INFORMING POLICY & PRACTICE

No. 2018-1 (June 2018)

OPINION OF BAGUIO CITY AND LA TRINIDAD, BENGUET RESIDENTS ON THE CURRENT TAXI AND PLANNED PUJ FARE INCREASES

Cheryll C. Launio, Kacy O. Labon, Rhea S. Loncio, Mary Cris B. Sotelo, Marivic C. Abyado, Anita T. Minong, Raiah Ruth S. Batani and Raiza Blaize H. Pangosban

Highlights

Majority of local residents interviewed are aware of the proposed PUJ fare increase and taxi fare hike.

Most of the respondents use jeepney services twice a day, and taxi services once a month or once a week. Transportation budget is roughly 13% of their average total household income.

Sixty-five percent claimed they will be greatly affected, while 28% claimed they will be affected with the proposed PUJ fare increase. On the current taxi rates, majority of respondents think they are greatly affected while 32% think they are affected.

Most respondents are willing to pay PUJ fare of Php10 minimum and Php1 to Php2 for every additional kilometer thereafter. Simulated enterprise budget shows that at these rates, jeepney operation remains profitable both for operators and drivers.

For taxi fare rates, many respondents suggested flagdown rate of Php35, plus Php2 per 250 meters distance travelled, and Php1 per minute of travel time; or same flagdown rate plus Php5 per 250 meters distance travelled and no charge per minute travel time.

Introduction

ollowing the Land Transportation Franchising Regulatory Board's (LTFRB's) approval of a petition for a taxi fare increase on October 4, 2017, taxis in Baguio City and nearby municipalities underwent calibration, and beginning May, 2018 started implementing the new taxi fare rates flagdown rate of Php35, with an additional Php13.50 for every kilometer thereafter, and Php2 for every minute of travel time on the road. For example, if you took a taxi from Burnham park going to Trancoville, the flagdown rate is Php35.00 and if you travelled less than one-kilometer distance but were caught in traffic for 20 minutes, you are more likely to pay Php75 for the full trip. If you travelled, however, to Kias from Burnham park, the flagdown rate is still Php35.00, but you will pay an additional Php13.50 for every kilometer thereafter, and Php2 per minute travel and waiting time. Considering that it is an 8.4 kilometer distance but were caught in traffic for 30 minutes, the full trip will likely to cost Php190.

Recently, a petition was also submitted by the Alliance of Jeepney Operators and Drivers

Associations to the LTFRB-Cordillera region this time calling for a 65% increase in PUJ fare from the current Php8.50 minimum fare (short trip or for the first 4 kilometers) and around Php1.00 to P1.50 per kilometer thereafter to Php14 minimum fare and an additional Php2 for every kilometer thereafter. In other words, coming from Baguio city going to Km.6 police outpost, for example, would cost a commuter Php18one way. The petitioners cited the skyrocketing prices of crude oil, spare parts, and the devaluation of the peso as reasons in asking for an increase.

Concerns have been raised by some consumer groups calling for the suspension of this seemingly prohibitive new taxi fare rates; hence the Baguio City Council passed a resolution asking the LTFRB to suspend the implementation of the new taxi fare rates, pending the conduct of a public hearing in Baguio (Opiña, R. in BMC, June 10, 2018). Moreover, an opposition group filed a motion against the implementation of the proposed Php14 minimum PUJ fare and the additional Php2 for every kilometer thereafter. According to the article, the petitions were

Continued on P2

2 INFORMING POLICY & PRACTICE

elevated from the LTFRB-CAR to the LTFRB-Central Office. However, the article mentioned that the opposition group did not submit a counterproposal.

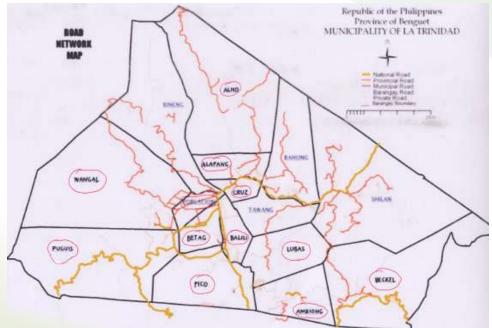
This policy memo presents the results of a quick survey and opinion poll conducted among residents of Baguio city and La Trinidad. The survey aimed to elicit the opinion and current status of commuting among city residents and residents in nearby La Trinidad, Benguet. The goal of this first issue of "informing policy and practice (IPP)" policy memo is to respond quickly to the call for local governments and academic institutions to contribute to evidence- and science-based decision-making and policymaking. In the case of the proposed increase for PUJ fares, while according to LTFRB, there was one public hearing conducted for consultation on the PUJ fare increase, the general riding public is not generally represented. On the taxi fare hike, there are claims that there was no consultation of stakeholders before the implementation.



