

**Graduate School for International Development and Cooperation (IDEC)**

**Hiroshima University**

## **QUESTIONNAIRE SURVEY OF AIRPORT ACCESS MODE CHOICE IN VIENTIANE CAPITAL, LAO PDR**

*This survey is conducting by a master's student in the Transportation Engineering Laboratory of Graduate School for International Development and Cooperation - Hiroshima University. The data collected from the study will use as input data for a master thesis - all the information in this survey used for research purposes only.*

**Your kind cooperation is a critical contribution to the success of our research.**

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ID No: \_\_\_\_\_/Group IV

## INSTRUCTION FOR ANSWERING QUESTIONNAIRE FORMS

Please answer all the questions one by one sequentially. Fill in the information in the space provided or put a tick (✓) in the appropriate answer.

The contents of the questionnaire are the following:

### I. PART I – REVEALED PREFERENCE PART (RP)

Section 1 – Socio-Economic and Personal Information.

Section 2 – Current Travel Mode Choice Information.

Section 3 – Air passengers' Attitude Towards Their Choice on Airport Access Modes.

### II. PART II – STATED PREFERENCE PART (SP)

Section 4 – Stated preference for MODE CHOICE

**For official use only**

**Name of person in charge of this survey sheet**

Interviewer:		
Supervisor:		
Location of the interview:		
Date of interview:		
Survey ID no:		Group IV

## SECTION 1: SOCIO-ECONOMIC AND PERSONAL INFORMATION

Please answer the following questions by filling in the information in the space provided or tick (☐) in the appropriate answer.

**1. Your gender:**

☐ Male ☐ Female

**2. Your age:**

☐ Less or 20 ☐ 21 - 30 ☐ 31 - 40  
☐ 41 - 50 ☐ 51 - 60 ☐ Above 60

**3. Your marital status:**

☐ Single ☐ Married

**4. Your nationality:**

☐ Lao - Vientiane citizen ☐ Lao - Non-Vientiane citizen ☐ Foreigner: \_\_\_\_\_

**5. Your occupation:**

☐ Government official ☐ Professor/Teacher ☐ Private firm employee  
☐ Businessperson ☐ Salesperson ☐ Self-employed person  
☐ Student/Pupil ☐ Housekeeper ☐ Retired/Unemployed  
☐ Other (specify): \_\_\_\_\_

**6. Your education levels:**

☐ Under or high school ☐ College ☐ Bachelor  
☐ Master/doctor ☐ Other (specify): \_\_\_\_\_

**7. Do you have a car or motorbike?**

☐ Yes ☐ No ☐ Share it with other people

**8. Do you have a driver's license for car or motorbike?**

☐ Do not have ☐ Car driver's license  
☐ Motorbike riders license ☐ Both car and motorbike driver's license

**9. The number of vehicles including individual and household (individual/household):**

☐ Motorbike: \_\_\_\_/\_\_\_\_ ☐ Car: \_\_\_\_/\_\_\_\_ ☐ None

**10. What is your current main travel mode?**

☐ Private car ☐ Public bus ☐ Tuk-tuk/Jumbo  
☐ Motorbike ☐ Taxi ☐ Other(specific): \_\_\_\_\_

**11. Do you have the intention of buying your own cars in the future? Moreover, when?**

☐ Yes, less than five years ☐ Yes, about 5-10 years  
☐ Yes, above 10 years ☐ None

**12. If your income increases in the future, will you buy your own cars?**

☐ Yes ☐ No ☐ Do not know

**13. If you answered "YES" in question no. 12. So, how many percent do you assure to buy the cars in the future?**

☐ less than 30% ☐ 30 - 60% ☐ 61 - 80% ☐ 81 - 100%

**14. How many people reside in your household?**

- ☐ One-person                      ☐ Two persons                      ☐ Three persons  
☐ Four persons                      ☐ Five persons or above

**15. Your household income levels:**

- ☐ Under 1,299,999 Kip                      ☐ 1,300,000 – 1,999,999 Kip  
☐ 2,000,000 – 3,999,999 Kip                      ☐ 4,000,000 – 6,999,999 Kip  
☐ 7,000,000 – 9,999,999 Kip                      ☐ 10,000,000 – 14,999,999 Kip  
☐ 15,000,000 – 19,999,999 Kip                      ☐ Over 20,000,000 Kip

