

Chapter 8: Critical Analysis of Possible PPP/UPP Measures at CMU

The first questionnaire of this study did not only address topics needed to assess the study area, but also anticipated questions for this analysis and PPP in traffic management. This group of questions is based on results from the preliminary paper "Proposal for a Land-Use Plan and Concept for One of the Study Centers of Chiang Mai University Campus". They are:

1. What do you think of the following statement? If the university introduces user fees for the transportation infrastructure at campus, a control agency should be installed to guarantee that the collected fees are only used for maintenance and improvement of the university infrastructure.
2. If a control agency for user fees would be established, who should be represented in it?
3. Who should decide on how the collected user fees are used?
4. If the university should collect user fees to create a budget for the maintenance and improvement of the university transportation infrastructure and the appropriate use of this budget is guaranteed, what would be the upper yearly fee limit you would agree to pay?
5. Would you agree to a user fee system according to the size of vehicle engine? For example: a car with 2000 cc engine size would be charged a larger fee than one with a 1400 cc engine or a motorbike with a 125 cc engine. Bicycles have no engine and would thus not pay.
6. If there is a user fee system at campus, do you think visitors to the campus should also pay a fee to be allowed to enter campus?
7. Do you think that in case the university should collect user fees for motorized forms of transportation, these fees should be used to establish some form of public transportation?
8. What do you think? If the university does not collect user fees for motorized transportation, would it be appropriate to establish a zone where only environmentally friendly vehicles or low-emission vehicles should have right of entry?

8.1 User Fees

A total 72.7% of users would agree to the introduction of user fees at campus, but mostly under the condition that the collected fees are used directly for traffic management and related infrastructure, only. How these user fees should be managed was topic of the following questions:

Table 12: User fee management	
Number of answers and per cent distribution	Worded questions and possible answers.
1.	What do you think of the following statement? If the university introduces user fees for the transportation infrastructure at campus, a control agency should be installed to guarantee that the collected fees are only used for maintenance and improvement of the university infrastructure.
296 = 61.67%	Yes.
184 = 38.33%	No.
480 = 100%	
	Answers according to user groups:
Yes	Students: 254/411 = 61.80% All other groups combined: 39/69 = 56.52%
No	Students: 157/411 = 38.20% All other groups combined: 30/69 = 43.48%

2.	If a control agency for user fees would be established, who should be represented in it?
389/480 = 81.04%	Students
262/480 = 54.58%	Administrators
223/480 = 46.46%	University personnel and research assistants
227/480 = 47.29%	Teachers
125/480 = 26.04%	Representatives of the red busses
The following groups should be represented:	Answers according to user groups:
Students	Students: 349/411 = 84.92% Teachers: 19/28 = 67.86% University personnel and assistants and private employees: 17/29 = 58.62% Administrators: 4/12 = 33.33%
Administrators	Students: 209/411 = 50.86% Teachers: 25/28 = 89.29% University personnel and assistants and private employees: 16/29 = 55.17% Administrators: 12/12 = 100.00%
University personnel and research assistants	Students: 176/411 = 42.82% Teachers: 21/28 = 75.00% University personnel and assistants and private employees: 19/29 = 65.52% Administrators: 7/12 = 58.33%
Teachers	Students: 193/411 = 49.96% Teachers: 19/28 = 67.86% University personnel and assistants and private employees: 11/29 = 37.93% Administrators: 4/12 = 33.33%
Representatives of the red busses	Students: 102/411 = 24.82% Teachers: 7/28 = 25.00% University personnel and assistants and private employees: 11/29 = 37.93% Administrators: 2/12 = 16.67%
3.	Who should decide on how the collected user fees are used?
401/480 = 83.54%	Students
279/480 = 58.13%	Administrators
192/480 = 40.00%	University personnel and research assistants
223/480 = 46.46%	Teachers
115/480 =	Representatives of the red busses

23.96%	
The following groups should be represented:	Answers according to user groups:
Students	Students: 359/411 = 87.35% Teachers: 21/28 = 75.00% University personnel and assistants and private employees: 17/29 = 58.62% Administrators: 4/12 = 33.33%
Administrators	Students: 222/411 = 54.02% Teachers: 23/28 = 82.14% University personnel and assistants and private employees: 20/29 = 68.97% Administrators: 12/12 = 100.00%
University personnel and research assistants	Students: 146/411 = 35.52% Teachers: 22/28 = 78.57% University personnel and assistants and private employees: 18/29 = 62.07% Administrators: 6/12 = 50.00%
Teachers	Students: 188/411 = 45.74% Teachers: 20/28 = 71.43% University personnel and assistants and private employees: 11/29 = 37.93% Administrators: 4/12 = 33.33%
Representatives of the red busses	Students: 99/411 = 24.09% Teachers: 6/28 = 21.43% University personnel and assistants and private employees: 8/29 = 27.57% Administrators: 2/12 = 16.67%

A slight majority of users of 61.67% opts for the creation of a control agency in case user fees should be collected. The most support to such an agency is given by the teachers with 67.86%, followed by students with 61.80%. The least support is given by University personnel and assistants and private employees with only 44.82%.

In case such an agency is created the opinion towards who should be represented varies greatly. Almost 85% of the students think that they should be represented, while only 33% of the administrators would like to share the control agency with students or teachers. About half of the students would also like to have representatives of teachers and administrators. 90% of the teachers want administrators to be present, while only 68% see the need for both themselves and students in the agency. These numbers clearly demonstrate at least a partial alliance or common denominators between teachers and students. They also show that the administration needs distance to the students, the biggest group they administrate and interestingly to the teachers, one of the most important and influential groups of voters in the election of the administration. Viewed these numbers in the light of the current traffic policy, they might also indicate a political dilemma for the administration between the car-user teacher and the bike-user student. An open support for car-use would be welcome by the influential teachers and show support in elections, while an open policy in favor of the motorbike, e.g., students, would create a popular majority, but no support during elections.