Data and Source

Data used in this policy memo largely came from a quick survey and opinion poll of 800 quota sample of residents and commuters in Baguio city and La Trinidad, Benguet conducted from June 11 to 20, 2018. Residents such as government workers, private employees, and self-employed workers including housewives and jeepney drivers, and students were purposively selected as respondents. Only survey questionnaires 763 considered valid. were

In addition, key informant interviews with drivers of selected jeepney lines were also conducted during the period to elicit common costs for drivers such as



"boundary" cost, maintenance, diesel and other expenses.

Figure 1 presents the respondents' residence location. The survey questionnaire includes questions awareness on on the proposed increase, commuter behavior, willingness to pay, household budget for transportation and household income bracket.

This policy memo also used data from an earlier survey conducted by Rañosa et al. (2017) on the average number of passengers on board, average trips per day, and average distance (in km) for jeepney lines operating in Baguio city.

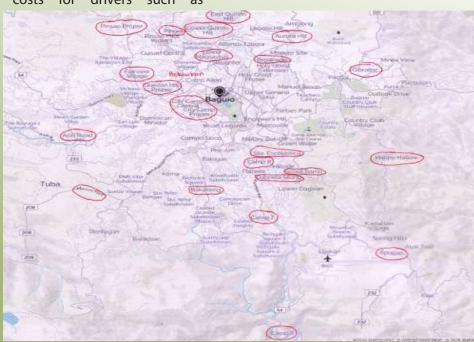


Figure 1. Barangay maps of Baguio city and La Trinidad, Benguet and location of respondents' residences

Opinion of Baguio City and La Trinidad, Benguet Residents on the Current Taxi and Planned PUJ Fare Increases



Awareness on proposed PUJ fare increase and the taxi fare hike

On average 81% and 79% of the respondents were aware of the proposed jeepney fare hike, and the taxi fire increase, respectively. Figures 2a and 2b present the awareness by respondent category. The most informed regarding the proposed jeepney fare hike were the drivers, students, and government employees, while the most informed regarding the taxi fare increase were the self-employed and drivers. Early on in the implementation of the taxi fare hike, it was noted that passengers tried to ask taxi drivers first if they are already calibrated or not before boarding the taxi, indicating awareness of the significantly higher rates for newly calibrated taxis.



Commuting behaviour in Baguio City and La Trinidad, Benguet

Commuting behaviour indicates to some extent the demand for jeepney services in Baguio city and nearby La Trinidad, Benguet. Overall 82% of interviewed residents in La Trinidad and Baguio city used PUJ services everyday -- around 90% of students and private employees, and 70% to 80% of government workers and self-employed workers (Fig. 3). Majority of those who use jeepney service every day ride two times a day. This is true for students, government workers, private employees and self-employed workers. About a quarter of students used jeepney services four times to more than five times a day while a third of the government workers who use jeepney ride four to five times a day. These results are not at odds with the result of Rañosa et al. (2017) where they found that the common commuter trip purpose in Baguio city is to go for work (23%) and to go to school (21%).

In relation to jeepney services demand, Rañosa et al. (2017) estimated that of the 11,289 units of

vehicles entering and exiting the central business district of Baguio city between the peak hours from 4:00-5:00pm, 23% are jeepneys. In addition, the result of the boarding and alighting surveys of the same authors, showed that the average load factor (or the capacity utilization) of these jeepneys is on average 82% for all trunk lines, with the green trunkline having the highest capacity utilization at 92%. Accordingly, the average number of trips (from an origin terminal to the destination and back) per day of jeepneys in Baguio city is around 7.5 varying from only 2.25 trips in the case of Beckel to as many as 15 trips per day in the case of Aurora Hill (Rañosa et al., 2017) and Pinget (authors' own interviews in 2018).

In the case of the demand for taxi services, most of the respondents use taxi services at least once a month, followed by once a week (Fig. 4). Overall, 7.2% of respondents claim to use taxi services every day. Among private employees, however, 15% claim to use taxi every day.