**SECTION 2: CURRENT TRAVEL MODE CHOICE INFORMATION**

*Please answer the following questions by filling in the information in the space provided or tick (☑) in the appropriate answer.*

**1. Your final trip destination:** \_\_\_\_\_**2. Your airline:**

- ☐ Lao Airlines                      ☐ Lao Skyway                      ☐ Thai Airways  
☐ Vietnam Airlines                      ☐ China Eastern Airlines                      ☐ Other: \_\_\_\_\_

**3. Your airline class:**

- ☐ Economy class                      ☐ Business class                      ☐ First class

**4. Number of accompanying travelers:**

- ☐ Do not have                      ☐ One-person                      ☐ 2 persons  
☐ 3 persons                      ☐ 4 persons or above

**5. Number of party sizes:**

- ☐ Alone                      ☐ 2 persons  
☐ 3 persons                      ☐ 4 persons or above

**6. Your trip purpose:**

- ☐ Business                      ☐ Holiday/tourism                      ☐ Visiting relatives/friends  
☐ Back Home                      ☐ Education/training                      ☐ Other(specify): \_\_\_\_\_

**7. Number of carry-on luggage:**

- ☐ Do not have                      ☐ One-piece                      ☐ 2 pieces  
☐ 3 pieces                      ☐ 4 pieces or above

**8. Number of check-ins luggage:**

- ☐ Do not have                      ☐ One-piece                      ☐ 2 pieces  
☐ 3 pieces                      ☐ 4 pieces or above

**9. Your trip duration/Days away:**

- ☐ Under three days                      ☐ 3 – 7 days                      ☐ 8 – 15 days  
☐ 16 – 30 days                      ☐ Above 30 days

**10. Number of times you traveled from the airport in the past 12 months:**

- ☐ One time                      ☐ 2 times                      ☐ 3 times  
☐ 4 times                      ☐ 5 times or above

**11. Your origin to the Wattay International Airport:**

- ☐ Home
 ☐ Work/Office  
☐ Hotel
 ☐ Others (specify): \_\_\_\_\_

**12. How far was it from your origin to Wattay International Airport? \_\_\_\_\_ Km**

**13. How long have you come to the airport earlier than scheduled flight departure time?**

- ☐ Under 60 minutes
 ☐ 60 – 90 minutes
 ☐ 90 – 120 minutes  
☐ 120 – 180 minutes
 ☐ Above 180 minutes

**14. How long have you waited for check-in your flight (waiting time for flight check-in)?**

- ☐ Under 10 minutes
 ☐ 10 – 20 minutes
 ☐ 20 – 30 minutes  
☐ 30 - 40 minutes
 ☐ Above 40 minutes

**15. How long have you waited for boarding at the airport terminal?**

- ☐ Under 10 minutes
 ☐ 10 – 20 minutes
 ☐ 20 – 30 minutes  
☐ 30 - 40 minutes
 ☐ Above 40 minutes

**16. How many minutes do you want to stay at the airport terminal before your flight departure time?**

- ☐ Under 30 minutes
 ☐ 30 – 40 minutes
 ☐ 40 – 60 minutes  
☐ 60 – 90 minutes
 ☐ Above 90 minutes

**17. Which transport mode have you used to get to Wattay International Airport?**

- ☐ Motorbike-parked
 ☐ Motorbike-dropped off
 ☐ Car-parked  
☐ Car- dropped off
 ☐ Taxi
 ☐ Rental car/van  
☐ Organization's car
 ☐ Hotel bus
 ☐ Tourist bus  
☐ Tuk-tuk/Jumbo
 ☐ Airport bus
 ☐ Others (specify): \_\_\_\_\_

**18. Do you use the same mode of access to travel to Wattay International Airport?**

- ☐ Yes
 ☐ No

**19. Total travel cost of your trip (including fuel costs, toll road fee, parking fee/vehicle rental fee/taxi fee/bus fee) from your origin to the airport**

