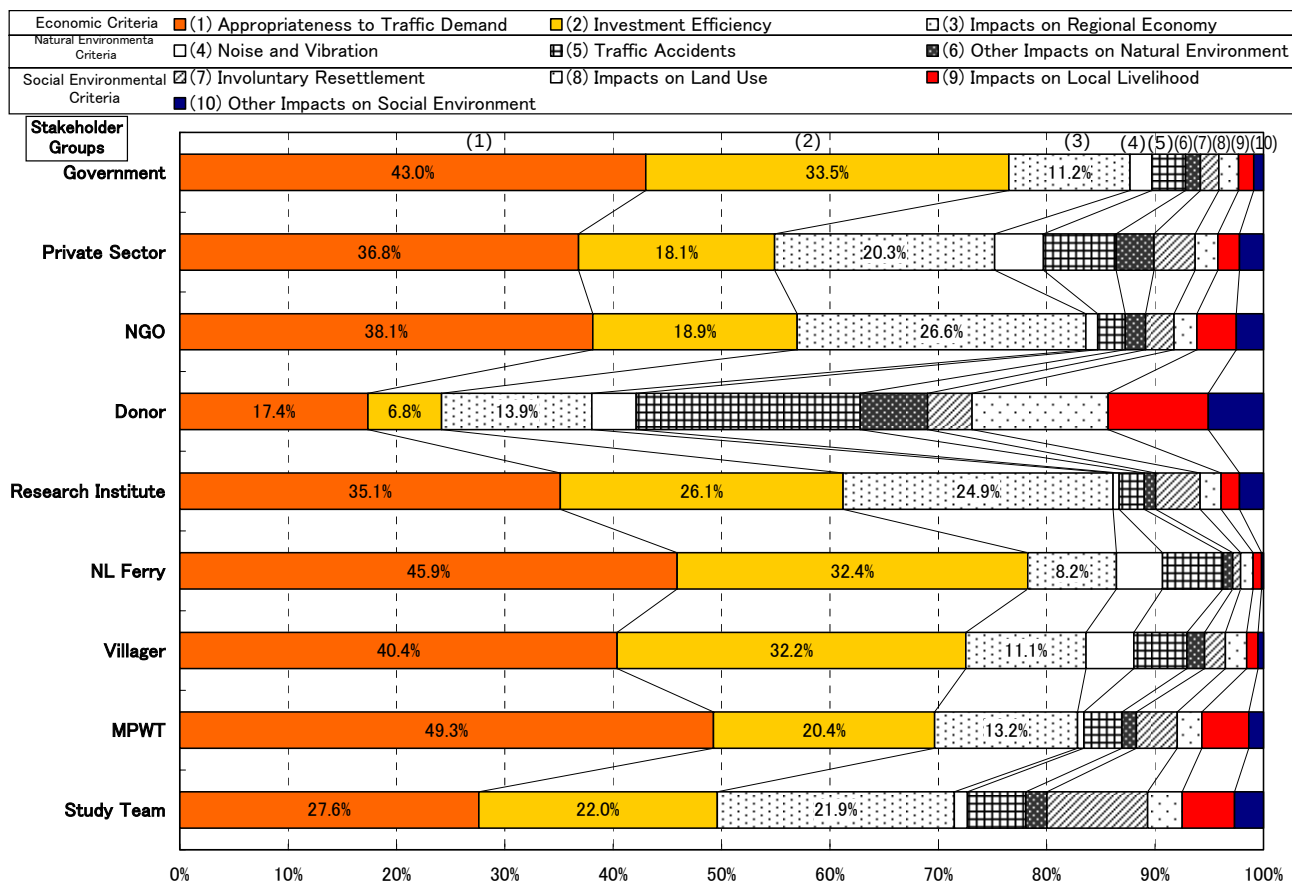
**Table AP4.2.1 Weights on Evaluation Criteria Derived from the Survey**

| Criteria                             | Weights by Government Officials |           |           |         | Weights by Private Sector |           |           |         | Weights by NGO |           |           |         | Weights by Donor |           |           |         |
|--------------------------------------|---------------------------------|-----------|-----------|---------|---------------------------|-----------|-----------|---------|----------------|-----------|-----------|---------|------------------|-----------|-----------|---------|
|                                      | 1st Level                       | 2nd Level | 3rd Level | Overall | 1st Level                 | 2nd Level | 3rd Level | Overall | 1st Level      | 2nd Level | 3rd Level | Overall | 1st Level        | 2nd Level | 3rd Level | Overall |
| Total                                |                                 |           |           | 1.000   |                           |           |           | 1.000   |                |           |           | 1.000   |                  |           |           | 1.000   |
| Economic Criteria                    | 0.877                           |           |           |         | 0.752                     |           |           |         | 0.836          |           |           |         | 0.380            |           |           |         |
| Appropriateness to Traffic Demand    |                                 |           | 0.490     | 0.430   |                           |           | 0.490     | 0.368   |                |           | 0.456     | 0.381   |                  |           | 0.457     | 0.174   |
| Investment Efficiency                |                                 |           | 0.382     | 0.335   |                           |           | 0.241     | 0.181   |                |           | 0.226     | 0.189   |                  |           | 0.179     | 0.068   |
| Impacts on Regional Economy          |                                 |           | 0.128     | 0.112   |                           |           | 0.269     | 0.203   |                |           | 0.319     | 0.266   |                  |           | 0.365     | 0.139   |
| Environmental Criteria               | 0.123                           |           |           |         | 0.248                     |           |           |         | 0.164          |           |           |         | 0.620            |           |           |         |
| Natural Environmental Criteria       |                                 | 0.528     |           |         |                           | 0.593     |           |         |                | 0.337     |           |         |                  | 0.500     |           |         |
| Noise and Vibration                  |                                 |           | 0.311     | 0.020   |                           |           | 0.305     | 0.045   |                |           | 0.200     | 0.011   |                  |           | 0.132     | 0.041   |
| Traffic Accidents                    |                                 |           | 0.472     | 0.031   |                           |           | 0.457     | 0.067   |                |           | 0.460     | 0.025   |                  |           | 0.667     | 0.207   |
| Other Impacts on Natural Environment |                                 |           | 0.217     | 0.014   |                           |           | 0.238     | 0.035   |                |           | 0.340     | 0.019   |                  |           | 0.201     | 0.062   |
| Social Environmental Criteria        |                                 | 0.472     |           |         |                           | 0.407     |           |         |                | 0.663     |           |         |                  | 0.500     |           |         |
| Involuntary Resettlement             |                                 |           | 0.291     | 0.017   |                           |           | 0.376     | 0.038   |                |           | 0.241     | 0.026   |                  |           | 0.132     | 0.041   |
| Impacts on Land Use                  |                                 |           | 0.308     | 0.018   |                           |           | 0.206     | 0.021   |                |           | 0.195     | 0.021   |                  |           | 0.405     | 0.126   |
| Impacts on Local Livelihood          |                                 |           | 0.246     | 0.014   |                           |           | 0.200     | 0.020   |                |           | 0.333     | 0.036   |                  |           | 0.298     | 0.093   |
| Other Impacts on Social Environment  |                                 |           | 0.154     | 0.009   |                           |           | 0.218     | 0.022   |                |           | 0.231     | 0.025   |                  |           | 0.164     | 0.051   |

| Criteria                             | Weights by Research Institute |           |           |         | Weights by NL Ferry |           |           |         | Weights by Villagers |           |           |         | Simple Average Weights of S.H |           |           |         |
|--------------------------------------|-------------------------------|-----------|-----------|---------|---------------------|-----------|-----------|---------|----------------------|-----------|-----------|---------|-------------------------------|-----------|-----------|---------|
|                                      | 1st Level                     | 2nd Level | 3rd Level | Overall | 1st Level           | 2nd Level | 3rd Level | Overall | 1st Level            | 2nd Level | 3rd Level | Overall | 1st Level                     | 2nd Level | 3rd Level | Overall |
| Total                                |                               |           |           | 1.000   |                     |           |           | 1.000   |                      |           |           | 1.000   |                               |           |           | 1.000   |
| Economic Criteria                    | 0.861                         |           |           |         | 0.864               |           |           |         | 0.836                |           |           |         | 0.825                         |           |           |         |
| Appropriateness to Traffic Demand    |                               |           | 0.408     | 0.351   |                     |           | 0.531     | 0.459   |                      |           | 0.483     | 0.404   |                               |           | 0.477     | 0.393   |
| Investment Efficiency                |                               |           | 0.303     | 0.261   |                     |           | 0.374     | 0.324   |                      |           | 0.385     | 0.322   |                               |           | 0.343     | 0.283   |
| Impacts on Regional Economy          |                               |           | 0.289     | 0.249   |                     |           | 0.095     | 0.082   |                      |           | 0.132     | 0.111   |                               |           | 0.180     | 0.148   |
| Environmental Criteria               | 0.139                         |           |           |         | 0.136               |           |           |         | 0.164                |           |           |         | 0.175                         |           |           |         |
| Natural Environmental Criteria       |                               | 0.282     |           |         |                     | 0.792     |           |         |                      | 0.669     |           |         |                               | 0.549     |           |         |
| Noise and Vibration                  |                               |           | 0.142     | 0.006   |                     |           | 0.396     | 0.042   |                      |           | 0.403     | 0.044   |                               |           | 0.312     | 0.030   |
| Traffic Accidents                    |                               |           | 0.593     | 0.023   |                     |           | 0.519     | 0.056   |                      |           | 0.449     | 0.049   |                               |           | 0.483     | 0.047   |
| Other Impacts on Natural Environment |                               |           | 0.265     | 0.010   |                     |           | 0.085     | 0.009   |                      |           | 0.149     | 0.016   |                               |           | 0.205     | 0.020   |
| Social Environmental Criteria        |                               | 0.718     |           |         |                     | 0.208     |           |         |                      | 0.331     |           |         |                               | 0.451     |           |         |
| Involuntary Resettlement             |                               |           | 0.412     | 0.041   |                     |           | 0.257     | 0.007   |                      |           | 0.351     | 0.019   |                               |           | 0.316     | 0.025   |
| Impacts on Land Use                  |                               |           | 0.194     | 0.019   |                     |           | 0.404     | 0.011   |                      |           | 0.362     | 0.020   |                               |           | 0.305     | 0.024   |
| Impacts on Local Livelihood          |                               |           | 0.171     | 0.017   |                     |           | 0.281     | 0.008   |                      |           | 0.196     | 0.011   |                               |           | 0.231     | 0.018   |
| Other Impacts on Social Environment  |                               |           | 0.222     | 0.022   |                     |           | 0.057     | 0.002   |                      |           | 0.091     | 0.005   |                               |           | 0.147     | 0.012   |

