

# Status of the Transportation Business in Ilocos Sur

CHRISTOPHER BUENO, Ph.D.  
FLORIDA URSULOM, MPA  
ELEANOR BELIZAR, MHSS

## Abstract

*This study sought to determine: 1) the status of transportation business and public utility in terms of: number and type of employees as managed by transportation owners/managers of the PUB and PUU, gross income commission of the employees and routes of PUB and PUU; 2) the specific needs and problems of the transportation owners/managers in terms of: motor vehicle maintenance and condition, drivers' quality performance based on productivity and profitability, management's perception of the drivers' quality performance, vehicular accidents and apprehension, and other management problems and needs, and 3) if there is a significant difference of the responses of the transportation owners/managers of PUB and PUU regarding the identified problems and needs of the public utility service in the province of Ilocos Sur.*

*This study was conducted through a survey analysis on the transportation services of the public utility vehicles for bus and jeep with franchise destination route in the territorial jurisdiction of Ilocos Sur.*

*The PUB drivers have varied gross income/commission from 7% to 20% while PUU drivers have higher gross income for they are the owners and had no conductors. Likewise, a commission of 5% to 10% is given to PUB conductors and 10% to 15% for PUU conductors. Further, majority of PUB respondents had a franchise route of Tugan-Laoag while PUU respondents have varied franchise route in the lowland and upland municipalities of Ilocos Sur. In terms of specific needs and problems of transportation owners, majority responded that their motor vehicles are in good condition having a rating of Very Good. Drivers also showed good treatment to their passengers and this had been compensated by similar treatment from transportation owners/managers. Then it comes to violations committed by drivers, they committed only few violations with overloading as the most common violation. Lastly, there was no significant difference in the responses of transportation owners/managers regarding the identified needs and problems of the public utility service. It is therefore recommended that entrepreneurs should venture more into the transportation business considering its profitability.*

## Introduction

Transportation is the act of conveying persons and goods from one place to another. As people seek to make transport facilities more efficient, they have endeavored to move people and property at the least time, effort and money. Improved transportation has helped make possible progress towards better living.

The public utility vehicle is, therefore, directed to solve the transportation problems of the people, particularly those whose residence is fur from the town proper or a place classified as an urban area. There are three classifications of utility vehicles namely: distance transport services, medium-distance transport services, and short-distance services. These vehicles have permit to operate through transportation franchise issued by the Department of Transportation and Communication (DOTC). Although the existence of the utility services in the province has been able to help the transportation needs of the community, there are still problems confronting the operation of such services especially now that there seems to be a glut in the transportation business. ht order to address these transportation problems, the researchers analyzed the total scenario of the transportation services in the province of Ilocos Sur.

Since understanding of public safety is necessary in the area of policies and mandates by the Land Transportation Office (LTO), this study hoped to give significant information about the management of public transportation system in the province of Ilocos Sur. Hence, it could pinpoint areas for improving the services of public utility vehicles like mini-buses and jeepneys in the province.

## Objectives of the Study

This study was conducted to assess the transportation industry in the province of Ilocos Sur. Specifically it aimed to:

- I. Determine the status of transportation business and public utility in terms of:
  - a. number and type of employees managed by transportation owners/managers of the PUB and PUJ;
  - b. gross income/commission of the employees in PUB and PUJ;
  - c. routes of PUB and PUJ;
  - d. motor vehicle maintenance and condition;
  - e. drivers' quality performance level on productivity and profitability; and
  - f. management's perception of the drivers' quality pcrfonnance.

2. Identify the specific needs and problems of the transportation owners/managers in
  - a. vehicular accidents and apprehension; and
  - b. other management problems and needs
3. Determine if there is a significant difference of the responses of the transportation owners/managers of PUB and PUJ regarding the identified problems and needs of the public utility service in the province of Ilocos Sur.

## **Scope and Limitation of the Study**

This study was limited to motor vehicles with "For Hire" status. Managers and owners of public utility vehicles plying the territorial jurisdiction of Ilocos Sur, both lowland and upland were the subjects of the study. Data needed for this study were generated from October to November, 2000.

## **Review of Related Literature**

Transportation is indispensable in the quest for development. The quality of transportation services being offered to the public is one indicator whether or not the needs of the people are being met. While the owners/managers have direct concern on the management of the transportation business, quality transport service depends so much on the performance of the drivers of the public utility vehicles. Although there are many administrative orders and mandates coming from the DOTC as standard management operation of transport services, which are also the guidelines in providing safe and quality service for public utility vehicles, there is a need to study the specific needs and concerns of the transportation owners/managers in the Province of Ilocos Sur.

There are four classifications of motor vehicles in transport services as provided in Republic Act No. 4136, as amended by Presidential Decree No.1934 as implemented by Administrative Order No. 84 AO-DIR-005, Section 2 of this mandate: a) private, b) for hire, c) government and d) diplomatic.

The other motor vehicles' classification are also important in this study in as much as recurring public utility accidents can also be directly involved in this problem. The transport users may constitute an average 70% of vehicular accidents for public vehicles while 30 % for private, government and diplomatic motor vehicles. However, in urban areas, there are more private vehicles than public utility vehicles. The study conducted by the Current Regional Transportation Improvement Plan of the United States particularly in Southern California (1997 Transportation Indicators:1994) revealed a high percentage with 70.9% for driver alone as a mode of transportation to work. While public transportation has a low

percentage of about 6.0%. The Philippine setting has quite the same condition as to these findings, however, this could be true in the urban area. In terms of vehicular accidents the comparative ratings depend on the percentage of motor vehicles in the province. However, higher transport services for public utilities vary in its geographical needs and income level of the place. The increase in volume of motor vehicles in the road does not only create a problem of vehicular accidents but also makes the time consumed in the trip longer.

