# 1980-2001 PHILIPPINE VEHICLE REGISTRATION CHARACTERISTICS 

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#### Abstract

This paper illustrates the annual variation of the number of motor vehicles in the Philippines for the period 1980 to 2001. It is presented by year, region, vehicle classification and vehicle type. Included in the report are policies that affected the motor vehicles registration or public transport services for selected motor vehicle type and classification. The key achievement of this report is the built database with customizable pivot table and chart for simplified analysis.


## About Transport Research Group

The Authors are members of the Transport Research Group (TRG) an ad hoc organization under the Office of the Assistant Secretary for Planning (ASP) whose primary task is to improve on access to information for various transport planning activity and general services through publication of various data and reports. TRG is composed of staff from the ASP, Transport Planning Service and its divisions. TRG has also members from JICA acting as an advisor.

## 1. INTRODUCTION

The enactment of the Philippines Legislature Act No. 2159 of 1912 started the regulation of motor vehicle thru the Automotive Section of the Bureau of Public Works. The Act was further enhanced in 1964 by the enactment of Republic Act 4136 which is know as the "Land Transportation and Traffic Code" which included the creation of the Land Transportation Commission. Since 1964, the Code was never re-written to effect the various amendments on the next 40 years.

Generally, the importance of the regulation is to protect the public from any vehiclederived failures, failures that result to a loss of life or property. The public relies with the strict implementation of vehicle, driver, and operation standards to protect themselves from the abuse and misuse of motor vehicles.

Vehicles are used to transport people and goods thus registration reflects the economic activity of a country. If more vehicles were registered it reflects that more people and goods need to be transported.

The Philippines is highly dependent to road transportation. In 1987, the modal share of for passenger traffic is $89 \%$ while water transportation is only about $9 \%$ and about $53 \%$
for freight while water transport has $47 \%$ share. At this rate, any events that would affect the road transportation would affect the equivalent share of economic activity and its transport traffic.

It is important to mention that the fee collected from vehicle and driver registration contributes significantly to the government's national revenue. In 2000, the Land Transportation Office contributed about P4.3 billion. This amount will significantly increase for the next 4 years with the implementation of the Motor Vehicle User's charge (RA8794) that is equivalent to a $100 \%$ increase in the motor registration fee.

Motor vehicle registration is a tool that protects the interest of the general public to effect safe and reliable land transportation. Revenues contribute significantly with the national budget that would help other sectors in delivering other forms of public service.

## 2. SCOPE AND LIMITATION

The main objective of this report is to have a glimpse of the vehicle registration characteristics. It is intended to determine its growth and obtain various statistics that may be used in transportation planning. However, the source of information limits the depth of this report in as much as the authors would like to undertake.

The author has prepared a pivot table for database for your specific analysis of vehicle registration. Instruction on the use of this excel function will be discussed during the TSSP conference.

## 3. VEHICLE REGISTRATION HIGHLIGHTS (YEAR 2001)

|  | Vehicle Registration, 2001 |  |
| :--- | :---: | ---: |
| PHILS | $3,865,862$ | $100.00 \%$ |
| NCR | $1,212,715$ | $31.37 \%$ |
| CAR | 50,605 | $1.31 \%$ |
| CARAGA | 39,758 | $1.03 \%$ |
| I | 210,135 | $5.44 \%$ |
| II | 130,762 | $3.38 \%$ |
| III | 477,106 | $12.34 \%$ |
| IV | 525,394 | $13.59 \%$ |
| V | 102,491 | $2.65 \%$ |
| VI | 225,056 | $5.82 \%$ |
| VII | 329,414 | $8.52 \%$ |
| VIII | 72,636 | $1.88 \%$ |
| IX | 98,392 | $2.55 \%$ |
| X | 89,217 | $2.31 \%$ |
| XI | 195,244 | $5.05 \%$ |
| XII | 64,511 | $1.67 \%$ |



Left: Table 1: 2001 Vehicle Registration
Top: Figure 1: Annual Variation of registration by region

In CY2001, the total number of registered motor vehicles in the Philippines reached $3,865,862$. This figure is equivalent to a $4.45 \%$ increase from the previous year of $3,701,173$ units. A significant number of registrations were made in the National Capital Region that is about $31 \%$ or about $1,212,715$ units followed by Region IV (14\%) and Region III ( $12 \%$ ). The sum of the three regions is about $57 \%$ of the total number of registered motor vehicle in the Philippines.