Source: JICA Study Team



Source: JICA Study Team

**Figure AP4.2.1 Weights on Evaluation Sub-criteria by Stakeholder Group**

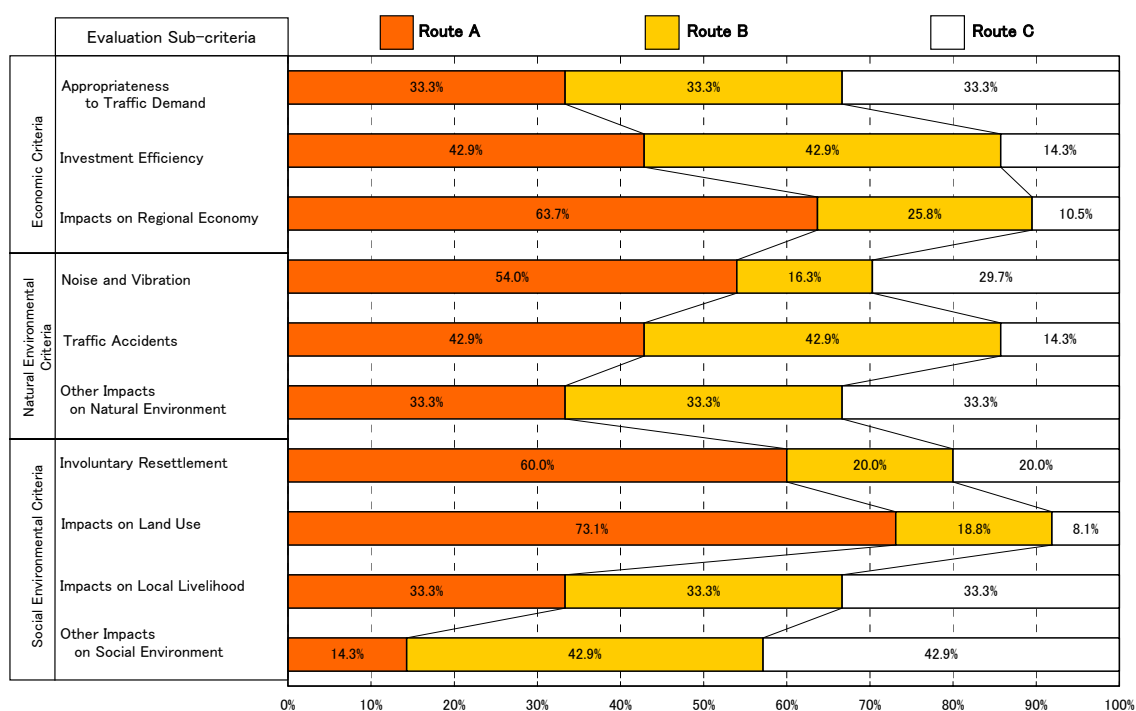
## AP 4.2.2 Evaluation of Alternative Crossing Routes by Criteria

Based on the comparative analysis of technical attributes, the importance of pair-wise alternative routes is judged and measured by the scale of relative importance. Weights of the alternatives by the sub-criteria are measured as shown in Table AP 4.2.2 and Figure AP4.2.2.

**Table AP4.2.2 Weights on Sub-Criteria for Alternative Route Evaluation**

| Evaluation Criteria    |                                      | Alternatives |         |         |
|------------------------|--------------------------------------|--------------|---------|---------|
|                        |                                      | Route A      | Route B | Route C |
| Economic Criteria      |                                      |              |         |         |
|                        | Appropriateness to Traffic Demand    | 0.333        | 0.333   | 0.333   |
|                        | Investment Efficiency                | 0.429        | 0.429   | 0.143   |
|                        | Impacts on Regional Economy          | 0.637        | 0.258   | 0.105   |
| Environmental Criteria |                                      |              |         |         |
|                        | Natural Environmental Criteria       |              |         |         |
|                        | Noise and Vibration                  | 0.540        | 0.163   | 0.297   |
|                        | Traffic Accidents                    | 0.429        | 0.429   | 0.143   |
|                        | Other Impacts on Natural Environment | 0.333        | 0.333   | 0.333   |
|                        | Social Environmental Criteria        |              |         |         |
|                        | Involuntary Resettlement             | 0.600        | 0.200   | 0.200   |
|                        | Impacts on Land Use                  | 0.731        | 0.188   | 0.081   |
|                        | Impacts on Local Livelihood          | 0.333        | 0.333   | 0.333   |
|                        | Other Impacts on Social Environment  | 0.143        | 0.429   | 0.429   |

Source: JICA Study Team



**Figure AP4.2.2 Weights of Alternative Routes by Evaluation Sub-criteria**

## **AP4.3 Selection of Optimum Crossing Method**

### **AP 4.3.1 Evaluation of Weights on Criteria for AHP (2)**

According to the questionnaire interview survey to the stakeholders, it is found that they, except for Donor group, allocate relatively higher importance on the “Engineering Criteria” or “Economic Criteria” rather than “Environmental Criteria”. Furthermore, between “Engineering Criteria” and “Economic Criteria”, a higher importance is placed depending upon stakeholder groups. A group of the government officials gives almost equal importance to both “Engineering” and “Economic” Criteria. Groups of Private Sector, Neak Loeung Ferry staff and Villagers tend to evaluate “Engineering Criteria” more important than “Economic Criteria”, while groups of NGO and Research Institute appreciate “Economic Criteria” more importantly. The survey result is summarized in Table AP4.3.1 and Figure AP4.3.1.

Table AP4.3.2 compares resultant simple average weights of Stakeholders (91 samples), MPWT (10 samples) and JICA Study Team (5 samples), and which indicate that:

- “Engineering Criteria” is highly appreciated by MPWT followed by the average figure of the Stakeholders and the Study Team
- On the contrary, “Environmental Criteria” is highly rated by the Study Team followed by the average figure of the Stakeholders and MPWT.
- Among the sub-criteria of “Engineering Criteria”, the average Stakeholders and MPWT show more importance to “Sustainability”, while the Study Team to “Safety”.
- Among the sub-criteria of “Economic Criteria”, the average Stakeholders and MPWT reveal their appreciation distinctively to “Appropriateness to Traffic Demand”, while the Study Team’s rating is more balanced among the sub-criteria “Appropriateness to Traffic Demand”, “Investment Efficiency” and “Impacts on Regional Economy”.
- Regarding the sub-criteria of “Environmental Criteria”, the average Stakeholders show relatively higher importance to “Natural” rather than “Social”, while MPWT and the Study Team rate higher to “Social Environment”.
- “Traffic Accidents” is regarded very important, compared to other sub-criteria of “Natural Environment” commonly by the average Stakeholders, MPWT and the Study Team.
- Among the sub-criteria of “Social” Environment, the Study Team distinguishes more importance of “Involuntary Resettlement” from others, but the average Stakeholders give higher rating almost equally to both “Involuntary Resettlement” and “Impacts on Land Use”; and MPWT almost equally to “Impacts on Local Livelihood” and “Involuntary Resettlement”.