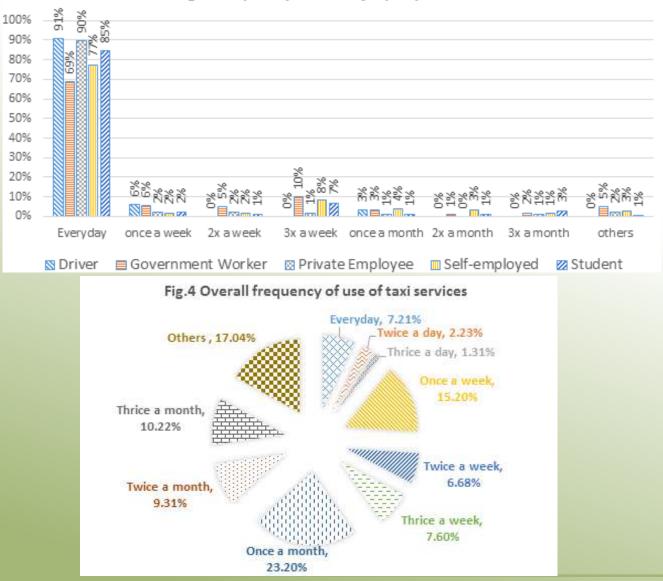


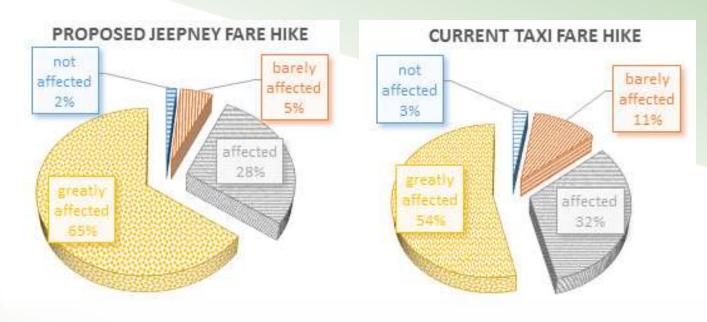
Fig.3 Frequency of use of jeepney services

How commuters will likely be affected by the proposed PUJ fare hikes

The average estimated budget for transportation for households in Baguio city and La Trinidad based on the survey is Php2639.67 per month which is roughly 13% of their average total household income. This result is much higher than the Family Income and Expenditure Survey (FIES) results in 2015 by the Philippine Statistical Authority (PSA) putting transport expenditure at about 5% of average total family annual expenditure or 4% of total family annual income for the Cordillera Administrative Region. Baguio City is the educational hub and represents the most urbanized areas in the CAR which may explain the larger share of transportation expense compared to the average of CAR. For students in one household, their average total transportation expenditure is estimated at Php65 per day or Php1837 per month. With the proposed 65% fare increase, this will increase to more or less Php100 per day. This is roughly a third of the minimum wage rate in Baguio City at Php285 per day.

We also directly asked the respondents their opinion on how they will be affected with the proposed increase in jeepney fare and how affected they are now with the current taxi fare hike (Figures 5a and 5b). Sixty-five percent claimed they will be greatly affected, while 28% claimed they will be affected if the proposed PUJ fare increase will be implemented. On the current taxi rates, majority of respondents think they are greatly affected while 32% think they are affected.

Figures 5a and 5b. How affected will you and your household members be if the JEEPNEY fares in Baguio and Benguet area will increase to Php14 minimum and Php2 every kilometer thereafter? ... with the increase in taxi fare?





How much commuters are willing to pay

Commuters' willingness to pay ranged from as low as Php6.50 to Php17.00 minimum fare for the first four kilometers and Php0.25 to Php3.00 additional for every kilometer thereafter (Figure 6). Most of the respondents (30%), however, suggested a minimum fare of Php10.00 with 22% voting for Php1.00 additional fare per additional kilometer thereafter. Some 4 to 5% of the respondents who suggested Php10 minimum fare were willing to pay Php1.50 or Php2.00 for every additional kilometer. Some respondents reasoned that they are not against the increase because jeepney operators and drivers also have their own families, but it should not be too much. Only 1% of all respondents were willing to pay Php14 to Php17 minimum and Php2 per kilometer thereafter.