Based on the related studies, the common problems of the transportation owners/managers are: 1) vehicular accidents, 2) reckless imprudence of the drivers, 3) reckless imprudence of the motor vehicles and other transport services, 4) the legal transaction of compensatory damages involved in the vehicular damages, and 5) vehicular congestion.

**It is** clear that the economic viability and regulation of motor vehicles are emphasized including the reasonable rates for utility services. The management functions of the transportation owners/managers have been well regulated by the DOTC. Usually a private enterprise has a wide latitude in the logistics on the productivity level, however, this is the limitation of the transportation owner/manager because the supervisory and regulatory functions are performed by the office.

From this analysis of the business management functions, the transportation enterprise has a more rigid supervision and regulation by the DOTC. This seems to be a problem because the idea of business is within the conceptual framework of maximum productivity and less bureaucratic control.

The justification of a regulatory transport system which becomes a semi-business management function is the productive purpose of the enterprise. It is clear that transportation owners/managers have been classified within the business sector but the government has to safeguard public welfare in transport services. The rationale of the full control and regulation of the DOTC is the classification of business according to public welfare. That's why, the transportation enterprise is considered as "public transport utility service." Thus, the transport enterprise must have a low and reasonable rate for the services offered and must welcome full government regulation and control to reduce the risk of social disaster and for public protection. Moreover, it must safeguard the public from abuses of the institutional business with the sole purpose of maximum profitability.

Primarily, the main concern in the public utility service is the safety of the passengers to prevent the loss of human life and property. This is the reason why proper license is given to those who intend to work as drivers and even conductors for specific types of service. If public safety is compromised the transportation office has to be more vigilant. The government is requiring the transport business to follow the policies and mandate about transportation services to prevent vehicular accidents and for public safety. A violation of policies or mandates such

as reckless driving would cause a fine or even to the extent of revocation, suspension or cancellation of license. The transportation owners/managers are also liable in the maintenance of public utility vehicles and a violation of such mandate creates a problem for the transport management operation.

There are penalties for drivers violating any of the mandates for public safety in the operation of the utility vehicle including motorized vehicles under Republic Act No. 4136 (including B.P. 398). The transportation owners/managers have also a problem in the management operation if such violation occurs.

Records from the Land Transportation Office (1994), shows that the degree of offense was from "light" to "serious." However, good driving is not an assurance for not being apprehended because motor vehicle maintenance is also included in the mandate.

It is also clear that a defensive and good driver can still be apprehended by a police officer for the mechanical and electrical condition of the public utility. These have been identified as corrupt practices in the apprehension of motor vehicles with many possibilities of pinpointing violation from the manner of driving to a shallow mechanical problem of a vehicle. Public utility vehicles are always prone to apprehensions as the data show that an average 22.89 % for both the violations on the manner of driving and maintenance of the vehicle. It is now one of the current problems confronting the transportation owners/managers because of recurring apprehension of their public utility vehicle.

### **Type of Service**

The type of service is essential to serve the passengers in different specific geographical destination. The reason for such classification is based on the motor vehicle being used by the passengers. Getting a franchise and the submission of other requirements to operate the utility transport service has also been the responsibility of the owner. It was found out that many of the motor vehicles are not granted with a franchise, therefore, such operation without proper franchise requirements would create a problem for a colorum operation.

This holds true in the colorum problem of the PUJ owners/managers of Ilocos Sur and nearby provinces. These operators of the PUJ are barred to operate in specific geographical destination through the use of the national highway. The BOT acted on this problem and consequently disseminated Memorandum Circular Number JC-JC-83-033 dated May 17, 1983 for the Rationalization of Colorum PUJs in the provinces of La Union, Ilocos Sur, and Abra. Based on this mandate, the transportation office approved a study on the "Methodology on the Legalization Program for the Provinces of La Union, Ilocos Norte, Ilocos Sur and Abra." The methodology consisted of surveys, analysis of data, identification of problems associated with colorum operations and recommendations and actions to be taken.

## Conceptual Framework of the Study

The problems and needs of the transportation owners/managers are presented as independent variables. These include: (1) number and type of Transportation Owners of PUB and PUJ; (2) number and type of Transportation Employees; (3) Origin-Destination Data of passengers and utility vehicles; and (4) type of Roads. The dependent variables are the assessment of the Transportation Owners/Managers on (1) Motor Vehicle Maintenance and Conditions, (2) Drivers' Quality Performance, Productivity and Profitability, (3) Franchise Operation and Registration Problems/Needs, (4) Vehicular Accidents and Apprehensions, and (5) Other Management Transportation Problems and Needs.

## Methodology

This study was conducted through a survey analysis of the transportation services of the public utility vehicles for bus and jeep with franchise destination route in the territorial jurisdiction of Ilocos Sur. The first part is the status of the infrastructure development in the transportation services. In this part, the research analysis focused on the origin destination data for passengers and movement of the public utility vehicles within the province. It also included the kilometerages of the road including the number of public utility operators in the area.