Concerning decision-making on how the fees should be used, results are very similar with a tendency upwards regarding the percentage points for each group. If PPP/UPP is implemented at university a dialogue between the user groups is needed to have each group learn from each

other and put one of the central PPP/UPP ideas into focus: the solving of environmental problems with the participation of all users groups that will be subject to impact by measures taken.

Concerning the user fee itself, 76.87% would agree to pay one Baht per day or more. This is a sufficient majority to actually initiate a fee payment system at university. However, the support drops to only 50.42% if the fee is coupled with the size of the individual vehicle used and only 50.62% think that visitors should pay for entering the university premises. These numbers might indicate that in the second questionnaire when a PPP/UPP proposal is introduced to the user groups, a majority would not agree to its implementation. On the other hand, the idea that a higher consumption of resources results in higher cost per resource unit is central to PPP/UPP, as the aim is not to simply create a budget, but to distribute social costs fairly and evenly.

In case the "fee per cc of engine" cannot be implemented and market economic forces not be applied, it is very important that a traffic policy based simply on a standard user fee defines exact outlines on how to achieve environmental improvements and by what kind of incentives. Otherwise the user fee will be just an additional indirect tax and the benefit only with those who have the most influence in using the newly created budget.

The following questions were asked:

Table 13: Characteristics of user fees	
Number of answers and per cent distribution	Worded questions and possible answers.
1.	If the university should collect user fees to create a budget for the maintenance and improvement of the university transportation infrastructure and the appropriate use of this budget is guaranteed, what would be the upper yearly fee limit you would agree to pay?
111/480 = 23.13%	Less than 1 Baht/day
189/480 = 39.38%	1 Baht/day
134/480 = 27.92%	2 Baht/day
46 /480 = 9.58%	More than 2 Baht/day
480 = 100%	
2.	Would you agree to a user fee system according to the size of vehicle engine? For example: a car with 2000 cc engine size would be charged a larger fee than one with a 1400 cc engine or a motorbike with a 125 cc engine. Bicycles have no engine and would thus not pay.
242/480 = 50.42%	I would agree.
238/480 = 49.58%	I would not agree.
480 = 100%	
	Answers according to user groups:

I would agree	Students: 207/411 = 52.05% Teachers: 17/28 = 60.71% University personnel, private employees and research assistants: 13/29 = 44.83% Administrators: 5/12 = 41.67%
I would not agree	Students: 204/411 = 49.64% Teachers: 11/28 = 39.29% University personnel, private employees and research assistants: 16/29 = 55.17% Administrators: 7/12 = 58.33%
3.	If there is a user fee system at campus, do you think visitors to the campus should also pay a fee to be allowed to enter campus?
243/480 = 50.63%	Visitors should pay.
237/480 = 49.38%	Visitors should not pay.
480 = 100%	
	Answers according to user groups:
Visitors should pay.	Students: 214/411 = 52.07% Teachers: 12/28 = 42.86% University personnel, private employees and research assistants: 13/29 = 44.83% Administrators: 4/12 = 33.33%
Visitors should not pay.	Students: 197/411 = 47.93% Teachers: 16/28 = 57.14% University personnel, private employees and research assistants: 16/29 = 55.17% Administrators: 8/12 = 66.67%

The difference in majority regarding general user fees and particular ones is very interesting. The study interprets the data as being in line with observed traffic behavior: a clear majority thinks there is a lack of traffic discipline and ask for stricter measures. However, they seem to fail noticing, that stricter measures are not needed if each and every user behaves disciplined. If asked in general, a majority agrees to fees, but if the question reflects the individually created traffic environment, many seem to have second thoughts as to the appropriateness of the measure suggested. If PPP/UPP is to be implemented, the idea has to be promoted and made understood in order to find a majority. One way to achieve this end and a key to implement PPP/UPP at campus might be the wish of most users for an efficient alternative in commuting. A majority of 67.29% thinks that in case user fees for motorized forms of transportation are collected, these fees should be used to establish some form of public transportation. Regarding the use of the fees the following question was asked:

Table 14: Usage of fees

1.	Do you think that in case the university should collect user fees for motorized forms of transportation, these fees should be used to establish some form of public transportation?
323/480 = 67.29%	Yes.
157/480 = 32.71%	No.
480 = 100%	

Answers according to user groups:	
Yes.	Students: 271/411 = 65.94% Teachers: 22/28 = 78.57% University personnel, private employees and research assistants: 21/29 = 72.41% Administrators: 9/12 = 75.00%
No.	Students: 140/411 = 34.06% Teachers: 6/28 = 21.43% University personnel, private employees and research assistants: 8/29 = 27.59% Administrators: 3/12 = 25.00%

8.2 Alternative to User Fees

Most users, however, would agree to some restricting traffic measures at campus, whether based on PPP/UPP or not. In case fees are not introduced 66.88% find the creation of a special traffic zone linked to pollution and engine efficiency an appropriate alternative. This once more shows the principal willingness of users to change the traffic situation at campus and adapt accordingly. Whether this potential can be utilized depends to a very high degree on a dialogue between all user groups and a policy encompassing all three traffic environments. Regarding an alternative to fees, the following question was asked:

Table 15: Alternative to user fees	
1.	What do you think? If the university does not collect user fees for motorized transportation, would it be appropriate to establish a zone where only environmentally friendly vehicles or low-emission vehicles should have right of entry?
321/480 = 66.88%	Yes, that would be appropriate.
159/480 = 33.12%	No, that would not be appropriate.
480 = 100%	