Table 2: Vehicle registration by classification (left) and vehicle type (right)

| Registraiotn by Classification, 2001 |  |  |
| :--- | ---: | ---: |
| PRIVATE | $3,010,974$ | $77.89 \%$ |
| FOR HIRE | 794,306 | $20.55 \%$ |
| GOVERNMENT | 56,695 | $1.47 \%$ |
| DIPLOMATIC | 2,698 | $0.07 \%$ |
| TAX EXEMPT | 1,189 | $0.03 \%$ |


| Vehicle Registration by Vehicle Type, 2001 |  |  |
| :--- | ---: | ---: |
| CARS | 738,641 | $19.11 \%$ |
| UV | $1,479,975$ | $38.28 \%$ |
| BUSES | 31,686 | $0.82 \%$ |
| MC/TC | $1,337,576$ | $34.60 \%$ |
| TRUCKS | 254,283 | $6.58 \%$ |
| TRAILERS | 23,701 | $0.61 \%$ |

In terms of vehicle classification, the most number of vehicles are for private use. Seventy-seven percent ( $78 \%$ ) of all vehicles are registered as private while $21 \%$ are registered for hire. This figure is an equivalent of 3.8 private vehicle to every for hire vehicle. If motorcycles and tricycles will be excluded, the ratio will be about 7.9 private to one for hire vehicle

In terms of vehicle type, utility vehicles (UV) registered the most number of units with 1.48 million units or have a $38 \%$ share of all vehicles. It exceeds the number of motorcycle/tricycle by about 142,399 units with MC/TC share of $35 \%$. The number of cars is about 738,641 units ( $19 \%$ share) while buses is about 31,686 units( $0.8 \%$ share).

Trucks and trailers may only about $6.7 \%$ and $0.7 \%$ of all vehicle registration, but in 1987, this vehicle type carried $53 \%$ of all transported goods in the Philippines.

## 4. OVERALL REGISTRATION BY VEHICLE TYPE

### 4.1.About the Data

The period 1980 to 1981 data seemed unreasonably abrupt in growth or decline. For this analysis, the 1980 data will be removed from the analysis. Taxicabs (TX) are registered separately with cars but in 1996 this vehicle type were added to the Car type. For this change, TX were included in Car type from 1980 for all of the analysis.


Figure 2: Vehicle registration by vehicle type

### 4.2.CARS

For the period 1981-2001, car registrations have been increasing at an annual average of $4.4 \%$. In 2001, car registration reached 738,641 units, and has a modal share of $19.1 \%$. Metro Manila has the highest number of Cars with 454,106 . CARAGA and Region VIII have the least car registration, 2,073 and 3,333 units respectively.

In 1998, car registration stated to decline, this could be reflection of the ASIAN financial crisis as all other vehicle types recorded a reduced growth rates compared to the 1997 data. However it is not conclusive that the purchasing power of the public declined, it can be hypothesized that the choice of vehicles shifted towards the Utility Vehicle types.

### 4.3.UTILITY VEHICLES (UV)

Although the number might be an aggregate of a broad classification of vehicle type, it is nonetheless noticeable phenomenal growth. UV's recorded the highest number and average annual growth for four-wheel-up vehicles; it is about 1.4 million units at $8.3 \%$ average annual growth for the period 1991 to 2001. In 2001, its growth rate improved to $6.6 \%$ compared to all-vehicle of $4.4 \%$.

This vehicle is favorite vehicle in NCR, about $43 \%$ of which is registered in Metro Manila followed by Car of $36 \%$. It is also important to mention that majority ( $86 \%$ ) of the utility vehicles are registered for private use and only $12 \%$ are utilized for hire.

### 4.4.BUS

Bus is not a widely used mode of transport in the Philippines compared to UV's, the ratio is about 6.5 UV for every Bus. There are about 32,000 buses nationwide, equivalent to only $0.8 \%$ of all vehicles. Eighty-seven percent ( $87 \%$ ) of buses are utilized for hire. Although its primary could be for long trips, registration by region would not reflect its use within the region.

For the period 1981 to 1990 the average annual growth is only about


Figure 3: Bus registration for NCR and Phils $0.5 \%$ while for 1991-2001 it improved to about $5.4 \%$. In 2001, registration declined to about $6.5 \%$. In Metro Manila, bus registration declined from 12,170 units in CY2000 to about 8,868 units in 2001, an equivalent of $27 \%$ negative growth.