- ☐ Under 20,000 Kip
 ☐ 20,000 – 50,000 Kip  
☐ 50,001 – 100,000 Kip
 ☐ 100,001 – 200,000 Kip  
☐ 200,001 – 400,000 Kip
 ☐ Above 400,000 Kip

**20. If you used a means of public transport, please mention your access time from your origin to a bus stop or bus station:**

- ☐ Under 10 minutes
 ☐ 10 – 20 minutes
 ☐ 20 – 30 minutes  
☐ Above 30 minutes
 ☐ N/A

**21. In-vehicle travel time of your main travel mode to get to the airport?**

- ☐ Under 20 minutes
 ☐ 20 – 40 minutes
 ☐ 40 – 60 minutes  
☐ 60 – 90 minutes
 ☐ 90 – 120 minutes
 ☐ Above 120 minutes

**22. Delay time (if any): \_\_\_\_\_ min**

**23. In case you drove and parked a car at the airport, was it reimbursed for a parking fee?**

- ☐ Not reimbursed
 ☐ Yes, reimbursed partially
 ☐ Yes, reimbursed fully



### SECTION 3: AIR PASSENGERS' ATTITUDE TOWARDS THEIR CHOICE ON AIRPORT ACCESS MODES.

Please answer the following questions by filling in the information in the space provided or tick (☑) in the appropriate answer.

**1. Have you ever used a public bus to travel to and from the airport?**

- ☐ Yes ☐ No

**2. If there is a new type of public transportation system is established and operation to go to and from to the airport directly which is more convenience, rapidness, safely, and nice services. So, would you like to use it?**

- ☐ Yes ☐ No ☐ Do not know

**3. How far is it from your house/hotel to the nearest bus stop or station currently?**

- ☐ Under 200 m ☐ 200 – 400 m ☐ 400 – 600 m  
☐ 600 – 1000 m ☐ Above 1000 m ☐ Do not know

**4. How far do you satisfy with walking to get to a bus stop or the bus station with check-in luggage?**

- ☐ Under 100m ☐ 100 – 200m ☐ 200 – 300m  
☐ 300 – 600m ☐ 600 – 900m ☐ Above 900m

**5. How far do you satisfy with walking to get to a bus stop or the bus station with carry-on baggage?**

- ☐ Under 100m ☐ 100 – 200m ☐ 200 – 300m  
☐ 300 – 600m ☐ 600 – 900m ☐ Above 900m

**6. Which public transport services would you like to use to access the airport?**

- ☐ Free airport shuttle bus service. ☐ Remote check-in service at the public transport terminal. ☐ One-stop service of the airport limousine bus ☐ Others: .....

**7. Have you ever (or nearly) been previously late for your flight check-in time caused by travel modes' problems? If "Yes" please mention how many times where you delayed last year?**

- ☐ Never ☐ Yes, \_\_\_\_\_time (s)

**8. If you answer "Yes" in question 7, please mention the causes of being late for your flight check-in.**

- ☐ Traffic Congestion ☐ Unpunctuality ☐ Traffic accident  
☐ Unreliability ☐ Vehicle breakdown ☐ Others: .....



9. Please rate the essential levels of the following factors influencing the choices on airport access modes to the Wattay International Airport by circling (O) the following factors.

**For Example:**

<i>No transferring</i>	1	2	3	4	5
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Important factor	Not Important	Slightly Important	Fairly Important	Important	Very Important
<b>Time - saving</b>	1	2	3	4	5
<b>No transferring</b>	1	2	3	4	5
<b>User-friendly</b>	1	2	3	4	5
<b>Reasonable price</b>	1	2	3	4	5
<b>Punctuality</b>	1	2	3	4	5
<b>Safety during the trip</b>	1	2	3	4	5
<b>Comfortableness</b>	1	2	3	4	5
<b>Rapidness</b>	1	2	3	4	5
<b>Convenience for storing and retrieving luggage</b>	1	2	3	4	5
<b>Ease of accessibility</b>	1	2	3	4	5
<b>Other (specify):</b> .....	1	2	3	4	5

## SECTION 4: STATED PREFERENCE FOR MODE CHOICE

You will be asked to answer eight hypothetical questions in this part. **Please respond only based on the given information in each SCENARIO of the study.**