**Table AP4.3.1 Weights on Evaluation Criteria Derived from the Survey (AHP (2))**

| Criteria                             | Weights by Government Officials |           |           |         | Weights by Private Sector |           |           |         | Weights by NGO |           |           |         | Weights by Donor |           |           |         |
|--------------------------------------|---------------------------------|-----------|-----------|---------|---------------------------|-----------|-----------|---------|----------------|-----------|-----------|---------|------------------|-----------|-----------|---------|
|                                      | 1st Level                       | 2nd Level | 3rd Level | Overall | 1st Level                 | 2nd Level | 3rd Level | Overall | 1st Level      | 2nd Level | 3rd Level | Overall | 1st Level        | 2nd Level | 3rd Level | Overall |
| Total                                |                                 |           |           | 1.000   |                           |           |           | 1.000   |                |           |           | 1.000   |                  |           |           | 1.000   |
| Engineering Criteria                 | 0.464                           |           |           |         | 0.491                     |           |           |         | 0.346          |           |           |         | 0.177            |           |           |         |
| Stability of Crossing Service        |                                 |           | 0.288     | 0.134   |                           |           | 0.332     | 0.163   |                |           | 0.475     | 0.164   |                  |           | 0.333     | 0.059   |
| Safety of Crossing Service           |                                 |           | 0.272     | 0.126   |                           |           | 0.427     | 0.210   |                |           | 0.278     | 0.096   |                  |           | 0.219     | 0.039   |
| Sustainability of Crossing Service   |                                 |           | 0.440     | 0.204   |                           |           | 0.241     | 0.118   |                |           | 0.247     | 0.085   |                  |           | 0.448     | 0.079   |
| Economic Criteria                    | 0.470                           |           |           |         | 0.383                     |           |           |         | 0.547          |           |           |         | 0.313            |           |           |         |
| Appropriateness to Traffic Demand    |                                 |           | 0.490     | 0.230   |                           |           | 0.490     | 0.187   |                |           | 0.456     | 0.249   |                  |           | 0.457     | 0.143   |
| Investment Efficiency                |                                 |           | 0.382     | 0.180   |                           |           | 0.241     | 0.092   |                |           | 0.226     | 0.123   |                  |           | 0.179     | 0.056   |
| Impacts on Regional Economy          |                                 |           | 0.128     | 0.060   |                           |           | 0.269     | 0.103   |                |           | 0.319     | 0.174   |                  |           | 0.365     | 0.114   |
| Environmental Criteria               | 0.066                           |           |           |         | 0.126                     |           |           |         | 0.107          |           |           |         | 0.510            |           |           |         |
| Natural Environmental Criteria       |                                 | 0.528     |           |         |                           | 0.593     |           |         |                | 0.337     |           |         |                  | 0.500     |           |         |
| Noise and Vibration                  |                                 |           | 0.311     | 0.011   |                           |           | 0.305     | 0.023   |                |           | 0.200     | 0.007   |                  |           | 0.132     | 0.034   |
| Traffic Accidents                    |                                 |           | 0.472     | 0.016   |                           |           | 0.457     | 0.034   |                |           | 0.460     | 0.017   |                  |           | 0.667     | 0.170   |
| Other Impacts on Natural Environment |                                 |           | 0.217     | 0.008   |                           |           | 0.238     | 0.018   |                |           | 0.340     | 0.012   |                  |           | 0.201     | 0.051   |
| Social Environmental Criteria        |                                 | 0.472     |           |         |                           | 0.407     |           |         |                | 0.663     |           |         |                  | 0.500     |           |         |
| Involuntary Resettlement             |                                 |           | 0.291     | 0.009   |                           |           | 0.376     | 0.019   |                |           | 0.241     | 0.017   |                  |           | 0.132     | 0.034   |
| Impacts on Land Use                  |                                 |           | 0.308     | 0.010   |                           |           | 0.206     | 0.011   |                |           | 0.195     | 0.014   |                  |           | 0.405     | 0.103   |
| Impacts on Local Livelihood          |                                 |           | 0.246     | 0.008   |                           |           | 0.200     | 0.010   |                |           | 0.333     | 0.024   |                  |           | 0.298     | 0.076   |
| Other Impacts on Social Environment  |                                 |           | 0.154     | 0.005   |                           |           | 0.218     | 0.011   |                |           | 0.231     | 0.016   |                  |           | 0.164     | 0.042   |

| Criteria                             | Weights by Research Institute |           |           |         | Weights by NL Ferry |           |           |         | Weights by Villagers |           |           |         | Simple Average Weights of S.H |           |           |         |
|--------------------------------------|-------------------------------|-----------|-----------|---------|---------------------|-----------|-----------|---------|----------------------|-----------|-----------|---------|-------------------------------|-----------|-----------|---------|
|                                      | 1st Level                     | 2nd Level | 3rd Level | Overall | 1st Level           | 2nd Level | 3rd Level | Overall | 1st Level            | 2nd Level | 3rd Level | Overall | 1st Level                     | 2nd Level | 3rd Level | Overall |
| Total                                |                               |           |           | 1.000   |                     |           |           | 1.000   |                      |           |           | 1.000   |                               |           |           | 1.000   |
| Engineering Criteria                 | 0.370                         |           |           |         | 0.561               |           |           |         | 0.605                |           |           |         | 0.487                         |           |           |         |
| Stability of Crossing Service        |                               |           | 0.228     | 0.084   |                     |           | 0.159     | 0.090   |                      |           | 0.292     | 0.177   |                               |           | 0.299     | 0.146   |
| Safety of Crossing Service           |                               |           | 0.310     | 0.114   |                     |           | 0.139     | 0.078   |                      |           | 0.257     | 0.155   |                               |           | 0.273     | 0.133   |
| Sustainability of Crossing Service   |                               |           | 0.462     | 0.171   |                     |           | 0.702     | 0.394   |                      |           | 0.451     | 0.273   |                               |           | 0.428     | 0.209   |
| Economic Criteria                    | 0.543                         |           |           |         | 0.379               |           |           |         | 0.331                |           |           |         | 0.423                         |           |           |         |
| Appropriateness to Traffic Demand    |                               |           | 0.408     | 0.221   |                     |           | 0.531     | 0.201   |                      |           | 0.483     | 0.160   |                               |           | 0.477     | 0.202   |
| Investment Efficiency                |                               |           | 0.303     | 0.164   |                     |           | 0.374     | 0.142   |                      |           | 0.385     | 0.127   |                               |           | 0.343     | 0.145   |
| Impacts on Regional Economy          |                               |           | 0.289     | 0.157   |                     |           | 0.095     | 0.036   |                      |           | 0.132     | 0.044   |                               |           | 0.180     | 0.076   |
| Environmental Criteria               | 0.087                         |           |           |         | 0.059               |           |           |         | 0.065                |           |           |         | 0.090                         |           |           |         |
| Natural Environmental Criteria       |                               | 0.282     |           |         |                     | 0.792     |           |         |                      | 0.669     |           |         |                               | 0.549     |           |         |
| Noise and Vibration                  |                               |           | 0.142     | 0.004   |                     |           | 0.396     | 0.019   |                      |           | 0.403     | 0.017   |                               |           | 0.312     | 0.015   |
| Traffic Accidents                    |                               |           | 0.593     | 0.015   |                     |           | 0.519     | 0.024   |                      |           | 0.449     | 0.019   |                               |           | 0.483     | 0.024   |
| Other Impacts on Natural Environment |                               |           | 0.265     | 0.007   |                     |           | 0.085     | 0.004   |                      |           | 0.149     | 0.006   |                               |           | 0.205     | 0.010   |
| Social Environmental Criteria        |                               | 0.718     |           |         |                     | 0.208     |           |         |                      | 0.331     |           |         |                               | 0.451     |           |         |
| Involuntary Resettlement             |                               |           | 0.412     | 0.026   |                     |           | 0.257     | 0.003   |                      |           | 0.351     | 0.008   |                               |           | 0.316     | 0.013   |
| Impacts on Land Use                  |                               |           | 0.194     | 0.012   |                     |           | 0.404     | 0.005   |                      |           | 0.362     | 0.008   |                               |           | 0.305     | 0.012   |
| Impacts on Local Livelihood          |                               |           | 0.171     | 0.011   |                     |           | 0.281     | 0.003   |                      |           | 0.196     | 0.004   |                               |           | 0.231     | 0.009   |
| Other Impacts on Social Environment  |                               |           | 0.222     | 0.014   |                     |           | 0.057     | 0.001   |                      |           | 0.091     | 0.002   |                               |           | 0.147     | 0.006   |