The *motor vehicle maintenance and condition* was evaluated through a research analysis using the BLT Form or Motor Vehicle Inspection Report. On the other hand, *vehicular accidents and apprehensions* including some areas on the manner of driving utilized the provision of Republic Act No. 4136 through the degree of violation and liability of the driver or operator. The other variables were determined by the descriptive responses of transportation owners/managers regarding their problems and needs in the public utility services in Ilocos Sur.

The respondents of this study were the managers and owners of PUB and PUJ of Ilocos Sur whose vehicles ply the different parts of Ilocos Sur both lowland and upland routes.

The frequency count and percentage were utilized to assess the current trend of transportation services as identified in the lowland and upland municipalities. On the other hand, to determine the specific needs and problems of transportation owners/managers, mean scores and ranks were used with the following indicators based on: the BLT Form or Motor Vehicle Inspection Report as mandated in Republic Act No. 4136: 1) Poor-R, 2) N-Normal, 3) G-Good/Safe, 4) VG-Very Good and 5) OS-Outstandingly Safe(Newly Installed).

The descriptive indicators 5 - Very often, 4 - Often, 3 - Moderately often, 2 - Seldom and 1 - Not at all were used for the responses on passengers' perceptions on the driver's quality performance, management, and vehicular apprehensions.

In the area of other violations committed by the driver and other common management problems, the researchers utilized the frequency count and rank to determine the degree of violation committed and problems encountered by the management in the transport services for PUB and PUJ.

Finally, this study used the Analysis of Variance (ANOVA) to analyze the responses of transportation owners and managers of PUB and PUJ in terms of the identified problems and needs of the public utility services in Ilocos Sur. The areas of concern in the ANOVA were passengers' perception of the drivers' quality performance, management's perception of the drivers' performance and vehicular apprehensions.

## Discussion of Results

This section deals with the presentation, analysis and interpretation of the data gathered in this study.

### The Status of the Transportation Business and Public Utility Services

PUJ respondents were divided into "lowland" and "upland" municipalities. The "lowland" respondents comprised the transportation owners/managers in the municipalities of Bantay, Candon, Magsingal, San Esteban, San Juan, Santa, Santiago, Sta. Cruz, Sta. Lucia, Sto. Domingo, Sugpon, Suyo, Tagudin, and Vigan; while "upland" respondents comprised those from Alilem, Banayoyo, Burgos, Del Pilar, Galimuyod, Lidlidda, Salcedo, and San Emilio.

Table I presents the wages of the drivers and conductors. For the PUB respondents, majority (23.68%) give 14% of the gross income to their drivers, while 15.79% of respondents give as much as 15% of the gross income. For the conductors, majority or 23.68% transportation owners/respondents give them 5% to 7% of their gross income, followed by 21.05 respondents who give 10% of the gross income.

Majority of the PUJ lowland respondents (37.62%) receive 100% of the gross income because they are the owners of the vehicle. Other transportation owners (10.89 %) give their drivers 30% of the gross income.

Table 1. Percentage distribution of the gross income commission of employees.

Gross Income Commission	PUB		PUJ				TOTAL PUJ	
	F	%	Lowland		Upland		F	%
			F	%	F	%		
<b>Driver</b>								
7 % of G.I.	4	10.53						
7.5% of G.I.	4	10.53						
9 % of G.I.	2	5.26						
10 % of G.I.	2	5.26						
11 % of G.I.	3	7.89						
14 % of G.I.	9	23.68						
15 % of G.I.	6	15.79						
19 % of G.I.	1	2.63						
20 % of G.I.	3	7.89						
30 % of G.I.	-	-	11	10.89	16	15.84	27	26.73
100 % of G.I.	4	10.53	38	37.62	32	31.68	70	69.30
No response	-	-	2	1.98	2	1.98	4	3.96
<b>Conductor</b>								
None	-	-	43	42.57	25	24.75	68	67.32
4 % of G.I.	1	2.63						
5 % of G.I.	9	23.68						
6 % of G.I.	2	5.26						
7 % of G.I.	9	23.68						
7.5% of G.I.	1	2.63						
8 % of G.I.	1	2.63						
9 % of G.I.	3	7.89						
10 % of G.I.	8	21.05	4	3.96	16	15.84	20	19.80
15 % of G.I.	4	10.53			4	3.96	4	3.96
No response	-	-	4	3.96	5	1.98	5	5.94

For the PUJ upland respondents, majority or 32 (31.68%) receive 100% of gross income or are owners of the vehicle. The other transportation owners/managers (16 or 15.84%) give their drivers 30% of the gross income. Sixteen or 15.84% of the respondents give 10% of the gross income and four or 3.96% respondents give 15% of the gross income.

Table 2 shows the routes of the PUB and PUJ in Iocos Sur. Majority of the PUBs or 20 (52.63%) have the route of Vigan-Laoag, followed by the route of Vigan-Bangued with 10 or 26.32%. Some or four (10.53%) travel the Laoag-Carmen route while others or three (7.89%) travel the Vigan-San Fernando route and one (2.63%) travels the Vigan-San Fernando-Candon route.



Table 2. Distribution of respondents according to the routes of the PUBs and PUJs.