The willingness to pay did not differ much among government workers, private employees and selfemployed workers. Even among drivers who are expected to be part of those who petitioned for higher fares, while they welcomed the proposed fare increase, a third of them suggested that Php10 pesos minimum and Php1 for every additional kilometer is just right. One Trancoville jeepney route driver (route that travels only short distance at minimum fare rate) for example said "Php14 minimum might be too much for our regular passengers; they might just walk rather than ride our jeepneys." Some jeepney drivers also mentioned that if the fare increase will push through, jeepney operators will benefit because they will likely increase the boundary charge by Php300.

Regarding taxi fares, the most common suggestion is to maintain the Php35 flagdown

rate, add Php2 per 250 meters thereafter, and no added charge per minute of travel time. This is quite unrealistic considering the increase in diesel price and inflation of spare parts. The next most-preferred rates are: 1) Php35 flagdown rate plus Php2 per 250 meters and Php1 per minute travel time; 2) Php35 flagdown rate plus Php5 per 250 meters and no charge per minute of travel time. Around a quarter of the respondents were willing to increase flagdown rate to more than Php35. A commonly suggested option is to increase the flagdown rate to Php40 and add Php2 per 250 meters thereafter and no additional charges per minute of travel time. Overall, most of the suggestions appeared to favor changes in the flagdown rate, and rate per travelled distance, but no or at most Php1 additional charge per minute of travel time. The possible reason is that Baguio city and La Trinidad, Benguet is rid with traffic most of the time.

Based on interviews with passengers, they observe that some taxi drivers now are less motivated to drive reasonably fast, and would not care whether to find a route where there is less traffic, or would generously allow pedestrians and other vehicles to pass to try to bid time. The advantage also of the additional payment per 200 or 250 meters tranche, not per kilometer, is that the taxi driver can be paid even with less than a kilometer distance, and there is no incentive for the taxi driver to find a longer route. Some taxi drivers, on the other hand, mentioned that operators increased the boundary payment by Php300 to Php500 as a result of the calibration and installation of required gadgets. Also, while the "modernization" required that all taxis should have "free wifi" among others, there are reports of non-availability of such service.

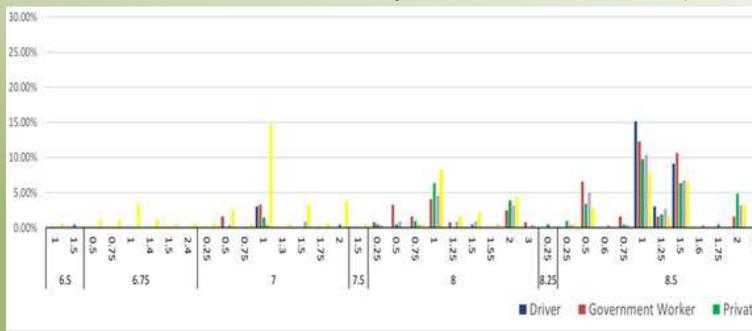
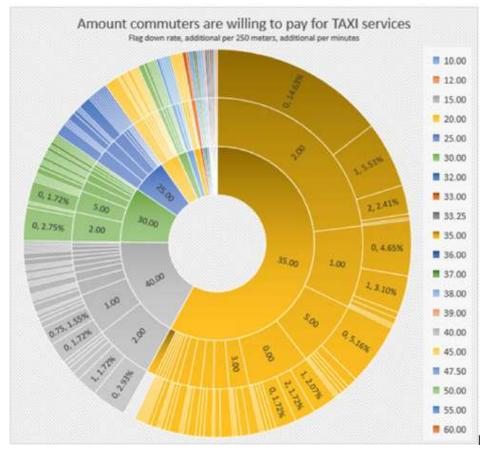


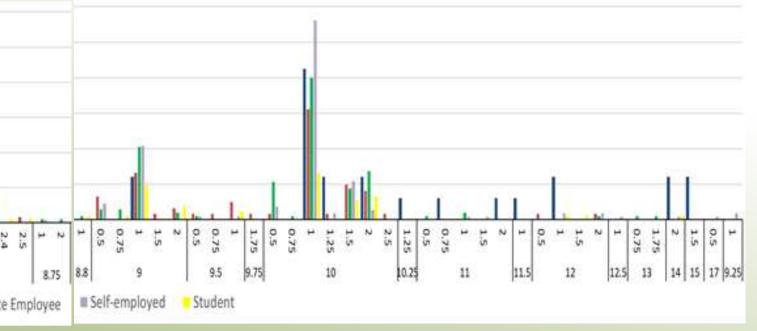
Figure 6. How much JEEPNEY fare (minimum and peso for ev

Figure 7. How much flagdown and peso for every additional 250 meters or every additional minute are you willing to pay for TAXI services?