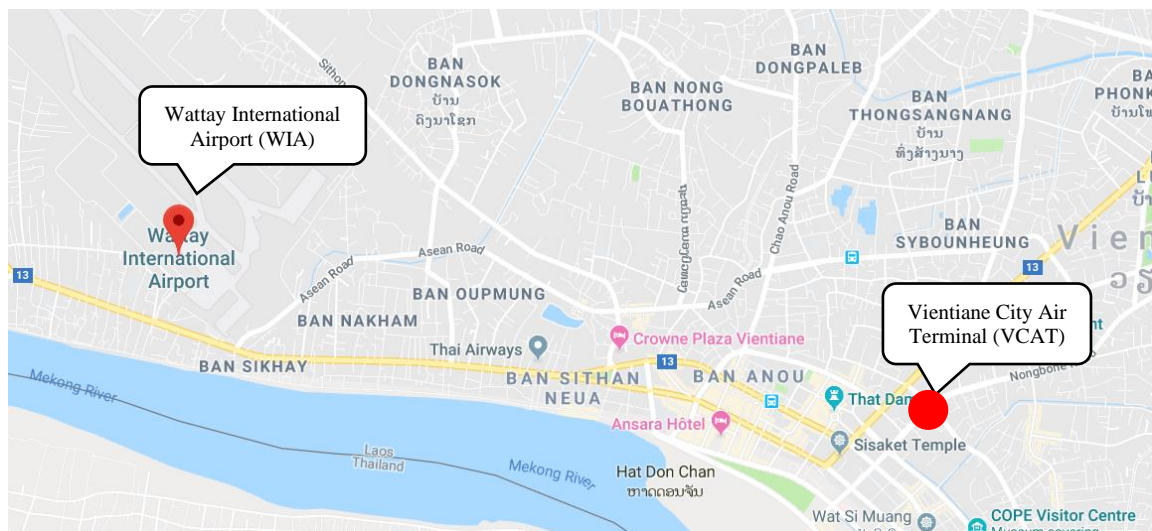
**Before answer questions, please carefully read the following description on Wattay International Airport.**

### Concepts of Vientiane City Air Terminal Services.

According to the master plan of Wattay International Airport in 2013 (JICA, 2013), the annual air passenger will rapidly increase and reach more than 6 million in 2040. Moreover, registered vehicles in Vientiane city have increased gradually with more than 10 percent annually. Consequently, not only the airport terminal but also the airport ground access system will be congestion due to the rapid growth of air passengers in the future.

In the future, **Vientiane City Air Terminal service (VCAT)** will be established and expected to share a burden of traffic congestion and the overcrowding of air passengers in the airport terminal. It is a type of public transportation mode which serves the air passenger to travel to and from the airport by using the airport limousine bus with a specific pathway. Its station situates near the central bus station of Vientiane city that air passengers are easy to access, egress and transfer. Moreover, the air passengers can proceed and complete their flight check-in and immigration process at VCAT before getting to the airport terminal.

There are several alternatives (including motorbike, car, taxi, airport bus, and VCAT-Limousine bus) to get to and from the Wattay International Airport in the future. So, air passengers have more options to access and egress the airport.



**QUESTION:** *Based on the given information, what is your most preferred mode of transport in each SCENARIO?*

**INSTRUCTION:** Please use the cross symbol (X) for your most preferred mode choice in SCENARIOS, and **please answer all SCENARIOS in this part that you belong to.**



## I. Definition:

**Total of Travel cost:** the amount cost of the trip, including fuel cost, toll road fee, and public transport fare but excluding parking fee.

**Total of Travel time:** the time needed for travel to the airport, including in-vehicle time and access time.

**In-vehicle time:** the time in a public vehicle or a private car/motorbike or taxi that access the airport.

**Access time:** the time needed for a trip from the origin of an air passenger to a bus stop or station (airport bus station or VCAT station)

**Waiting time:** the average time interval for which a passenger needs to wait for a bus or a limousine bus at a bus stop or the station to get to the airport.

**Number of Transfer:** the number of changing that an air passenger moved from one vehicle to another one.

**Travel Time Reliability:** the difference between real-time and predicted time for arriving during travel to the airport caused by traffic congestion or other reasons arising.