Routes	PUB		PUJ				TOTAL PUJ	
	F	%	Lowland		Upland		F	%
			F	%	F	%		
Vigan-Sta. Maria			8	7.92			8	7.92
Tay-ac-Vigan-Sinait			1	0.99			1	0.99
Vigan-Sto. Domingo			2	1.98			2	1.98
Vigan-aoag	20	52.63						
Vigan-Sn. Fernando	3	7.89						
Wigan-Sn. F&do-Candon	1	2.63						
Wigan-Sineit			11	10.89			11	10.89
LaOeg-Carmen	4	10.53						
Vigan-Bangued	10	26.32						
Vigan-Narvacan			1	0.99			1	0.99
Banayoyo-Candon					5	4.95	5	4.95
Burgos-Sta. Maria					5	4.95	5	4.95
Galimuyod-Candon					5	4.95	5	4.95
Candon-Lidlidda					5	4.95	5	4.95
Tagudin-Del Pilar					5	4.95	5	4.95
Candon-Salcedo					5	4.95	5	4.95
Candon-San Emilio					5	4.95	5	4.95
Candon-Narvacan			5	4.96			5	4.95
Tagudin-Candon			10	9.90			10	9.90
Suyo-Tagudin					5	4.95	5	4.95
Tagudin-Sn.Fernando			5	4.95			5	4.95
No response			8	7.92	10	9.90	18	17.82

Majority or 38 (37.62%) PUJs have the route of Vigan-Sinait; 10 or 9.90% have the route of Tagudin-Candon; 8 or 7.95% have the route of Vigan-Sta. Maria; 5 or 4.95 % have the routes of Candon-Narvacan and Tagudin-San Fernando; 2 or 1.98% have the route of Vigan-Sto. Domingo; and one or 0.99% has the route of Tay-ac-Vigan-Sinait and Vigan-Narvacan. It can be deduced therefore that PUJ operators prefer to ply along the national highways where passengers can be expected anytime of the day. This is considered more profitable compared to routes that can be classified as rural.

According to the respondents, all upland-bound PUJs in each municipality have one route. Those from Banayoyo have the route Banayoyo-Candon; those from Burgos, have the route Burgos-Sta. Maria; those from Galimuyod, have the route Galimuyod-Candon; those from Lidlidda, have the route Candon-Lidlidda; those from Del Pilar, have the route Tagudin-Del Pilar, those from Salcedo, have the route Candon-Salcedo; those from San Emilio, have the route Candon-San Emilio; and those from Suyo, have the route Suyo-Tagudin.

### Motor Maintenance and Condition

Table 3 shows the parts of the vehicle which need to be maintained by the transportation owners/managers to minimize or avoid problems relative to the operation of the vehicle. Said parts are ranked according to the owners/managers' priority.

Table 3, Vehicle parts which need to be maintained as assessed by respondents.

VEHICLE PARTS	PUB		PUJ			
	X	Inter-pretation	Lowland		Upland	
			X	Inter-pretation	5	Inter-pretation
Body	4.3428	OS	3.4909	VG	3.1944	G
Doors/Windows	4.0285	VG	3.6545	VG	3.3333	VG
Windshield	4.0000	VG	3.3272	VG	3.1388	G
Capacity marking	4.0285	VG	3.4545	VG	3.1944	G
Appearance	3.8857	VG	3.3818	VG	2.9722	G
Chassis	3.9714	VG	3.6363	VG	3.1388	G
Spring	4.0285	VG	3.6363	VG	3.9444	VG
Seat	3.9142	VG	3.3636	VG	3.1111	G
Battery	3.9428	VG	3.7454	VG	3.2777	G
Fuel tank	<b>4.0000</b>	VG	3.9636	VG	3.7777	VG
Ignition system	3.9428	VG	3.6545	VG	3.8333	VG
Engine	3.8571	VG	3.0909	G	3.0000	G
Headlights	3.7714	VG	3.8181	VG	3.8888	VG
Stop lights	3.8000	VG	3.6181	VG	3.1666	G
Park lights	4.0000	VG	3.3272	VG	3.3333	VG
Signal lights	4.0000	VG	3.5636	VG	3.2500	G
Interior lights	3.9428	VG	3.5090	VG	3.0277	G
Dimmer lights	3.9714	vG	3.3272	VG	3.3611	VG
Tires	4.0000	VG	4.0363	VG	3.7500	VG
Wheels	4.0000	VG	3.9454	VG	3.9444	VG
<b>Steering</b>	4.0000	VG	4.2363	VG	3.9166	VG
<b>Wiper</b>	3.9428	VG	3.3818	VG	3.3333	VG
Transfer lever	3.9142	VG	3.2545	G	3.3055	VG
Clutch system	3.9428	VG	3.4727	VG	3.4444	VG
Horā	3.9428	VG	3.6181	VG	3.5833	VG
Footbreak	3.8571	VG	3.4727	VG	3.4444	VG
Handbreak	3.4285	vG	2.8363	G	3.0555	G
Panel gauges	3.8571	VG	3.6000	VG	3.4444	VG
Smoke emission	3.8571	VG	3.2727	G	3.3888	VG
<b>Overall X</b>	<b>.9369</b>	<b>VG</b>	<b>.5410</b>	<b>VG</b>	<b>3.3984</b>	<b>VG</b>

Legend: OS - Outstandingly Safe/Newly installed (4.30-5.00)

VG-- Very Good/Very satisfactory (3.30-4.29)

G-- Good/Satisfactory (2.30-3.29)

N - Normal (1.30-2.29)

P-Poar (1.00-1.29)

The PUB has an outstandingly safe body with a mean score of 4.3428. This shows that the PUB has been newly acquired and properly maintained as a public transport vehicle of Ilocos Sur. The PUBs are also granted provincial operation franchise in Ilocos Norte, La Union, and Pangasinan. For the PUJ, all vehicle parts are in "Very Good" condition except for the engine, transfer lever, handbrake and smoke emission which are rated "Good.". The steering has a "Very Good" condition with a mean score of 4.2363. This is an important vehicle part for lowland PUJ as it would control and allow easy wheel operation to prevent vehicular accidents especially in the curves of the national roads.