First layer – suggested flag down rate Middle layer – suggested additional for every 250 meters Outer layer – suggested additional every minute

ery additional kilometer thereafter) are you willing to pay?





On the proposed PUJ fare increase

Based from the findings, the residentcommuters of Baguio city and La Trinidad in general are aware of the planned taxi fare increase before it was implemented, and the proposed PUJ fare increase. While many welcomed the planned fare increase considering the increase in the price of diesel, majority of the riding public think that increasing to Php14 minimum and Php2 every kilometer thereafter is quite too much. Most suggested increasing to Php10 minimum and Php1 to Php2 for every kilometer thereafter. A significant percentage of drivers interviewed in this study also shared that Php10 minimum is just right. It can be recalled that in the National Capital Region (NCR), Central Luzon and Southern Tagalog, at least five transport groups also petitioned the LTFRB asking for a Php2 increase in the minimum jeepney fare as early as September 2017.

Assuming decision makers take on the amount consumers are willing to pay, what will be the implication to the earnings of jeepney drivers and operators? Tables 2a and 2b present rough calculations of the net returns to jeepney operation considering the "boundary" payment to operator, diesel and other costs, the average number of trips per day, average number of passengers on board and average distance travelled. Taking the case of Baguio-La Trinidad route (Tomay line) at current prices and average route characteristics (Table 1), preliminary analysis show that drivers receive an estimated average gross earning of Php2464 per day or Php39424 per month. At the average boundary cost of Php743 per day, Php1204 diesel cost per day and Php200 daily dues to their association for parking and other fees, a Baguio-LTB Tomay driver gets only Php317 returns to his labor per day. This is around 50% reduction from their average returns of around Php700 per day when the diesel price is on average Php32 per liter. On the part of the operator who receives an average of Php743 boundary or jeepney rental fee

per day, at the average cost of Php6742 per month including capital recovery, maintenance and repair cost, and other expenses such as registration and BIR expenses, the average return to the operator is Php321 per day. This is the case of BGO-LTB route which is quite saturated according to drivers.

For the case of BGO-Pinget, also of the blue trunkline and known among drivers to be the "highest-paying" route because of the limited number of jeepney units operating based on the association's policies, they are able to operate for five days and around 15 trips per day. The average distance travelled for their passengers is 3.17 kilometers and passengers only pay minimum fare of Php8.50 for regular passengers and Php7.00 per students and senior citizens. Table 2b shows that on average, they get an estimated gross income of Php4332 per day, total cost of Php1810 per day, hence net returns of Php2247 per day. The resulting net profit-cost ratio of jeepney operation in this case is 1.78 which means for every peso invested in jeepney operation, the profit is Php1.78. This will almost double when the proposed increase will push through.

The findings of this study, particularly in the case of BGO-LTB Tomay line before the diesel price increase in 2018, are not far from the results of a study of jeepney operation in selected routes in Metro Manila by GIZ (2015). The jeepney daily cost structure showed that the vehicle boundary rental in 2015 ranged from Php619 to Php758, and drivers' net take-home pay ranged from Php574 to Php755 for end to end route lengths of less than five kilometer to routes travelling distance of 20-30 kilometers. The average annual repair and maintenance costs of jeepneys used in this study (Php47483 to Php74800 per year) were also not very far from the GIZ (2015) estimates of baseline jeepneys by route which ranged from Php19000 to Php70,000 depending on the end to end route distance.

Particular	Baguio city-La Trinidad-Tomay	Baguio city – <u>Pinget</u>
No. of months operation	12	12
No. of operating days	16 (MWFSu or TThSu schedule)	20 (5 days operation)
No. of trips/day	7	15
No. of passengers/trip	40	38
Average no. of kilometers travelled*	5.31	3.17
Average fare received	Php10.00	Php8.50
Average discounted fare received	Php8.00	Php7.00
% of passengers with discounted fare	60%	60%

Table 1. Route characteristics and assumptions for the case routes

The data and findings suggest that indeed the increase from Php32.00 diesel price to Php47.00 have greatly affected the net income from jeepney operations reducing its net profit-cost ratio by almost half for the lower end BGO-LTB (Tomay) of the driver-operator income spectrum and in the case of the higher end BGO-Pinget by more than 30%. With the average diesel price of Php47 and not considering the inflationary impact of the increased fuel cost, the estimated returns to labor of drivers and returns to capital of operators when computed per day is just a little over the minimum wage of Php285 per day. The proposed PUJ fare increases, on the other hand, will more than double the profitability of jeepney operations benefitting both operators and drivers.