Source: JICA Study Team

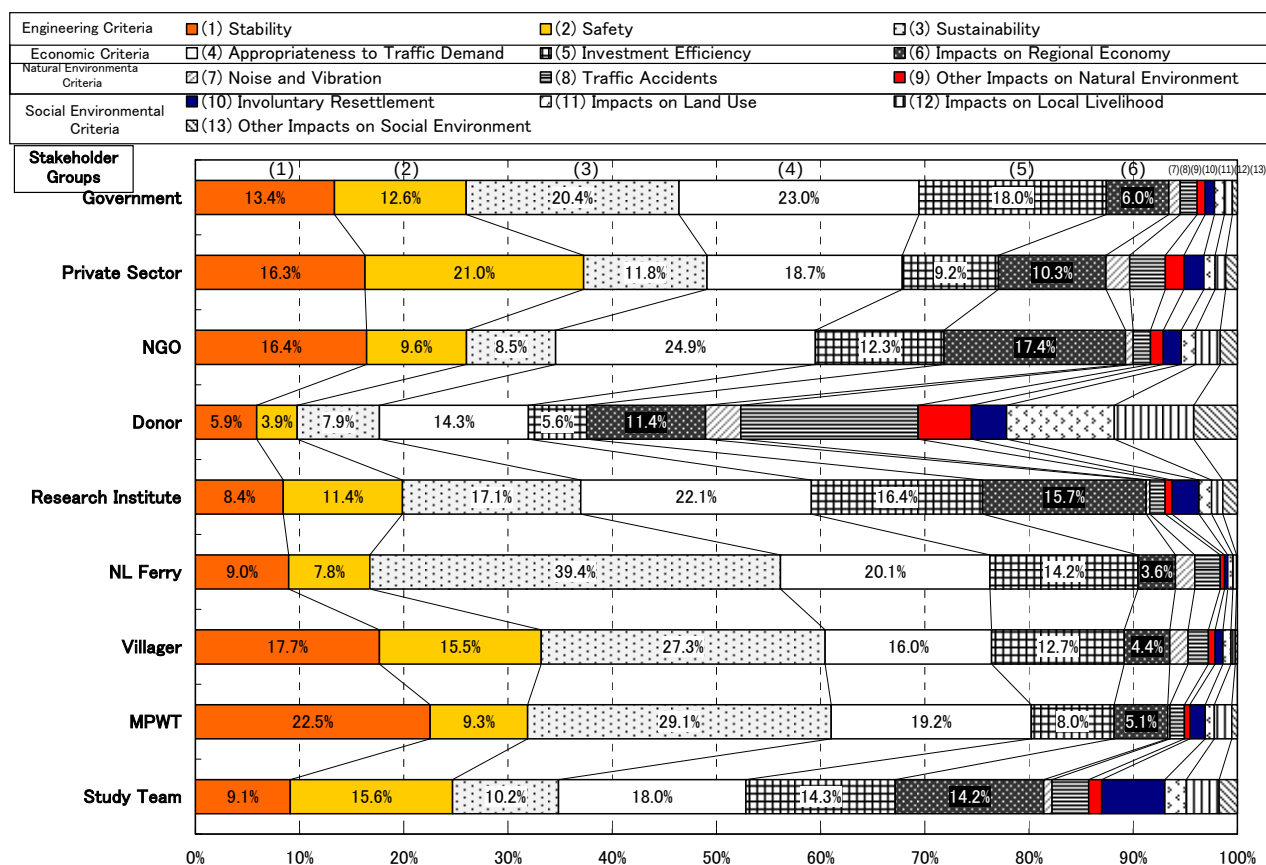


Figure AP4.3.1 Weights on Evaluation Sub-criteria by Stakeholder Group

Table AP4.3.2 Comparison of Resultant Weights on Evaluation Criteria (AHP (2))  
(By Stakeholders, MPWT and Study Team)

| Overall Evaluation     |                                      | Stakeholders (91) |           |           |         | MPWT (10) |           |           |         | Study Team (5) |           |           |         |
|------------------------|--------------------------------------|-------------------|-----------|-----------|---------|-----------|-----------|-----------|---------|----------------|-----------|-----------|---------|
| Criteria               |                                      | Weights           |           |           |         | Weights   |           |           |         | Weights        |           |           |         |
|                        |                                      | 1st Level         | 2nd Level | 3rd Level | Overall | 1st Level | 2nd Level | 3rd Level | Overall | 1st Level      | 2nd Level | 3rd Level | Overall |
| Total                  |                                      |                   |           |           | 1.000   |           |           |           | 1.000   |                |           |           | 1.000   |
| Engineering Criteria   |                                      | 0.487             |           |           |         | 0.610     |           |           |         | 0.349          |           |           |         |
|                        | Stability of Crossing Service        |                   |           | 0.299     | 0.146   |           |           | 0.369     | 0.225   |                |           | 0.261     | 0.091   |
|                        | Safety of Crossing Service           |                   |           | 0.273     | 0.133   |           |           | 0.153     | 0.093   |                |           | 0.447     | 0.156   |
|                        | Sustainability of Crossing Service   |                   |           | 0.428     | 0.209   |           |           | 0.478     | 0.291   |                |           | 0.292     | 0.102   |
| Economic Criteria      |                                      | 0.423             |           |           |         | 0.323     |           |           |         | 0.466          |           |           |         |
|                        | Appropriateness to Traffic Demand    |                   |           | 0.477     | 0.202   |           |           | 0.595     | 0.192   |                |           | 0.386     | 0.180   |
|                        | Investment Efficiency                |                   |           | 0.343     | 0.145   |           |           | 0.246     | 0.080   |                |           | 0.308     | 0.143   |
|                        | Impacts on Regional Economy          |                   |           | 0.180     | 0.076   |           |           | 0.159     | 0.051   |                |           | 0.306     | 0.142   |
| Environmental Criteria |                                      | 0.090             |           |           |         | 0.067     |           |           |         | 0.186          |           |           |         |
|                        | Natural Environmental Criteria       |                   | 0.549     |           |         |           | 0.317     |           |         |                | 0.300     |           |         |
|                        | Noise and Vibration                  |                   |           | 0.312     | 0.015   |           |           | 0.109     | 0.002   |                |           | 0.142     | 0.008   |
|                        | Traffic Accidents                    |                   |           | 0.483     | 0.024   |           |           | 0.648     | 0.014   |                |           | 0.630     | 0.035   |
|                        | Other Impacts on Natural Environment |                   |           | 0.205     | 0.010   |           |           | 0.243     | 0.005   |                |           | 0.227     | 0.013   |
|                        | Social Environmental Criteria        |                   | 0.451     |           |         |           | 0.683     |           |         |                | 0.700     |           |         |
|                        | Involuntary Resettlement             |                   |           | 0.316     | 0.013   |           |           | 0.321     | 0.015   |                |           | 0.465     | 0.061   |
|                        | Impacts on Land Use                  |                   |           | 0.305     | 0.012   |           |           | 0.194     | 0.009   |                |           | 0.159     | 0.021   |
|                        | Impacts on Local Livelihood          |                   |           | 0.231     | 0.009   |           |           | 0.370     | 0.017   |                |           | 0.242     | 0.032   |
|                        | Other Impacts on Social Environment  |                   |           | 0.147     | 0.006   |           |           | 0.115     | 0.005   |                |           | 0.134     | 0.017   |

Source: JICA Study Team

## AP 4.3.2 Evaluation of Alternative Crossing Methods by Criteria

**Table AP4.3.3 Resultant Average Ratings by Each Sub-Criteria**

### 1.1 Regarding “Stability” Criteria

| Pair-wise Alternatives |                            | Descriptive Judgment                                                                                                            | Scale of Relative Importance |
|------------------------|----------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| A                      | B                          |                                                                                                                                 |                              |
| Bridge                 | Zero Option                | A is superior to B                                                                                                              | 6                            |
|                        | Ferry Imp.                 | Judgments are diversified depending upon the appreciation of a no-bridge existence period for several years up to 2014 or 2015. | 1                            |
|                        | Ferry Improvement + Bridge | A is inferior to B                                                                                                              | 1/4                          |
| Zero Option            | Ferry Imp.                 | A is inferior to B                                                                                                              | 1/5                          |
|                        | Ferry Improvement + Bridge | A is inferior to B                                                                                                              | 1/7                          |
| Ferry Imp.             | Ferry Improvement + Bridge | A is inferior to B                                                                                                              | 1/3                          |

### 1.2 Regarding “Safety” Criteria

| Pair-wise Alternatives |                            | Descriptive Judgment                    | Scale of Relative Importance |
|------------------------|----------------------------|-----------------------------------------|------------------------------|
| A                      | B                          |                                         |                              |
| Bridge                 | Zero Option                | A is superior to B                      | 6                            |
|                        | Ferry Imp.                 | Majority agrees that A is superior to B | 3                            |
|                        | Ferry Improvement + Bridge | A is inferior to B                      | 1/2                          |
| Zero Option            | Ferry Imp.                 | A is inferior to B                      | 1/2                          |
|                        | Ferry Improvement + Bridge | A is inferior to B                      | 1/6                          |
| Ferry Imp.             | Ferry Improvement + Bridge | A is inferior to B                      | 1/4                          |

### 1.3 Regarding “Sustainability” Criteria

| Pair-wise Alternatives |                            | Descriptive Judgment                    | Scale of Relative Importance |
|------------------------|----------------------------|-----------------------------------------|------------------------------|
| A                      | B                          |                                         |                              |
| Bridge                 | Zero Option                | A is superior to B                      | 5                            |
|                        | Ferry Imp.                 | Majority agrees that A is superior to B | 3                            |
|                        | Ferry Improvement + Bridge | A is inferior or equal in maximum to B  | 1/2                          |
| Zero Option            | Ferry Imp.                 | A is inferior to B                      | 1/4                          |
|                        | Ferry Improvement + Bridge | A is inferior to B                      | 1/6                          |
| Ferry Imp.             | Ferry Improvement + Bridge | A is inferior to B                      | 1/4                          |

### 2.1 Regarding “Appropriateness to Traffic Demand” Criteria

| Pair-wise Alternatives |                            | Descriptive Judgment | Scale of Relative Importance |
|------------------------|----------------------------|----------------------|------------------------------|
| A                      | B                          |                      |                              |
| Bridge                 | Zero Option                | A is superior to B   | 6                            |
|                        | Ferry Imp.                 | A is inferior to B   | 1/3                          |
|                        | Ferry Improvement + Bridge | A is inferior to B   | 1/3                          |
| Zero                   | Ferry Imp.                 | A is inferior to B   | 1/4                          |



|            |                               |                    |     |
|------------|-------------------------------|--------------------|-----|
| Option     | Ferry Improvement<br>+ Bridge | A is inferior to B | 1/6 |
| Ferry Imp. | Ferry Improvement<br>+ Bridge | A is inferior to B | 1/3 |

## 2.2 Regarding “Investment Efficiency” Criteria

| Pair-wise Alternatives |                               | Descriptive Judgment | Scale of Relative Importance |
|------------------------|-------------------------------|----------------------|------------------------------|
| A                      | B                             |                      |                              |
| Bridge                 | Zero Option                   | A is superior to B   | 4                            |
|                        | Ferry Imp.                    | A is inferior to B   | 1/3                          |
|                        | Ferry Improvement<br>+ Bridge | A is inferior to B   | 1/4                          |
| Zero Option            | Ferry Imp.                    | A is inferior to B   | 1/4                          |
|                        | Ferry Improvement<br>+ Bridge | A is inferior to B   | 1/6                          |
| Ferry Imp.             | Ferry Improvement<br>+ Bridge | A is inferior to B   | 1/3                          |