Most of the motor vehicle parts of PUBs and PUJs are in "Very Good" condition. These are doors/windows, windshield, chassis, battery, ignition system, stop lights, park lights, signal lights, dimmer lights, wiper, transfer lever and clutch system. In the transport operation of buses and jeeps, these are the most important parts which make the vehicle technically operational. The transportation managers/owners have to maintain these aforementioned parts to avoid the non-operation of the vehicle.

Table 4 shows the quality of drivers' performance as assessed by managers. They have an over-all rating of 4.30 with an interpretation of "Very Often", 4.62 for PUB; 4.27 for lowland PUJ; and 4.01 for upland PUJ

**Table 4. Quality of drivers' performance as assessed by managers.**

ITEMS	PUB		PUJ			
	X	Inter-pretation	Lowland		Upland	
			X	Inter-pretation	X	Inter-pretation
Prompt and courteous to the passengers	4.67	Very often	4.56	Very often	4.41	Very often
Honest to deal with the passengers	4.69	Very often	4.41	Very often	<b>3.88</b>	Often
Bring to the desired destination	4.69	Very often	4.48	Very often	4.15	Very often
Patient in waiting to the needs of the passengers	4.36	Very often	4.24	Very often	4.24	Very often
Considerate in extending help to those passengers with extra baggage/loads	4.64	Very often	4.30	Very often	4.12	Very often
Keen in solving complaints of passengers	4.50	Very often	4.22	Very often	3.53	Often
Waits for more passengers before leaving the terminal	3.86	Often	4.00	Often	4.00	Often
Drives carefully for the sake of the passengers	5.00	Very often	4.56	Very often	4.79	Very often
<b>Overall X</b>	<b>4.62</b>	<b>Very often</b>	<b>4.27</b>	<b>Very often</b>	<b>4.01</b>	<b>Very often</b>

Legend: Very often (4.01-5.00)  
Often (3.01-4.00)

Moderately often (2.01-3.00)  
Seldom (1.01-2.00)

The item "wait for more passengers before leaving the terminal" has an interpretation of "Often" with the following mean rating: (a) 3.86 for PUB and (b) 4.00 for lowland and upland PUJs. It would be noted that PUB and PUJ operators have higher commission if there are more passengers leaving the terminal.

On the other hand, the item "clean and wash the PUJ/PUB before and after operation", the PUB maintained higher rating than the PUJs. It has a rating of 4.81 compared to 3.96 for lowland and 3.76 for upland PUJs. The PUB respondents have a greater regard for the maintenance of cleanliness of the vehicles and a higher degree of awareness in cleaning and washing after the operation than the PUJs.

The PUBs and lowland PUJs are more honest in dealing with financial matters with mean rating of 4.81 and 4.11, respectively, than the upland PUJs which only have 4.00 with an interpretation of "Often." The same trend is observed for the item "keen in solving complaints of passengers" with 4.50 for PUB, 4.22 for lowland PUJ and only 3.53 for upland PUJ.

The PUB drivers and conductors have a rating of "Very often" ( $x=4.11$ ) for the item "requesting for additional commission for work well done", "Often" ( $x=3.31$ ) for lowland PUJ and "Moderately often" ( $x=4.4$ ) for upland PUJ.

In this assessment, the quality of drivers' performance of PUBs is higher than the PUJs. However, the lowland PUJs are more productive than the upland PUJs.

It is shown in Table 5 that there is "Seldom" vehicular apprehension committed by the drivers as assessed by transportation owners with an overall rating of 1.43. The PUB has a mean score of 1.61 while 1.33 and 1.35 for lowland PUJ and upland PUJ, respectively. However, there are times or instances when the PUJ had no apprehension at all. For the lowland PUJ, the item "falsely or fraudulently representing as valid and in force, a delinquent suspended or revoked license" has an interpretation of "Not at all" with a mean rating of 1.04 and 1.06 for upland PUJ. The driver's license has been an important legal document for PUJ drivers to operate a franchise utility vehicle. They have always been responsible in renewing and getting proper license from the DOTC.

The other items with an interpretation of "not at all" for the upland PUJs are (a) driving a vehicle with exceptionally loud horns, ( $x=1.09$ ); (b) driving vehicle with delinquent, suspended or invalid registration, or without the proper license plate for the current registration year ( $x=1.06$ ); (c) using or attempting to use a fake license, identification card, registration certificate, vehicle plate, tag or sticker ( $x=1.06$ ); and (d) making, manufacturing, distributing or selling a license, identification card, certificate of registration, number plate, tag or imitation sticker like those issued by the Bureau ( $x=1.06$ ).

Table 5. Vehicular apprehensions committed by the drivers as assessed by transportation owners.