Simulating the effect of the preferred rates of commuters on the profitability of jeepney operations show that profitability will still increase a bit relative to the situation prior to the 2018 diesel price increase. For the BGO-LTB (Tomay) route which operates only 3 to 4 days a week, the commuter preferred rate will still result to 50% and 30% increase in returns of operators and drivers, respectively. In the case of the BGO-Pinget, the increase in diesel price just reduced the net incomes of operators and drivers, but even with the increase in diesel price, jeepney operation is still highly profitable. Implementing the commuter suggested minimum fare rate in the case of such routes with high baseline profitability therefore will not jeopardize the earnings of drivers and operators.



10 INFORMING POLICY & PRACTICE

Table 2a.Preliminary enterprise budget for jeepney operation per day and simulations, case of
Baguio City-La Trinidad (Tomay line)

ltem	Before diesel price increase	Current prices	Proposed PUJ fare increase	Commuter preference fares
GROSS RETURNS	Php2464.00	Php2464.00	Php3942.40	Php2956.80
COSTS	5			
Operator (boundary)	742.86	742.86	1100.00	900.00
Capital recovery	146.37	146.37	146.37	146.37
Maintenance and repair	247.31	247.31	247.31	247.31
Other expenses (registration, etc.)	27.71	27.71	27.71	27.71
Subtotal cost	421.39	421.39	421.39	421.39
Driver gross	1721.14	1721.14	3335.20	2303.20
Fuel (diesel) cost	819.94	1204.29	1204.29	1204.29
Other expenses (parking, asso. fees, etc.)	200.00	200.00	200.00	200.00
Subtotal cost	1019.94	1404.29	1404.29	1404.29
Total cost	1425.54	1809.88	1809.88	1809.88
Net returns	1038.46	654.12	2132.52	1146.92
Net returns to cost ratio	0.71	0.35	1.43	0.75
Returns to operator	321.47	321.47	678.61	478.61
Returns to driver	701.20	316.86	1930.91	898.91

Table 2b.Preliminary enterprise budget for jeepney operation per day and simulations, case of
Baguio City-Pinget)

ltem	Before diesel price	Current	Proposed PUJ	Commuter
	increase	prices	fare increase	preference fares
GROSS RETURNS	4332.00	4332.00	7022.40	5016.00
COSTS				
Operator (boundary)	880.00	880.00	1300.00	1200.00
Capital recovery	210.00	210.00	210.00	210.00
Maintenance and repair	213.33	213.33	213.33	213.33
Other expenses				
(registration, etc.)	22.17	22.17	22.17	22.17
Subtotal cost	349.27	349.27	349.27	349.27
Driver gross	3452.00	3452.00	5722.40	3816.00
Fuel (diesel) cost	796.60	1170.00	1170.00	1170.00
Other expenses (parking,				
asso. fees, etc.)	35.00	35.00	35.00	35.00
Subtotal cost	831.60	1205.00	1205.00	1205.00
Total cost	1184.19	1557.60	1557.60	1557.60
Net returns	3151.14	2777.73	5468.13	3461.73
Net returns to cost ratio	2.67	1.79	3.52	2.23
Returns to operator	530.73	530.73	950.73	850.73
Returns to driver	2620.40	2247.00	4517.40	2611.00