## 2.3 Regarding “Impact on Regional Economy” Criteria

| Pair-wise Alternatives |                               | Descriptive Judgment | Scale of Relative Importance |
|------------------------|-------------------------------|----------------------|------------------------------|
| A                      | B                             |                      |                              |
| Bridge                 | Zero Option                   | A is superior to B   | 5                            |
|                        | Ferry Imp.                    | A is superior to B   | 2                            |
|                        | Ferry Improvement<br>+ Bridge | A is inferior to B   | 1/2                          |
| Zero Option            | Ferry Imp.                    | A is inferior to B   | 1/5                          |
|                        | Ferry Improvement<br>+ Bridge | A is inferior to B   | 1/7                          |
| Ferry Imp.             | Ferry Improvement<br>+ Bridge | A is inferior to B   | 1/4                          |

## 3.1 Regarding “Noise and Vibration” Criteria

| Pair-wise Alternatives |                               | Descriptive Judgment                                                | Scale of Relative Importance |
|------------------------|-------------------------------|---------------------------------------------------------------------|------------------------------|
| A                      | B                             |                                                                     |                              |
| Bridge                 | Zero Option                   | A is superior to B                                                  | 3                            |
|                        | Ferry Imp.                    | Judgments are diversified that A is slightly inferior or equal to B | 1                            |
|                        | Ferry Improvement<br>+ Bridge | A is inferior to B                                                  | 1/2                          |
| Zero Option            | Ferry Imp.                    | A is inferior to B                                                  | 1/2                          |
|                        | Ferry Improvement<br>+ Bridge | A is inferior to B                                                  | 1/3                          |
| Ferry Imp.             | Ferry Improvement<br>+ Bridge | A is inferior to B                                                  | 1/2                          |

## 3.2 Regarding “Traffic Accidents” Criteria

| Pair-wise Alternatives |                               | Descriptive Judgment                                                                                                                                                         | Scale of Relative Importance |
|------------------------|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| A                      | B                             |                                                                                                                                                                              |                              |
| Bridge                 | Zero Option                   | A is superior to B                                                                                                                                                           | 2                            |
|                        | Ferry Imp.                    | Majority agrees that A is superior to B                                                                                                                                      | 2                            |
|                        | Ferry Improvement<br>+ Bridge | Majority agrees that A is inferior to B                                                                                                                                      | 1/2                          |
| Zero Option            | Ferry Imp.                    | Judgment are diversified depending on the appreciation of traffic jam intensified at ferry terminal in Case A or prolonged vehicle distance by additional terminal in Case B | 1                            |

|            |                               |                                         |     |
|------------|-------------------------------|-----------------------------------------|-----|
|            | Ferry Improvement<br>+ Bridge | Majority agrees that A is inferior to B | 1/3 |
| Ferry Imp. | Ferry Improvement<br>+ Bridge | A is inferior to B                      | 1/3 |

### 3.3 Regarding “Other Impacts on Natural Environment” Criteria

| Pair-wise Alternatives |                               | Descriptive Judgment | Scale of Relative Importance |
|------------------------|-------------------------------|----------------------|------------------------------|
| A                      | B                             |                      |                              |
| Bridge                 | Zero Option                   | A is inferior to B   | 1/2                          |
|                        | Ferry Imp.                    | A is inferior to B   | 1/3                          |
|                        | Ferry Improvement<br>+ Bridge | A is superior to B   | 2                            |
| Zero Option            | Ferry Imp.                    | A is superior to B   | 1                            |
|                        | Ferry Improvement<br>+ Bridge | A is superior to B   | 3                            |
| Ferry Imp.             | Ferry Improvement<br>+ Bridge | A is superior to B   | 2                            |

### 4.1 Regarding “Involuntary Resettlement” Criteria

| Pair-wise Alternatives |                               | Descriptive Judgment | Scale of Relative Importance |
|------------------------|-------------------------------|----------------------|------------------------------|
| A                      | B                             |                      |                              |
| Bridge                 | Zero Option                   | A is inferior to B   | 1/4                          |
|                        | Ferry Imp.                    | A is superior to B   | 2                            |
|                        | Ferry Improvement<br>+ Bridge | A is equal to B      | 1                            |
| Zero Option            | Ferry Imp.                    | A is superior to B   | 4                            |
|                        | Ferry Improvement<br>+ Bridge | A is superior to B   | 3                            |
| Ferry Imp.             | Ferry Improvement<br>+ Bridge | A is inferior to B   | 1/3                          |

### 4.2 Regarding “Impacts on Land Use” Criteria

| Pair-wise Alternatives |                               | Descriptive Judgment | Scale of Relative Importance |
|------------------------|-------------------------------|----------------------|------------------------------|
| A                      | B                             |                      |                              |
| Bridge                 | Zero Option                   | A is superior to B   | 5                            |
|                        | Ferry Imp.                    | A is superior to B   | 4                            |
|                        | Ferry Improvement<br>+ Bridge | A is inferior to B   | 1/2                          |
| Zero Option            | Ferry Imp.                    | A is inferior to B   | 1/2                          |
|                        | Ferry Improvement<br>+ Bridge | A is inferior to B   | 1/6                          |
| Ferry Imp.             | Ferry Improvement<br>+ Bridge | A is inferior to B   | 1/4                          |

### 4.3 Regarding “Impacts on Local Livelihood” Criteria

| Pair-wise Alternatives |                               | Descriptive Judgment   | Scale of Relative Importance |
|------------------------|-------------------------------|------------------------|------------------------------|
| A                      | B                             |                        |                              |
| Bridge                 | Zero Option                   | A is superior to B     | 2                            |
|                        | Ferry Imp.                    | A is superior to B     | 1                            |
|                        | Ferry Improvement<br>+ Bridge | A is almost equal to B | 1                            |
| Zero Option            | Ferry Imp.                    | A is inferior to B     | 1/3                          |
|                        | Ferry Improvement<br>+ Bridge | A is inferior to B     | 1/4                          |
| Ferry Imp.             | Ferry Improvement<br>+ Bridge | A is inferior to B     | 1/3                          |

#### 4.4 Regarding “Other Impacts on Social Environment” Criteria

| Pair-wise Alternatives |                            | Descriptive Judgment   | Scale of Relative Importance |
|------------------------|----------------------------|------------------------|------------------------------|
| A                      | B                          |                        |                              |
| Bridge                 | Zero Option                | A is superior to B     | 2                            |
|                        | Ferry Imp.                 | A is superior to B     | 1                            |
|                        | Ferry Improvement + Bridge | A is almost equal to B | 1                            |
| Zero Option            | Ferry Imp.                 | A is inferior to B     | 1/3                          |
|                        | Ferry Improvement + Bridge | A is inferior to B     | 1/3                          |
| Ferry Imp.             | Ferry Improvement + Bridge | A is inferior to B     | 1/2                          |

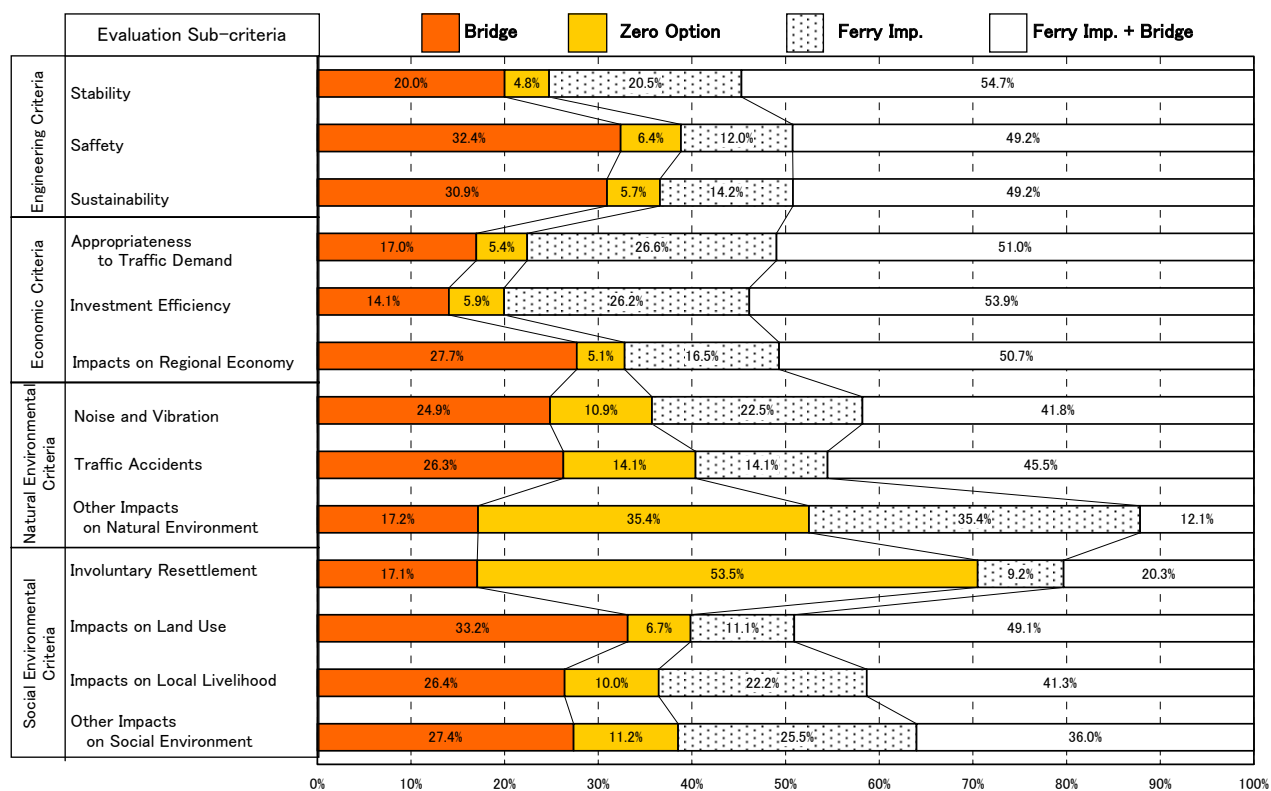
Source: JICA Study Team

Based on the comparative analysis and ratings of the pair-wise alternatives, weights on sub-criteria are derived for the respective alternative methods as summarized in Table AP4.3.4 and Figure AP4.3.2.