### 4.5.MOTORCYCLE/TRICYCLE (MC/TC)

It is noticeable that in every urban center there are quite a number of these types. In 2001, there are about $1,337,000$ registered units with $8.2 \%$ growth from the previous year . The growth rate is about $12.1 \%$ annually since 1991. The proliferation could be caused by several factors that could include the authority given to local government on the regulation of franchise. About $60 \%$ are registered private while $39 \%$ are for hire.


Figure 4: Motorcycle and Tricycle Registration

Motorcycle and Tricycle registered the most number of units and has the highest growth rate of for hire vehicle.

It should be noticed that there are three high growth periods, namely 1981-1985, 1986 to 1991, and 1992-2000. Coincidentally, there are three policies that were implemented during these three periods. In 1985, tricycles were legalized through LOI 1482 and in 1988 tricycles are to be registered as For Hire. In 1990, LTO issued a memorandum on the registration of imported motorcycles and in 1991 LGU's were authorized to give franchise for tricycle.

### 4.6.TRUCKS

There are about 254,000 trucks registered in the Philippines. About $25 \%$ of all truck are registered in Metro Manila followed by Region III(12\%), Region VII (11\%) and Region IV (10\%) the rest are shared amongst the remaining regions.

Ninety percent $(90 \%)$ of the trucks are private while $7 \%$ are for hire, and the remaining are governmentally owned.

Trucks have an average annual growth rate of $6.3 \%$. In 2001, the number increased by $2.4 \%$ from $2.0 \%$ of year 2000

### 4.7.TRAILERS

There are about 23,700 trailers registered in the Philippines and is about $0.6 \%$ of the total vehicles. About $48 \%$ are registered in Metro Manila. About $13.6 \%$ are registered in region III and 9.3\% are registered in Region VII.

From 1998 trailer registration posted negative growth, worst in 1998 with 13\% negative growth and in CY2001 it recorded an $11 \%$ decline. This continuing decline reduced the total fleet of trailers from 32,000 in 1997 to 23,000 in 2001, which is equivalent to $28 \%$ reduction.

About $90 \%$ of the trucks are privately owned, $10 \%$ are for hire, while $0.8 \%$ are owned by the government.

## 5. REGISTRATION BY CLASSIFICATION




Figure 5: Annual variation of private and for hire vehicles

### 5.1. Private and For Hire Vehicles

In 2001, the number of private vehicles is about $3,011,000$ units while for hire is only about 794,000 units. The ratio is about 3.8 private vehicle to every for hire vehicle. If motorcycle and tricycle are not included in the ratio, there will be about 7.8 private vehicle to every for hire vehicle.

Majority of the private vehicles are UV's which has also a noticeable growth that started in 1987. UV's affected the growth of private car registration that started in 1996 were for hire cars improved. It is likely that preference to the UV over cars over the popularity of utility vehicles like Toyota FX and the likes. Cars sales however improved for taxi service for the same period.

For the case of MC/TC, the decline of private registration in 1986 is the time when tricycles are allowed to operate as for hire. It is evident that for the same period for hire tricycle registration went up. For hire TC again increased its number in 1992 when LGUs were given the authority to issue franchises. From 1992, MC/TC registration increased dramatically.

Figure 5 illustrates the share of vehicle classification according to vehicle type. About $90 \%$ of cars, $80 \%$ of UV's are for private purposes while about $85 \%$ of buses are for hire.

Although utility vehicles have a share of $23 \%$ of for hire, following MC/TC of $61 \%$, its role were mostly for private use whose share is about $41 \%$ of all private vehicles compared to cars and MC/TC that have almost the same share of $25 \%$.


Figure 6: Comparative share of vehicle units to vehicle classification

Buses are primarily used as For Hire vehicles and almost $37 \%$ of all for hire buses are registered in NCR. About $11 \%$ are in Region III and IV and the rest are shared among all other regions. Majority of for hire cars are in NCR at about $78 \%$ seconded by Region VII (Cebu) with about 7\%.

Trucks and trailers are primarily used for private activities. Although in 1998 truck registration declined by about $6 \%$ and this could be caused by the ASIAN crisis. For the same time NCR private trucks declined about 20\%. Region VII and XI were also recorded negative growth for the same period. All other region recorded slight improvements.

## 6. REGISTRATION BY REGION

### 6.1.NATIONAL CAPITAL REGION (NCR)

Metro Manila used to have more cars than utility vehicles (1980-1997) from 1997 car registration declined continually. In 1998 cars are about 6,700 units more than UV's but in 1999 there are more UV's by 4,200 units. In 2001, there are about 498,000 units of Uvs in NCR and about 85,000 units more than the number of cars.