On the current taxi fare rates

Although overall, only 7% of respondents claimed to use taxi services every day, a significant percentage in most sectors use taxi once, twice or thrice a week which impacts their transportation budget. Hence majority of the commuters also think they are greatly affected with the recent increase in taxi fares. This study was not able to develop full estimation of the enterprise budget for taxi service operations in Baguio city in the interest of time as this is more complicated, but non-systematic interviews with old-time taxi drivers mentioned that before the taxi fare hike, a driver operating 12 hours or "half-set" in taxi driver parlance nets an average of Php500 per day. With the fare increase, the gross income per day increased but the operators also raised the vehicle rental or boundary charge by Php300 to Php500. With the increase in fuel cost, increase in boundary charge and the apparent adjustment period of the riding public as indicated by the reduced demand for taxi services, a taxi driver is left averaging almost the same as the Php500 per day net take home income per day. The dynamics of taxi demand or commuters' behavior and diesel price in the next few months would therefore define the ultimate impact of the taxi fare increase on drivers' returns to labor and welfare and impact to commuters. For operators, the increase in boundary will take care of the investment cost of calibration and installed gadgets, so that after two to three months, the increased boundary payment will more likely translate to increased net returns to capital even in consideration of inflation.

According to Grau and Romeu (2012), key parameters in analyzing taxi services are demand and supply for taxi services, the waiting time of users and the cost of the different involved actors. Further study considering in detail forecast of these factors is necessary. Meantime, it may be reasonable to consider the reasonable preferred rates of commuters, that is, flagdown rate of Php35.00 plus Php2 per additional 250 meters or around Php10 per additional kilometer; and reducing the additional charge per minute of travel time from Php2 to Php1.

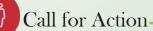


Cited References

- GIZ (2015). Jeepney Market Transformation Program - Inputs to DOTC NAMA Document. Final Report. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
- Lacsamana, H. 2018. Review of P14 fare hike plan assured. Baguio Midland Courier. May 27, 2018.
- Opiña, R.A. 2018. LTFRB-CO to decide on P14 jeep fare hike petition. Baguio Midland Courier. June 10, 2018.
- PSA (Philippine Statistical Authority). 2017. 2015 Family Income and Expenditure Survey (FIES)

Additional Tables. Available at https://psa.gov. ph/content/2015-fies-additional-tables. Downloaded on June 22, 2018.

- Rañosa, L.L., Fillone, A.M., and De Guzma, M.P. 2017. Jeepney service operation and demand in Baguio City, Philippines. Proceedings of the Eastern Asia Society for Transportation Studies. Vol. 11. 2017.
- Grau and Romeu. 2012. A mathematical approach to the modelling of taxi services. Available at http://transp-or.epfl.ch/heart/2012/l atsis2012_submission_164.pdf. Downloaded on June 22, 2018.



Consider increasing the PUJ fare from Php8.50 to Php10.00 minimum and Php1.50 increase for every additional kilometer thereafter. This rate is affordable to an average commuter, and maintains the profitability of jeepney operation for both drivers and operators.

Consider commissioning immediately a detailed study of the dynamics of demand and supply for taxi services in Baguio city; and cost structure of players in the taxi service industry; and meantime, maintaining the taxi flagdown rate to Php35.00; reducing the additional fare for distance travelled to Php2 per additional 200 meters or Php10 per additional kilometer; and reducing the additional charge per minute of travel time from Php2 to Php1. Consider reviewing and regulating the policies of PUJ and taxi drivers and operators' association so that policies are beneficial to all major stakeholders - drivers, operators and commuters. Too many jeepney units allowed operating in one route impact drivers and operators' welfare, and traffic management. Undersupply, on the other hand, largely benefits drivers and operators to the detriment of commuters' convenience.

Consider reviewing the LTFRB protocols in the implementation of fare hikes and reductions to ensure that all stakeholders are properly consulted before any policy is implemented. Explore systems of consultation other than public hearing to ensure proper representation of all sectors.

ABOUT THE MATERIAL

Informing Policy and Practice is published by the Institute of Social Research and Development of the Benguet State University. It synthesizes findings from research and development (R&D) activities, or presents results of quick survey and opinion poll on social, economic and policy issues and concerns affecting the Cordillera region. It also distills key messages and provides recommendations for the information and consideration of decision- and policy-makers.

This maiden issue presents the results of a quick survey and opinion poll conducted to residents and commuters in Baguio city and La Trinidad, Benguet on the concern regarding the recent increase in taxi fares and the proposed increase in PUJ fares in the Cordillera Administrative Region.



FOR MORE INFORMATION PLEASE CONTACT:

THE DIRECTOR Institute of Social Research and Development Research and Extension Building, BSU Km 5. La Trinidad, Benguet Email Address: isrd@bsu.edu.ph Tel/Fax:(074) 422-1877



Published by:

Benguet State University La Trinidad, 2601, Benguet, Philippines