Vehicular Accidents and Apprehensions	PUB		PUJ			
	X	Interpretation	Lowland		Upland	
			5	Interpretation	5	Interpretation
Failure to give right of way for police and other emergency vehicle giving audible signal.	1.9	Seldom	1.60	Seldom	1.66	Seldom
Allowing passengers to ride on board or hitch to the vehicles.	1.68	Seldom	1.47	Seldom	1.89	Seldom
Driving or parking on sidewalk	1.58	Seldom	1.45	Seldom	1.71	Seldom
Obscured or dirty plates	1.38	Seldom	1.38	Seldom	1.34	Seldom
Defective headlights, taillights, stoplights, wipers, and other accessories	1.78	Seldom	1.55	Seldom	1.46	Seldom
Not signaling when starting or stopping	1.65	Seldom	1.75	Seldom	1.63	Seldom
Illegal parking	1.58	Seldom	1.22	Seldom	1.31	Seldom
Failure to carry the Official Receipt (OR) or Certificate of Registration	1.65	Seldom	1.40	Seldom	1.71	Seldom
Operating unsafe, unsightly or dilapidated vehicle	1.75	Seldom	1.18	Seldom	1.17	Seldom
Unauthorized use of improvised plate	1.55	Seldom	1.22	Seldom	1.17	Seldom
Driving a vehicle with passengers in excess of capacity	1.55	Seldom	1.36	Seldom	1.60	Seldom
Driving a vehicle with horns that emit exceptionally loud, startling or disagreeable sound	1.55	Seldom	1.33	Seldom	1.09	Not at all
Driving a freight or cargo vehicle in excess of authorized capacity	1.70	Seldom	1.22	Seldom	1.54	Seldom
Driving a vehicle with defective braking system	1.55	Seldom	1.18	Seldom	1.20	Seldom
Reckless driving	1.62	Seldom	1.89	Seldom	1.34	Seldom
Obstructing driveway	1.58	Seldom	1.29	Seldom	1.34	Seldom
Failure to sign the license or driving with unsigned license	1.65	Seldom	1.16	Seldom	1.23	Seldom
Driving with delinquent or invalid license	1.55	Seldom	1.36	Seldom	1.20	Seldom
Driving a vehicle with delinquent, suspended or invalid registration, or without the proper license plate for the current registration year	1.62	Seldom	1.13	Seldom	1.06	Not at all
Driving a vehicle without a valid license	1.50	Seldom	1.18	Seldom	1.14	Seldom
Driving a vehicle while under the influence of liquor or narcotic drug	1.50	Seldom	1.29	Seldom	1.4	Seldom
Using or attempting to use a fake license, identification card, registration certificate, vehicle plate, tag or sticker	1.50	Seldom	I.II	Seldom	1.06	Not at all
Falsely or fraudulently representing, as valid and in force, a delinquent suspended or revoked license.	1.48	Seldom	1.04	Not at all	1.06	Not at all
Making, manufacturing, distributing or selling a license, identification card, certificate of registration, number plate, tag or sticker in imitation of those issued by the Bureau.	1.72	Seldom	1.13	Seldom	1.06	Not at all

The aforementioned items revealed that transportation owners/managers of upland PUJs are more concerned with the immediate transportation needs of passengers in the upland municipalities. It should be noted that with the poor road networks, upland PUJs have been modified to suit the rugged road terrain.

Table 6 reveals other violations committed by drivers. Said violations were ranked according to the frequency of violations.

**Table 6. Other violations committed by the driver.**

OTHER VIOLATIONS COMMITTED BY THE DRIVER	PUB			PUJ					
				Lowland			Upland		
	F	%	Rank	F	%	Rank	F	%	Rank
Wearing slippers instead of shoes	6	15.79	3				18	36	1
Driving under the influence of liquor							6	12	4.5
Not keen in solving problems of passengers							6	12	4.5
Overcharging fares	2	5.26	65				8	16	3
No permit when hired for field trip	2	5.26	65						
No sticker	10	26.32	1	1	31.37	I	12	24	2
Not in uniform	3	7.90	5	6					
No seatbelt	1	2.63	9						
Forgot to turn the destination plate	1	2.63	9		21.57	3			
Traffic violation (e.g. passing through a one-way road, wrong entry)	1	2.63	9	I					
Overtaking	7	18.42	2	I					
Not issuing tickets	5	13.16	4	1	21.57	3			
Outing trip				1	21.57	3			
Allowing passengers to board on unloading sign				1	3.92	5			
No response				1					
TOTAL	38	100		51	100		9	100	

One of the common violations committed by the driver is "no permit when hired for field trip" with 26.32% responses from PUB respondents, 31.37 % for lowland PUJ respondents and 24.00 % for upland PUB. However, PUB and PUJ transportation managers/owners are interested to be hired for field trips and business trips because of the high earnings they receive.

The traffic violations and overtaking yielded high percentage of responses from PUBs with a mean score of 18.42 % and 13.16 %, respectively. These are also the problems encountered by traffic enforcers and passengers through reckless imprudence by the PUB drivers. The wearing of slippers instead of shoes is also another problem with a mean score of 15.79% for PUB and 36% for upland PUJ.

The PUB drivers have also other violations like: (a) not keen in solving problems (5.26%); (b) overcharging fares (5.26%); (c) no sticker (7.90%); (d) not in uniform (2.63%); (e) forgot to turn the destination plate (2.63%); and (f) traffic violation, for instance passing through a one way road and wrong entry. On the other hand, the lowland PUJ drivers have other violations (a) overtaking (21.57%) and not issuing tickets (3.92%). The upland PUJ drivers have also other violations

like: (a) driving under the influence of liquor (12%) and (b) not keen in solving problems of passengers (12%).