**Safety Margin:** preparation time intervals of the passenger at the airport terminal until flight departure time.

## II. Instruction:

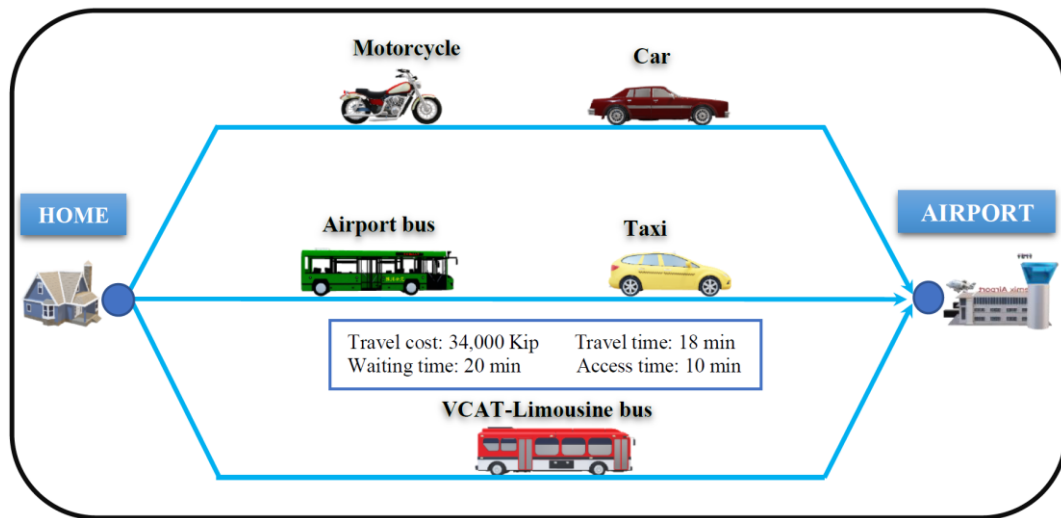
Please use the **cross symbol (X)** for your most preferred mode choice in SCENARIOS, and **please answer all SCENARIOS in this part that you belong to.**

**For example:**

Mode Choice Comparison	1. Motorbike	2. Car	3. Taxi	4. Airport Bus	5. VCAT-Limousine Bus
<b>Total of Travel Cost (Kip)</b>	<b>21,500</b>	<b>52,000</b>	<b>66,000</b>	<b>19,000</b>	<b>29,000</b>
– Travel Cost (Kip)	16,500	42,000	66,000	19,000	29,000
– Parking fee (Kip/day)	5,000	10,000	No	No	No
<b>Total of Travel Time (min)</b>	<b>110</b>	<b>115</b>	<b>115</b>	<b>150</b>	<b>83</b>
– In-vehicle Time (min)	20	25	25	30	18
– Access Time (min)	No	No	No	10	10
– <b>Waiting Time (min)</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>20</b>	<b>15</b>
– Safety Margin (min)	90	90	90	90	40
<b>Weather Condition</b>	<b>Sunny</b>	<b>Sunny</b>	<b>Sunny</b>	<b>Sunny</b>	<b>Sunny</b>
Flight check-in and Immigration at the station	No	No	No	No	Yes
<b>Which mode would you like to use? (X)</b>			X		

### QUESTION 1 (SCENARIO 6):

Under the following condition, please use the cross symbol (X) for your most preferred mode choice from home to the airport (only one option).