**Table AP4.3.4 Weights on Sub-Criteria for Alternative Crossing Methods**

| Evaluation Criteria    |                                      | Alternatives |             |            |                     |
|------------------------|--------------------------------------|--------------|-------------|------------|---------------------|
|                        |                                      | Bridge       | Zero Option | Ferry Imp. | Ferry Imp. + Bridge |
| Engineering Criteria   |                                      |              |             |            |                     |
|                        | Stability of Crossing Service        | 0.200        | 0.048       | 0.205      | 0.547               |
|                        | Safety of Crossing Service           | 0.324        | 0.064       | 0.120      | 0.492               |
|                        | Sustainability of Crossing Service   | 0.309        | 0.057       | 0.142      | 0.492               |
| Economic Criteria      |                                      |              |             |            |                     |
|                        | Appropriateness to Traffic Demand    | 0.170        | 0.054       | 0.266      | 0.510               |
|                        | Investment Efficiency                | 0.141        | 0.059       | 0.262      | 0.539               |
|                        | Impacts on Regional Economy          | 0.277        | 0.051       | 0.165      | 0.507               |
| Environmental Criteria |                                      |              |             |            |                     |
|                        | Natural Environmental Criteria       |              |             |            |                     |
|                        | Noise and Vibration                  | 0.249        | 0.109       | 0.225      | 0.418               |
|                        | Traffic Accidents                    | 0.263        | 0.141       | 0.141      | 0.455               |
|                        | Other Impacts on Natural Environment | 0.172        | 0.354       | 0.354      | 0.121               |
|                        | Social Environmental Criteria        |              |             |            |                     |
|                        | Involuntary Resettlement             | 0.171        | 0.535       | 0.092      | 0.203               |
|                        | Impacts on Land Use                  | 0.332        | 0.067       | 0.111      | 0.491               |
|                        | Impacts on Local Livelihood          | 0.264        | 0.100       | 0.222      | 0.413               |
|                        | Other Impacts on Social Environment  | 0.274        | 0.112       | 0.255      | 0.360               |

Source: JICA Study Team



**Figure AP4.3.2 Weights of Alternative Crossing Methods by Evaluation Sub-criteria**

## AP 4.5 Appropriate Ferry Development

### AP 4.5.1 Existing Ferry Services and Management at Each Operating Route

#### (1) Neak Loeung Ferry Unit

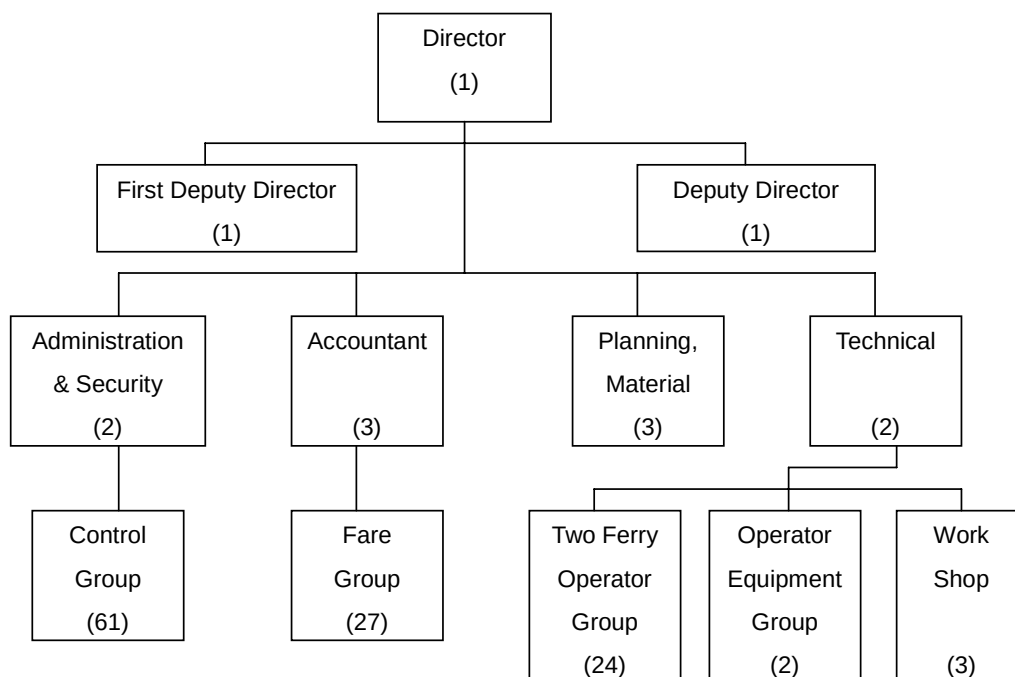
##### 1) Organization of the Neak Loeung Ferry Unit

The Neak Loeung Ferry Unit shown in Figures AP4.5.1 and 4.5.2 is located at east bank along with the ferry terminal and it is located about 60km southeast of Phnom Penh, at the junction of National Road No.1 (NR-1) and NR-15. The total staff of the unit is 130 persons as described in Figure AP4.5.3 Organization Chart of the Neak Loeung Ferry Unit.



Figure AP4.5.1 The Gate of Neak Loeung Ferry Unit

Figure AP4.5.2 Neak Loeung Ferry Unit Office



Note: The numeric in ( ) shows the number of staff.

Figure AP4.5.3 Organization Chart of the Neak Loeung Ferry Unit

2) Revenues, Expenditures and Profits at the Neak Loeung Ferry Unit  
The Neak Loeung Ferry Unit has been making profits in the past, and the profit in 2003 is 2,146 million Riel (equivalent to US\$533,000.-) as shown in Table AP4.5.1.

**Table AP4.5.1 Revenues, Expenditures and Profits at the Neak Loeung Ferry Unit**

(in Riel x 1,000)

| Category           | Year      |           |           |           |           |
|--------------------|-----------|-----------|-----------|-----------|-----------|
|                    | 1999      | 2000      | 2001      | 2002      | 2003      |
| Total Revenues     | 3,605,431 | 3,114,529 | 3,282,895 | 2,639,794 | 4,346,096 |
| Total Expenditures | 2,644,740 | 2,572,605 | 2,828,300 | 1,073,963 | 2,199,884 |
| Total Profit       | 960,691   | 541,924   | 454,595   | 1,565,831 | 2,146,212 |

Source: WORK PROGRAM AND PLANNING ACTIVITY (2004-2008), August 2004MPWT

(2) Preak Tamak Ferry

The Preak Tamak Ferry is located about 20 km north of Phnom Penh along with NR-6A. The ferry links NR-6 with Vihear Sour area, Ksach Kandal District, Kandal Province. The ferry service has started since 2002 after completion of KIZUNA Bridge at Kampong Cham November 2001. Due to the operation of Chroy Changwar Bridge, demand of transportation by ferryboat at Preak Tamak has been decreasing, however, the ferrying service is indispensable for transportation of truck, vehicle, and passengers, which destinations are for Rea Reang District (Prey Veng Province), Srei Santhor District (Kampong Cham Province) and Khsach Kandal District, (Kandal Province) since there are only two (2) ways to pass the Mekong River in this region i.e. KIZUNA Bridge at Kampong Cham and ferryboat at Preak Tamak. The Preak Tamak office told that only one (1) ferryboat is not able to accommodate the transportation demand in every week end. However, the Preak Tamak ferrying service is having deficit as shown in Table AP4.5.2. Total staff at the Preak Tamak Office including for ticketing is 23 and crew is 6 for a ferryboat. As of April 1, 2005, the Preak Tamak Ferry Unit has become a branch office of the Neak Loeung Ferry Unit.

**Table AP4.5.2 Revenues, Expenditures and Profits at Preak Tamak Ferry**

(in Riel x 1,000)

| Category           | Year     |          |
|--------------------|----------|----------|
|                    | 2002     | 2003     |
| Total Revenues     | 130,059  | 117,413  |
| Total Expenditures | 333,276  | 556,339  |
| Total Profit       | -203,217 | -438,926 |

Source: WORK PROGRAM AND PLANNING ACTIVITY (2004-2008), August 2004 MPWT

(3) Preak Kdam Ferry Unit

Preak Kdam ferry terminal is located about 30 km north of Phnom Penh, at the junction of NR-5, 51 and 61. A ferryboat is operated between Phum Kholeang Sbek on the west bank and Phum Prek Chik on the east bank for crossing the Tonle Sap River. The Preak Kdam

Ferry Unit office shown Figures AP4.5.4 and 4.5.5 in is located at the west bank and has 34 office staff and 4 operators of 2 pilots and 2 mechanics. According to the Ferry Unit, the recent revenues/expenditures/profit of the ferry Unit have been improving, but still negative figure. However, according to the statistics in 1998-2003 shown in Table AP4.5.3, the traffic demand of the ferryboat at Preak Kdam is relatively increasing.