Table 7 shows the common management problems of the PUBs/PUJs operating in Ilocos Sur. For the PUB respondents, the primary management problem is the "high price of tires and other spare parts" (28.95%) followed by "high cost of diesel and lubricants" (21.05%). The third problem is "high service charge of mechanic laborers" (15.79%) followed by "stiff competition/existence of bigger vehicle/buses" (31.16%). While the lowland PUJs have common management problems like (a) stiff competition (27.45%); (b) high price of tires and other spare parts (17.65%), and (c) passengers are choosy (13.73%). The upland PUJs have varied responses when compared with the PUBs and lowland PUJs. These are their common management problems: (a) poor/rough road and lack of maintenance (24.00%); (b) high parking fees (14.00%); and (c) high cost of diesel and lubricants (14.00%).

Table 7. Common management problems encountered by respondents.

COMMON MANAGEMENT PROBLEMS	PUB			PUJ					
				Lowland			Upland		
	R	%	R	F	%	R	F	%	R
Lack of finance for the maintenance of the vehicle				2	3.92	7	1	2	13
Seldom washing of the vehicle							1	2	13
Requesting additional commission							1	2	13
High price of tires and other spare parts	11	29.5	1	9	17.65	2	4	8	4.5
Small income/earnings		26.3		3	5.88	5	1	2	13
High parking fees	1		8.5	3	5.88	5	7	14	2.5
Stiff competition/existence of bigger vehicles/buses	5	15.16	4	14	27.45	1	3	6	6
Very low fare/slow fare increase	2	5.26	6				4	8	4.5
Scarce/few passengers							1	2	13
Driver sometimes doesn't remit							1	2	13
No jeepney association				1	1.96	12.5	2	4	8
No parking space in Candon							2	4	8
Passengers scratch the paint/cushion of seats				1	1.96	12.5			
High cost of diesel and lubricants	8	21.05	2				7	14	2.5
Fast turn-over of driver because they can't meet standards of owner				1	1.96	12.5			
Unfavorable location of parking area	2	5.26	6	1	1.96	12.5			
Small space of parking area				1	1.96	12.5	2	4	8
Flooded and no shade of parking area				1	1.96	12.5			
Lack of spare parts for sale in the locality	2	5.26	6						
High service charge of mechanic laborers	6	15.79	3						
Unauthorized booking system				1	1.96	12.5			
Passengers are choosy	1	2.63	8.5	7	13.73		3		
Poor/rough road and lack of maintenance				1	1.96	12.5	12	24	1
Landslide							4	2	13
Existence of competing parking areas like in Vigan and Bantay for Vigan-Lsoag route				3	5.88	5			
Passengers argue o/do not pay the real amount of fare				1	1.96	12.5			
Some mini-buses collect lower fare.				1	1.96	12.5			
<b>TOTAL</b>	<b>38</b>	<b>100</b>		<b>51</b>	<b>100</b>		<b>50</b>	<b>100</b>	

Based on these findings, it can be deduced that the high cost of vehicular maintenance is a common problem encountered by PUBs and PUJs. The high prices of tires and other spare parts can deplete income that could have been intended for other purposes. On the other hand, the poor road condition in the upland municipalities pose a big problem to drivers and operators because of the fast wearing of tires and other spare parts. The rugged terrain can also contribute to this dilemma.

The analysis of variance in the responses of the transportation owners/managers of PUB and PUJ regarding the identified **problems and needs of the public utility services in Ilocos Sur**

It is shown in Table 8 that there is no significant difference in the responses of the transportation owners/managers of PUB and PUJ in the identified problems and needs of the public utility service in Ilocos Sur. The null hypothesis reveals that the F-ratio of 0.146 is lower than the tabular value of 3.132 at .05 level of significance. This implies that the transportation owners/managers of the PUB and PUJ have common responses on the specific needs and problems in the motor vehicle maintenance and condition, driver's quality performance on production and profitability, vehicular accidents and apprehensions and other management problems and needs.

**Table 8. ANOVA Summary table for significant difference on the responses of the transportation owners/managers of PUB and PUJ regarding the identified problems and needs of the public utility services in Ilocos Sur.**

SOURCE OF VARIATION	SUM OF SQUARES	df	MSS	F-ratio	Tabular value at .05	INTER- PRETA- TION
Between groups	.1569	2	.07845	.146	3.132	Not significant
Within groups	3.7048	69	.05369			
Total	3.8617	71				

Specifically, there is no significant difference between the assessment of PUB and PUJ respondents pertaining to the identified problems and needs of the public utility service in Ilocos Sur

Based on the ANOVA result, the transportation owners/managers had common responses on the motor vehicle maintenance and condition with a very good assessment as to the compliance with the standard policy for the inspection of motor vehicles under BLT Fomm 1. The respondents are very well aware of their duty to keep the utility motor vehicles in good condition in order to prevent



vehicular accidents. The continuous evaluation of BLT Fonn 1 for utility vehicles has a positive impact on the awareness of the transportation owners/managers for the safe maintenance of the motor vehicles.

On the other hand, the respondents had common assessment of the drivers' quality performance, productivity and profitability. It showed that the good character/behavior of the driver and conductor improves the general image of the public utility vehicles so they get more passengers in the franchise route. It should be noted that drivers and conductors have high regards or respect for the passengers' in as much as their wages are always affected by the income/revenue earned per day. The usual gross income commission of 30% for drivers and 10% for conductors depends so much on the number of passengers who board in the utility vehicles. Therefore, the better the drivers' performance, the higher number of passengers taken for the franchise route which results to higher gross income commission pay for employees (drivers/conductors) and higher profit for transportation owners/managers.