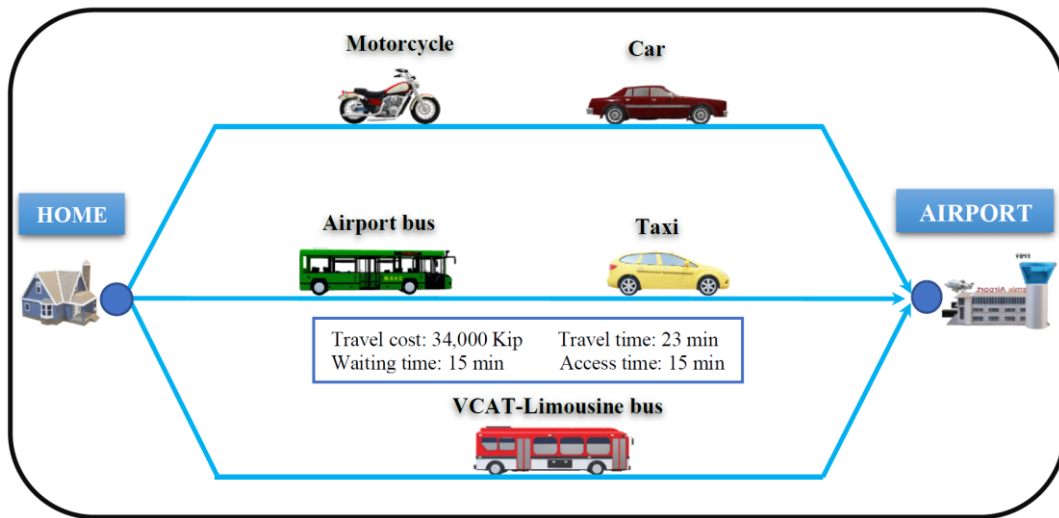
It assumed that you are traveling to Wattay International Airport under the following conditions:

<b>Trip purpose</b>	Business trip
<b>Number of check-in luggage</b>	No check-in luggage
<b>Accompanying travelers</b>	Alone

Mode Choice Comparison	1. Motorbike	2. Car	3. Taxi	4. Airport Bus	5. VCAT-Limousine Bus
<b>Total of Travel Cost (Kip)</b>	<b>21,500</b>	<b>52,000</b>	<b>66,000</b>	<b>19,000</b>	<b>34,000</b>
– Travel Cost (Kip)	16,500	42,000	66,000	19,000	34,000
– Parking fee (Kip/day)	5,000	10,000	No	No	No
<b>Total of Travel Time (min)</b>	<b>140</b>	<b>145</b>	<b>145</b>	<b>180</b>	<b>98</b>
– In-vehicle Time (min)	20	25	25	30	18
– Access Time (min)	No	No	No	10	10
– <b>Waiting Time (min)</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>20</b>	<b>20</b>
– Safety Margin (min)	120	120	120	120	50
Number of Transfers	No	No	No	One-time	One-time
Travel Time Reliability	On-time arrival	10 min delay	10 min delay	On-time arrival	On-time arrival
<b>Weather Condition</b>	<b>Rainy</b>	<b>Rainy</b>	<b>Rainy</b>	<b>Rainy</b>	<b>Rainy</b>
Flight check-in and Immigration at the station	No	No	No	No	Yes
<b>Which mode would you like to use? (X)</b>					

## QUESTION 2 (SCENARIO 8):

Under the following condition, please use the cross symbol (X) for your most preferred mode choice from home to the airport (only one option).



It assumed that you are traveling to Wattay International Airport under the following conditions:

<b>Trip purpose</b>	Non-business trip
<b>Number of check-in luggage</b>	No check-in luggage
<b>Accompanying travelers</b>	With family or friends

Mode Choice	1. Motorbike	2. Car	3. Taxi	4. Airport Bus	5. VCAT-Limousine Bus
<b>Total of Travel Cost (Kip)</b>	<b>21,500</b>	<b>52,000</b>	<b>66,000</b>	<b>19,000</b>	<b>34,000</b>
– Travel Cost (Kip)	16,500	42,000	66,000	19,000	34,000
– Parking fee (Kip/day)	5,000	10,000	No	No	No
<b>Total of Travel Time (min)</b>	<b>140</b>	<b>145</b>	<b>145</b>	<b>180</b>	<b>103</b>
– In-vehicle Time (min)	20	25	25	30	23
– Access Time (min)	No	No	No	10	15
– <b>Waiting Time (min)</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>20</b>	<b>15</b>
– Safety Margin (min)	120	120	120	120	50
Number of Transfers	No	No	No	One-time	One-time
Travel Time Reliability	On-time arrival	10 min delay	10 min delay	10 min delay	On-time arrival
<b>Weather Condition</b>	<b>Sunny</b>	<b>Sunny</b>	<b>Sunny</b>	<b>Sunny</b>	<b>Sunny</b>
Flight check-in and Immigration at the station	No	No	No	No	Yes
<b>Which mode would you like to use? (X)</b>					