**Figure AP4.5.4 Preak Kdam Ferry Unit**

**Figure AP4.5.5 Preak Kdam West Terminal**

**Table AP4.5.3 Revenues, Expenditures and Profit at Preak Kdam Ferry**

(in Riel x 1,000)

| Category           | Year     |          |          |         |         |         |
|--------------------|----------|----------|----------|---------|---------|---------|
|                    | 1998     | 1999     | 2000     | 2001    | 2002    | 2003    |
| Total Revenues     | 150,743  | 206,481  | 265,598  | 793,435 | 122,861 | 585,344 |
| Total Expenditures | 261,928  | 335,123  | 419,927  | 612,398 | 160,322 | 615,127 |
| Total Profit       | -111,185 | -128,642 | -154,329 | 181,037 | -37,461 | -29,783 |

Source: WORK PROGRAM AND PLANNING ACTIVITY (2004-2008), August 2004MPWT

#### (4) Stung Treng Ferry

Stung Treng ferrying service, which is located about 480 km north east of Phnom Penh, at the junction of NR-7, Provincial Road 214 and 216, is operated and managed by the Stung Treng Branch Office of the Department of Road and Bridge under the Ministry of Public Works and Transportation.

In 2000, the ferry barge “STUNG TRENG” and the towing tugboat “UNICEF-2” have been deployed at Stung Treng. At present, only one (1) ferry barge “STUNG TRENG” and tugboat “UNICEF-2” are mainly serving for crossing the SEKONG River and they are crossing the MEKONG River upon demand of vehicles.

The past traffic records and revenues/cost records were not available at the office during the survey by JICA Study Team in May 2005, however, it was told that the average number of vehicles per one way trip is approximately 4 units. The tariff for one way trip is Real 10,800

per vehicle and the net profit per year is approximately Real 6 million (equivalent to US\$1,500).

The total staff at the Stung Treng Branch Office of the MPWT is 38 persons, and among them, the staff in charge of ferrying service is 2 persons at the office and 5 as a crew.

#### **AP 4.5.2 Existing Ferryboat Operation**

##### **(1) Neak Loeung Ferry Unit**

###### **1) Operation Hours**

Ferryboats are operated for 15.5 hours from 5:30 am to 21:00 pm. Ferryboats have no fixed time schedule of departure and arrival, and its schedule depends on the traffic demand from time to time.

###### **2) Operation Time for Round Trip**

According to the survey by JICA Study Team in 2004, it took 24 minutes per round trip during dry season and 28 minutes per round trip during rainy season. It is reported by the Neak Loeung Ferry Unit that the ferryboats are operated for 340 days and remaining 25 days for repair and maintenance per year.

###### **3) Existing Operation System**

In April, 2005, three (3) ferryboats have been deployed at Neak Loeung since the ferryboat “VISHNU” has been shifted from Preak Tamak. At present, one (1) ferryboat is continuously operated for a whole day and another one (1) ferryboat is put into operation as an addition occasionally in the morning, daytime or evening when the traffic demand increases. Other one (1) ferryboat is used as a stand-by. Three (3) ferryboats are operated alternately day by day.

Note: In August 2005, the ferryboat “VISHNU” is operated at Preak Tamak and the ferryboat “SAMAKI-27” is operated at Neak Loeung.

###### **4) Crew**

The number of crew per ferryboat is totally 12 persons consisting of 2 pilots, 3 mechanics and 7 deck and machinery crew. The work shift system is adopted.

##### **(2) Preak Tamak Ferry Unit**

###### **1) Operation Hours**

The ferryboat is operated for 12 hours from 5:30 am to 18:00 pm. The ferry has no fixed time schedule of the departure and the arrival, and its schedule depends on the traffic demand from time to time.

###### **2) Operation Time for Round Trip**



During the on-board survey by JICA study team in May 2005, it took 2 minutes for unloading and loading, 7 minutes for sailing, 4 minutes for unloading and loading. It is reported that the average number of round trip is 25-30 times per day and the ferryboat is operated for 360 days. Ferryboat “SAMAKI-27” has never been repaired at dock since 1998.

3) Existing Operation System

In April 2005, only one (1) ferryboat “SAMAKI-27” has been operated at Preak Tamak.

Note: In August 2005, the ferryboat “VISHNU” operates at Preak Tamak and the ferryboat “SAMAKI-27” operates at Neak Loeung.

4) Crew

The number of crew on board is totally 6 persons consisting of 2 pilots, 2 mechanics and 2 deck and machinery crew. The work shift system is not adopted.

(3) Preak Kdam Ferry Unit

1) Operation Hours

The ferryboat is operated for 24 hours everyday. The ferry has no fixed time schedule of the departure and the arrival, and its schedule depends on the traffic demand from time to time.

2) Operation Time for Round Trip

It was told by the Ferry Unit that it takes 20-22 minutes for a round trip consisting of 5-6 minutes for unloading and loading, 5 minutes for sailing, 5-6 minutes for unloading and loading and 5 minutes for the return trip. The average number of the round trips is 32-36 times per day. According to Ferry Unit, the ferryboat is operated for 350 days per year and the remaining 15 days for repair and maintenance in afloat.

3) Existing Operation System

Only one (1) ferryboat “SAMAKI-28” is operated for twenty-four (24) hours everyday and the schedule is depending on the traffic demand such as car, truck, bus, motorcycle, and passenger. Actually, the main purpose of ferrying service at Preak Kdam is for large sized vehicles for destination to the east and the north regions of Cambodia through NR-6 and 7 from the west region by NR-5. The average number of round trips is 32-36 times per day.

4) Crew

The number of crew per ship is totally 4 persons consisting of 2 pilots, 2 mechanics and crew. The work shift system is adopted.

(4) Stung Treng Ferry

Stung Treng ferry office is operating the ferry barge and the towing tugboat from 6:00AM until 18:30PM everyday and the operating schedule is depending on the traffic demand such as car, truck and bus without the fixed time schedule. The average number of round trips is

50 times per month. Pedestrians, bicycles and motorcycles are transported by the wooden motor boats by the private companies.

### **AP 4.5.3 Existing Conditions of Ferryboats**

#### **(1) Neak Loeung Ferry Unit**

##### **Ferryboat “TA PHROM” and “VISHNU”**

“TA PHROM” and “VISHNU” are double ended ferryboats with a ramp at each end. These ferryboats are fitted with two (2) main diesel engines in the engine room and two (2) rudder propellers in the rudder propeller rooms. Each propulsion system is installed diagonally at each end of the ferryboat. The hull is subdivided into five (5) compartments by four (4) watertight bulkheads. The hydraulic driven ramps are manually operated by a hydraulic control valve fitted at the post of ramp. One (1) anchor is fitted at each end of the ferryboat. The wheelhouse is located at center position on a bridge between the casings and two control stands are arranged at forward and aft of wheelhouse. They are shown in Figure AP4.5.6 and in Figure AP4.5.7, and their particulars are shown in Table AP4.5.4.



**Figure AP4.5.6 TA PHROM**



**Figure AP4.5.7 VISHNU**

“TA PHROM” is in a good condition and she is maintained well. Docking maintenance of “TA PHROM” has been done at the Neak Loeung Dockyard periodically. However, “VISHNU” has never been docked since 1999. Urgent docking repair shall be done.

##### **Ferryboat “PEACE-2”**

“PEACE-2” was built in 1991 at Hong Kong shipyard and currently deployed in Neak Loeung. According to Neak Loeung Ferry Unit, the last survey before rehabilitation work noted that hull condition was apparently good. However, the ferryboat had on different occasion been repaired and spare parts of poor quality had been used. Furthermore, the ferryboat had been damaged during delivery voyage from Hong Kong to Cambodia and then

repaired in Vietnam. The quality of this repair work and materials used was reported to be poor. In particular, the main engines and all auxiliary systems needed to be replaced by the installation of new ones. In addition to this, it was very difficult to maneuver the ferryboat by one (1) conventional propeller and one (1) rudder at each ends during berthing operation at slow speed. The poor maneuverability occasionally caused damage to ferryboat and jetty. Due to the technical reasons, “PEACE-2” was rehabilitated at Department of Mechanical Factory No.1 in 1999. Current conditions and particulars of “PEACE-2” are shown in Figures AP4.5.8, AP4.5.9 and Table AP4.5.5.