Likewise, the respondents did not differ in their responses on the management's treatment of the drivers' quality of performance. The transportation managers/owners give additional commission to the drivers/conductors for work well done.

Finally, the transportation owners/managers did not also differ in their responses on vehicular apprehension. The ANOVA result showed that the respondents seldom violated the rules and regulations governing the operations of public utility vehicles and the respondents believed that the drivers are aware on the provisions of vehicular apprehension as mandated in Republic Act No. 4136.

## **Summary of Findings**

- A. On the status of public utility vehicles:
  1. The PUB drivers' gross income/commission ranges from 7% to 20% while PUJ drivers have more gross income for they own the vehicles and have no conductor. Likewise, a commission of 5% to 10% is given to PUB conductors and 10%-15% for PUJ.
  2. Majority of PUB respondents have a franchise route of Vigan-Laoag while PUJ respondents have varied franchise routes in the lowland and upland municipalities of Ilocos Sur.

- B. On the specific needs and problems of transportation owners/managers:
1. The motor vehicle maintenance and condition have been assessed at Very Good level with a mean score of 3.9369 for PUBs and 3.5410 (lowland) and 3.3984 (upland) PUJs.
  2. The drivers show quality performance especially in their treatment of the passengers with a mean score of 4.5500 for PUB and 4.3462 (lowland) and 4.1400 (upland) for PUJ.
  3. The drivers are treated well by the managers/owners with a mean score of 4.6987 for PUB and 4.2015 (lowland) and 3.878 (upland) for PUJ.
  4. The level of vehicular apprehensions is "Very Low" with mean score of 1.6071 for PUB and 1.3288 (lowland) and 1.349 (upland) for PUJ.
- C. There is no significant difference in the responses of the transportation owners/managers of PUB and PUJ regarding the identified problems and needs of the public utility services in Ilocos Sur.

## Conclusions

1. The size of investment in public utility vehicles gives better understanding of the operation of the transportation enterprise. Those who employ more drivers and conductors have better wage schemes. Likewise, lower capacity transport services have very few drivers and conductors. They also have lower wage schemes. The franchise operation and geographical description are significant factors to consider in the transport services in the province of Ilocos Sur.

2. The awareness of the transportation owners/managers of the specific needs and problems of public utility services has contributed to the high level assessment of the transport services in the province of Ilocos Sur.

2.1 The motor vehicle inspection contributes to the prevention of vehicular accidents due to mechanical problems of the PUB/PUJ.

2.2 The better treatment of passengers contributes to the productivity of the business.

2.3 The reciprocal treatment of management and employees improves the profitability level of the enterprise.

## Recommendations

1. The transportation business depends much on personnel administration and management. Although practical skills are involved in the operation of public utility vehicles, an information dissemination campaign through trainings and conferences would professionalize the public utility service in the province.

2. Although there is a sound assessment of the specific needs and problems of transportation owners/managers, the following are recommended to further improve the public utility services in the province:

- 2.1 spare parts assistance and monitoring services should be maintained for PUB/PUJ.
- 2.2 trainings for employees/drivers/conductors on courteous treatment of passengers should be conducted.
- 2.3 Trainings on the maintenance of public utility vehicles should also be conducted.
- 2.4 Republic Act No. 4136 should be disseminated.
- 2.5 roads should be improved..
3. There should be a conference of all transportation owners/managers of PUB/PUJ in Iloos Sur to improve the utility vehicle service in Ilocos Sur. These are the following thrusts/objectives and goals.
  - 3.1 organize the PUB/PUJ managers-owners into a professional organization.
  - 3.2 professionalize the services offered by public utility vehicles.
  - 3.3 improve the utility vehicle services through trainings, workshops and other means to educate the management and employees.
4. In the area of agricultural development affected by the transportation services, further study should be conducted to assess the following areas: a) agricultural movement of crops and farm products. b) passengers- demand/supply of the PUB and PUJ, c) impact of farm to market roads on the transportation business. Hence, the proper title of the outcome of this research work is: " Prospects for Sustainable Agricultural development for Upland and Lowland Municipalities."

## Bibliography

- Administrative Order No. 84 AO-DIR-002. Series of 1984. Rules and Regulations Governing the New Licensing System Pursuant to B.P. 325 Amending Related Provisions of R.A. 4136, otherwise known as Land Transportation and Traffic. 1984
- Administrative Order No. 84 AO-DIR-005. Series of 1984. Rules and Regulations on the New System Registration Pursuant to Republic Act No. 4136, as Amended by Presidential Decree No. 1934. 1984
- Circular No. 82-033. BOT Franchise Numbering System, 1982. Current Regional Transportation Improvement Plan of Southern California. 1997
- Transportation Report Indicators. 1994
- Department of Local Government. Readings for Local Government Councils. 1989
- Land Transportation Commission. A Compilation of Laws, Rules and Regulations Related to the Land Transportation System of the Philippines; 1982-1985. East Avenue. Quezon City. 1986
- Land Transportation Commission. BLT Form I. Revised Motor Vehicle Inspection Report. 1983

Land Transportation Commission. Methodology on Legalization Program for the Province/City of La Union, Ilocos Norte, Ilocos Sur and Abra. 1983

Land Transportation Commission. Guidelines for the Rationalization of Colorum PUJ Operating in the Province of La Union, Ilocos Norte, Ilocos Sur and Abra. 1983

Republic Act No.4136. Land Transportation and Traffic Code.Q