Table 3: Registration of Cars and UV's in NCR

| YEAR | CARS | UV | Difference <br> (CAR-UV) |
| :--- | :--- | :--- | ---: |
| 1996 | 445,827 | 402,666 | 43,161 |
| 1997 | 452,576 | 425,678 | 26,898 |
| 1998 | 436,910 | 430,200 | 6,710 |
| 1999 | 440,387 | 444,645 | $(4,258)$ |
| 2000 | 430,372 | 468,140 | $(37,768)$ |
| 2001 | 413,043 | 498,220 | $(85,177)$ |

From 1981 to 1990, vehicle registration grew at an average of $5.1 \%$ annually ( $4.8 \%$ without MC/TC). From 1991 to 2001, it grew by $5.6 \%$ on the average. The growth on the second half was significantly affected by the 1998 trend. In 2001 total vehicle registration dipped by $4.1 \%$

NCR is the least region not dominated (13\%) by Motorcycle and Tricycles for transport service as compared to Region II with $54 \%$ MC/TC.

### 6.2.CORDILLERA ADMINISTRATIVE REGION (CAR)

Motor vehicles from this region used to register under Region I. In 1989, CAR had its own regional office and registered 15,741 units on its first year alone. By 2001, registration reached 50,605 units and 5 -year average annual growth of $8 \%$.

CAR is also not dominated by MC/TC as form of transportation. In 2001 there are about 9,900 units of MC/TC. It is also possible that majority of the units are motorcycle as tricycles will have difficulty in managing the difficult terrain of the mountainous region.

Also the popularity of UV as the main mode of transportation continue. About $50 \%$ of all mode are UV with $74 \%$ are registered private and $22 \%$ for-hire. There are about 10,000 cars in CAR of which $77 \%$ are private and $22 \%$ for hire.

### 6.3.CARAGA

CARAGA regional was created in 1996 and in that year it recorded a total of 36,329 vehicles from the region. In 2001, there are about 39,758 vehicles in the region this represent an increase of $9.4 \%$ form the previous year. Majority of the registration are from MC/TC with $55 \%$ followed by $28 \%$ UV's and $10 \%$ trucks. Cars share is only about 5\%.

### 6.4.REGION I

In spite of the creation of CAR, registrations in the region continued its growth. It recorded a 210,000 units in 2001 and at an 5-year annual average growth of $9.7 \%$. The region has about $52 \%$ motorcycles and tricycles (MC/TC). The average growth for the last 10 years is at $11 \%$ annually much was attributed to MC/TC with an average growth of $12 \%$ annually starting FY1991.

### 6.5.REGION II

For the period 1991-2001, vehicle registration is at an annual growth average of $12 \%$. In 2001, there are about 130,700 vehicles from 38,000 in 1991.

Much of the registration was from MC/TC, UV, and surprisingly Trucks more than cars. Since 1980, there are more trucks in the region than cars by $63 \%$. In 2001, there are about 12,000 trucks and 7,000 car units. This could be attributed to high freight movements of agricultural products and other goods in and out of the region.

### 6.6.REGION III

Since 1991 the average registration growth is about $8.4 \%$ annually with CY2001 registering 477,106 units. Seventy-one percent ( $73 \%$ ) of the vehicles are registered private. Although MC/TC only accounts to $36 \%$ of the total registration this is about $76 \%$ of all For Hire vehicles.

### 6.7.REGION IV

This has the second highest 5-year average annual growth rate of $11 \%$ second only to Region II. There are about 525,000 vehicles in the region in CY2001. Similar to Region III most are vehicles are UV's and MC/TC with share of $44 \%$ and $37 \%$, respectively. Seventy-three percent ( $73 \%$ ) are private while $26 \%$ are for hire.

### 6.8.REGION V

In CY2000, there are about 102,000 registered motor vehicles in the region with an average annual growth of $10.4 \%$, much were attributed with the growth in MC/TC ( $54.8 \%$ share of total) with $12 \%$ growth annually that started 1991.

### 6.9.REGION VI

In CY2001, there are about 225,000 registered vehicles in the region. MC/TC and UV have the most number, their numbers would sum up $76 \%$ of all vehicles. With
motorcycle/tricycle and buses are growing at $15 \%$ annually higher that the other modes, while the overall growth is only about $10 \%$ annually.