**Table AP4.5.4 Particulars of “TA PHROM” and “VISHNU”**

| Name of Ferry                   | TA PHROM                      | VISHNU                        |
|---------------------------------|-------------------------------|-------------------------------|
| Classification                  | Expired                       |                               |
| Length overall (incl.ramp)      | Abt. 51.50 m                  | Abt. 59.50 m                  |
| Length on deck                  | 39.50 m                       | 39.50 m                       |
| Breadth moulded                 | 11.50 m                       | 11.50 m                       |
| Breadth extreme (incl.fender)   | 11.80 m                       | 11.90 m                       |
| Depth moulded                   | 2.40 m                        | 2.40 m                        |
| Draft (designed)                | 1.60 m                        | 1.50 m                        |
| Free height (car deck)          | 5.50 m                        | 5.50 m                        |
| Deadweight                      | 230 tons                      | 175 tons                      |
| Passenger (on deck)             | 200 persons                   | 200 persons                   |
| Truck                           | 180 tons                      | 120 tons                      |
| Fuel Oil Tank (incl.daily tank) | 15.5 m3                       | 15.5 m3                       |
| Lubricating Oil Tank            | 0.3 m3                        | 0.3 m3                        |
| Fresh Water Tank                | 14.0 m3                       | 14.0 m3                       |
| Waste Oil Tank                  | 1.0 m3                        | 1.0 m3                        |
| Size of ramp                    | 6 m x 7 m/5 m                 | 10 m x 7 m/5 m                |
| Main engines                    | 350 HP x 2 units              | 350 HP x 2 units              |
| Propulsion                      | Rudder Propeller<br>x 2 units | Rudder Propeller<br>x 2 units |
| Speed                           | 7.8 knots                     | 7.8 knots                     |

Note: see Appendix 6 of the Progress Report (2) (September 2005) for more details.



**Figure AP4.5.8 PEACE-2**



**Figure AP4.5.9 Operation at Wheelhouse**

**Table AP4.5.5 Particulars of “PEACE-2”**

| Principal Particulars of Ferryboat “PEACE-2” |                                                 |
|----------------------------------------------|-------------------------------------------------|
| Type                                         | River crossing car ferry                        |
| Rehabilitated by                             | Department of Mechanical Factory No.1, Cambodia |
| Rehabilitated year                           | 1999                                            |
| Classification Society                       | Expired                                         |
| Length overall (including ramp)              | 49.50 meters                                    |
| Length on deck                               | 39.50 meters                                    |
| Breadth (moulded)                            | 11.50 meters                                    |
| Depth (moulded)                              | 2.40 meters                                     |
| Draft (moulded)                              | 1.60 meters                                     |
| Length of ramp door                          | 5.00 meters each                                |
| Loading Capacity                             | About 10 truck of 12 tons                       |
| Main Engine                                  | 350 HP x 2 units                                |
| Propeller                                    | Rudder Propeller x 2 units                      |

Note: see Appendix 6 of the Progress Report (2) (September 2005) for more details.

The “PEACE-2” is a double-ended ferryboat with ramp at each end. The ferryboat is fitted with two (2) main diesel engines in the engine room and two (2) rudder propellers in rudder propeller rooms each. Each propulsion system is installed at the centerline of ferry as an in-line. The hull is subdivided into five (5) compartments by four (4) watertight bulkheads. The hydraulic driven ramp is manually operated by a hydraulic control valve at the post of ramp. One (1) anchor is fitted at each end. The wheelhouse is located at center position on a bridge between the casings and two control stands are arranged at forward and aft of wheelhouse.

“PEACE-2” appeared in a good condition, but suitable maintenance work especially for painting to whole area and cleaning in engine room are needed urgently.

#### (2) Preak Tamak Ferry Unit

##### Ferryboat “SAMAKI-27”

The ferryboat “SAMAHI-27” was built in 1981 at Singapore Shipyard and rehabilitated at the Department of Mechanical Factory No.1 located in Phnom Penh, Cambodia in 1998.

SAMAHI-27 was deployed at Kampong Cham from rehabilitation to 2001 and moved to Preah Vihear. The current conditions and Particulars are shown in Figures AP4.5.10, 4.5.11 and Table AP4.5.6.



**Figure AP4.5.10 “SAMAHI-27”**



**Figure AP4.5.11 Unloading at West Terminal**

**Table AP4.5.6 Particulars of “SAMAHI-27”**

|                |                                       |
|----------------|---------------------------------------|
| Type           | Double ended ferryboat                |
| Classification | Non class                             |
| Length Overall | 41.00 m including 5.5m length of ramp |
| Length Deck    | 30.00 m                               |
| Breadth        | 9.15 m                                |
| Depth          | 2.50 m                                |
| Draft          | 1.89 m                                |
| Main Engine    | 350 PS x 1,800 RPM x 2                |
| Propeller      | Rudder Propeller x 2                  |
| Capacity       | 13 units of car                       |

Note: see Appendix 6 of the Progress Report (2) (September 2005) for more details.

“SAMAHI-27” is a double-ended ferryboat with a ramp at each end. The ferry is fitted with two (2) main diesel engines in the engine room and two (2) rudder propellers in rudder propeller rooms. Each propulsion system is installed diagonally at each end. The hull is subdivided into five (5) compartments by four (4) watertight bulkheads.

The hydraulic driven ramps are manually operated by a hydraulic control valve fitted at the post of ramp. One (1) anchor is fitted at each end. The wheelhouse is located at center position on a bridge between the casings and has two control stands at forward and aft of wheelhouse.

“SAMAHI-27” is in a good condition in terms of the machinery, but whole hull shall be repaired and painted. Urgent docking repair shall be needed.

### (3) Preak Kdam Ferry Unit

#### Ferryboat “SAMAKI-28”

The ferryboat “SAMAKI-28” was built at Singapore Shipyard in 1981 as a Ro/Ro passenger river ferry with two (2) main diesel engine of 125 HP each, four (4) propellers and four (4) rudders. Due to frequent machinery troubles and propeller damage, SAMAKI-28 could not develop her performance sufficiently. In order to improve its propulsion performance as well as other machinery and hull construction, SAMAKI-28 was rehabilitated at Department of Mechanical Factory No.1, located in Phnom Penh, Cambodia in 1998. Since completion of rehabilitation, SAMAKI-28 has been deployed and operated at Preak Kdam and its current profile and particulars are shown in Figures AP4.5.12, 4.5.13 and Table AP4.5.7.



**Figure AP4.5.12 SAMAKI-28**



**Figure AP4.5.13 Bridge of SAMAKI-28**

**Table AP4.5.7 Particulars of “SAMAKI-28”**

|                |                                       |
|----------------|---------------------------------------|
| Type           | Double ended ferryboat                |
| Classification | Non class                             |
| Length Overall | 41.00 m including 5.5m length of ramp |
| Length Deck    | 30.00 m                               |
| Breadth        | 9.15 m                                |
| Depth          | 2.50 m                                |
| Draft          | 1.89 m                                |
| Main Engine    | 350 PS x 1,800 RPM x 2                |
| Propeller      | Rudder Propeller x 2                  |
| Capacity       | 13 units of car                       |

Note: see Appendix 6 of the Progress Report (2) (September 2005) for more details.

“SAMAKI-28” is a double-ended ferryboat with a ramp at each end. The ferry is fitted with two (2) main diesel engines in the engine room and two (2) rudder propellers in rudder propeller room each. Each propulsion system is installed diagonally at each end. The hull is subdivided into five (5) compartments by four (4) watertight bulkheads. The hydraulic driven ramps are manually operated by a hydraulic control valve fitted at the post of ramp. One (1)

anchor is fitted at each end. The wheelhouse is located at center position on a bridge between the casings and two (2) control stands are arranged at forward and aft of wheelhouse.

During the on board survey by JICA study team in May 2005, one engine was troubled and “SAMA-KI-28” was towed by a small wooden vessel during the ferrying service.

“SAMA-KI-28” needs major docking repair urgently for the safe and reliable operation. Considering the accumulated operation hours of the main engine after the rehabilitation in 1999, the engine should be in good condition, however, many troubles have happened on the engines very often. It supposed to be caused by lack of maintenance. The “SAMA-KI-28” is generally in poor condition.

#### (4) Stung Treng Ferry

##### Ferry Barge “STUNG TRENG” and tugboat “UNICEF-2”

In 2000, ferry barge “STUNG TRENG” and towing tugboat “UNICEF-2” have been deployed at Stung Treng Ferry. Ro/Ro ferry barge “Stung Treng” is an open flat top barge as shown in Table AP4.5.8 and Figure AP4.5.14. “UNICEF-2” was built in 1981 as shown in Table AP4.5.9 and Figure AP4.5.15.

**Table AP4.5.8 Particulars of “STUNG TRENG”**

|                |                                            |
|----------------|--------------------------------------------|
| Type           | Double ended ferry barge                   |
| Classification | Non class                                  |
| Length Overall | Abt. 32.00 m including 5.5m length of ramp |
| Length Deck    | Abt. 21.00 m                               |
| Breadth        | Abt. 6.90 m                                |
| Depth          | Abt. 1.70 m                                |
| Draft          | Abt. 1.20 m                                |
| Ramp           | 5.10 m x 4.25 m x 2                        |
| Capacity       | 8 cars or 4 trucks                         |

Note: see Appendix 6 of the Progress Report (2) (September 2005) for more details.

**Table AP4.5.9 Particulars of Towing Tugboat “UNICEF-2”**

|             |               |
|-------------|---------------|
| Length      | Abt.10.00 m   |
| Breadth     | Abt. 3.00 m   |
| Depth       | Abt. 2.00 m   |
| Draft       | Abt. 1.50 m   |
| Main Engine | 240 HP V-type |

Note: see Appendix 6 of the Progress Report (2) (September 2005) for more details.





**Figure AP4.5.14 Ferry Barge “STUNG TRENG”**



**Figure AP4.5.15 Tugboat “UNICEF-2”**

The ferry barge is in a general condition except the painting under water. Urgent docking repair is needed since the ferry barge “STUNG TRENG” has not been docking repair since 2000. The main engine of the tugboat “UNICEF-2” has been troubled so often and it was reported that the procurement of spare parts is very difficult. No technical documents i.e, the instruction manual, the list of Spare parts and so on, is available. Overhaul and repair especially for main engine shall be done urgently.