### 6.10. REGION VII

There are about 329,000 registered vehicles in CY2001. Private vehicles dominate the number of vehicles with about $84 \%$ which is mainly composed of MC/TC (46\%) and utility vehicles ( $32 \%$ ). UVs and MC/TC and trucks are the most active for the past 10 years, it registered an average growth of $11 \%$ annually. Overall the region has been growing at about $10 \%$ average annually.

### 6.11. REGION VIII

There are about 73,000 vehicles in this region. Dominated by MC/TC (55\%) with major the role in private ( $46 \%$ ) and public service ( $56 \%$ ). Trucks also exceed the number of cars by $104 \%$ or 6,700 units to 3,300 car units.

### 6.12. REGION IX

Vehicle registration in the region is about 98,000 units with $10 \%$ annual growth. The number MC/TC exceeds all other modes that it is about $64.5 \%$ of all vehicles and is $77 \%$ private and $62 \%$ for hire. MC/TC has continually growing at $11 \%$ growth rate. The growth rate of UVs and Buses has declined for the part two decades, from $13 \%$ to $9 \%$ annually.

### 6.13. REGION X

This region is growing at a slow pace of $5.8 \%$ annually. In CY2001, there are about 89,000 vehicles and about $44 \%$ are MC/TC followed by UV's with $32 \%$ share. There exist a slum in registration for the year 1995-1996 as caused by the creation of the CARAGA region with $14 \%$ reduction of registration.

### 6.14. REGION XI

In CY2001, there are about 195,000 vehicles and recorded an average growth rate of $8.5 \%$. Like most regions, Region XI is dominated by MC/TC with $51 \%$ share of all registration with $62 \%$ for private purposes while $77 \%$ for hire. The total share of for hire vehicles is about $19 \%$ while private vehicles is about $78 \%$.

### 6.15. REGION XII

There are only about 64,000 vehicles in region, $60 \%$ are motorcycle/tricycle and $29 \%$ are UV's. Private vehicles are about $71 \%$ and For Hire are about $24 \%$. The average annual growth is at a moderate $7.5 \%$ rate.

## DEFINITIONS

## 7. REGISTRATION BY CLASSIFICATION

Private
Motor vehicles registered under this classification are those that are not to be used for hire under any circumstance.

## For Hire

Motor vehicles registered under this classification are those authorized to operate as public utility by virtue of certificates of public convenience or provisional authority or special permit issued by the Board of Transportation, and shall thereby subject to the provisions of the Public Service Act and the rules and regulations issued hereunder, as well as the provision of Republic Act. No. 4136, as amended by Batas Pambansa Bilang 43 and Batas Pambansa Bilang 74

## Government

Motor vehicles owned by the government of the Philippines or any of its political subdivisions including government-owned or controlled corporations shall be registered under this classification.

## Diplomatic

Motor vehicles owned by foreign governments or by their duly accredited diplomatic officials in the Philippines and used in the discharge of their official duties. This classification refers exclusively to official and personnel who enjoy diplomatic status.
8. Vehicle Type

Car
Cars are classified in three categories: L - refers to cars whose cubic centimeter displacement is 1600 cc and below, M - refers to cars whose cubic -centimeter displacement ranges from 1601 cc to $2800 \mathrm{cc}, \mathrm{H}$ - refers to cars whose cubic centimeter displacement is 2801 cc and above

Utility Vehicle
Refers to utility vehicles such as owner-type jeeps, Ford Fiera, Tamaraw, Pinoy, etc. This denomination shall include the Toyota Land Cruiser, International Scout, Land Rover, Nissan Patrol, Mini-Cruiser, and other vehicles with similar designs or configurations. The gross vehicle weight thereof shall not exceed 4500 kilograms, except in instances when the passenger capacity is less than eighteen (18)

Bus
Refers to buses whose passenger capacity is eighteen (18) and above.
Motorcycle and Tricycle
Refers to mopeds and motorcycles, both with or without sidecars

## Truck

Refers to the types of trucks such stake, platform, pickup, trucks for gravel and sand, and others of the same configuration, including van and tanker types, provided that the gross vehicle weight exceeds 4500 . kilograms

## Trailer

Trailers are classified in three categories: TRL- refers to trailers whose gross vehicle weight is 1,600 kilograms below, TRM -refers to trailers whose gross vehicle weight ranges from 1601 kilograms to 4500 kilograms, TRH -refers to trailers whose gross vehicle weight is 4501 kilograms and above

