



Republic of the Philippines  
Department of Transportation

# **Developing Measures Related to Vehicle Safety and Environmental Protection**

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**7<sup>th</sup> Forum For Southeast Asia,  
12<sup>th</sup> Public and Private Joint Forum in Asian Region**

08 December 2021



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**STATE OF ROAD SAFETY AND ROAD  
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**CURRENT  
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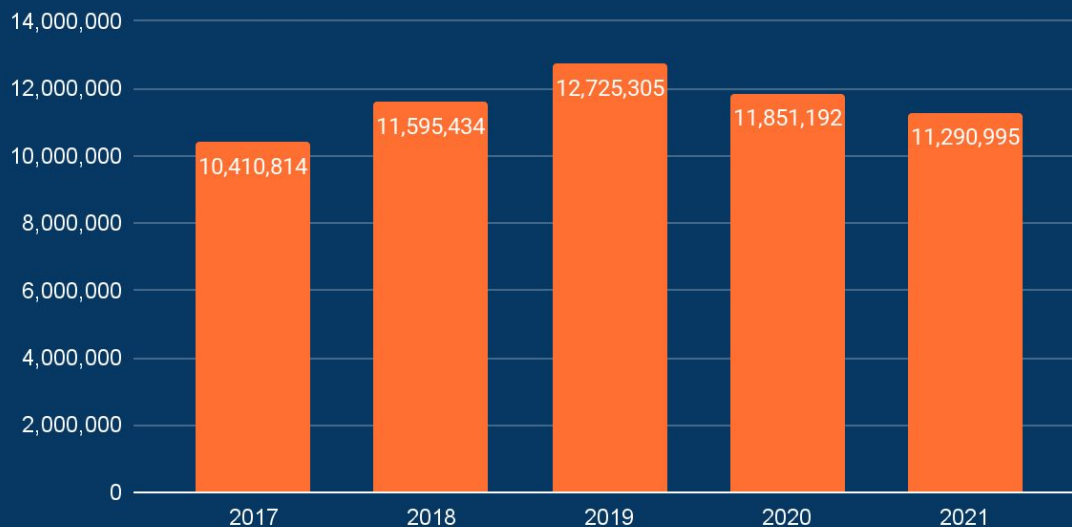
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# STATE OF ROAD SAFETY AND ROAD VEHICLE EMISSIONS



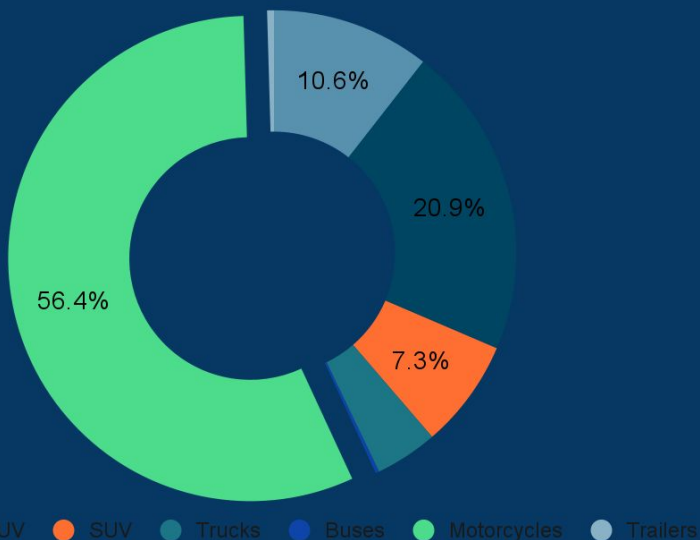


## REGISTERED MOTOR VEHICLES IN THE PHILIPPINES





### Vehicle Registration by MV Type (as of September 2021)



In 2021, **6,373,519**  
or **56%** of the  
total registered motor  
vehicles are  
**MOTORCYCLES.**





## NUMBER OF ROAD CRASH DEATHS UNACCEPTABLY HIGH

**12,487** (PSA, 2018)  
recorded deaths

More than **34 persons**  
**every day**

More than **1 person**  
**every hour**

Majority are  
**20-29 years old**

Most fatalities involve:

**53%** Motorcycles

**19%** Pedestrians  
(WHO, 2015)



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**179,663**

TOTAL NUMBER OF  
JEEPNEY UNITS  
(NATIONWIDE)



**90%**

15 YEARS OLD  
AND ABOVE



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# HIGHER EMISSIONS

# INCREASED URBAN POLLUTION

Road transport GHG emissions under business-as-usual scenario will yield an increase of **87 MtCO<sub>2</sub>e** by 2030 (GIZ)

SOURCES: Jeepney+NAMA Project of GIZ







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# PROCESS OF DEVELOPING MEASURES IN VEHICLE SAFETY AND ENVIRONMENTAL PROTECTION

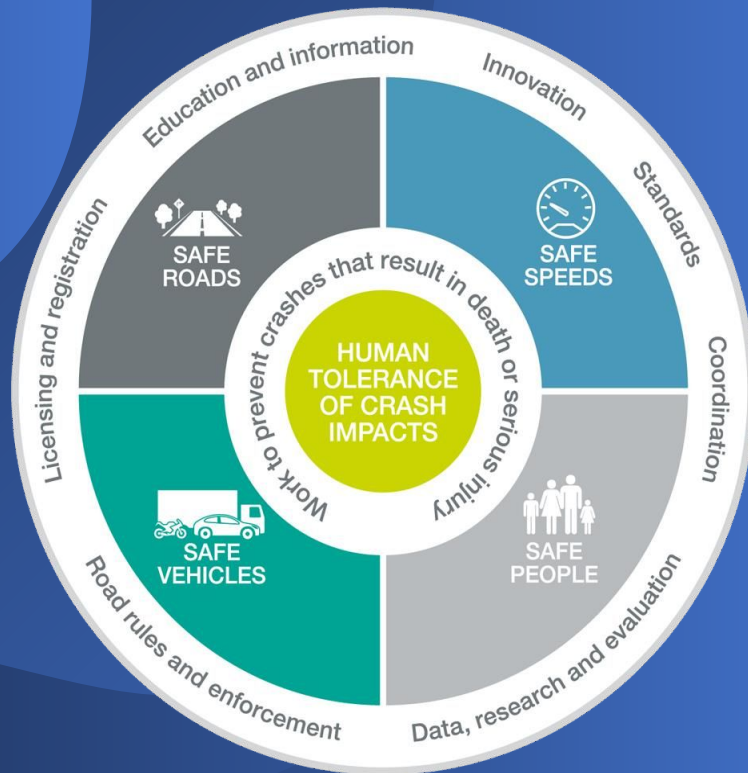




# SAFE SYSTEM APPROACH

There's a shared responsibility between **system designers** (government, manufacturers) and the **road users**, for safe travel outcomes on the road network.

It is based on well-established safety principles — of known tolerance of the human body to crash forces, speed thresholds for managing crash impact energies and the capacities of vehicles and forging infrastructure to reduce crash impact energy transfers to humans.

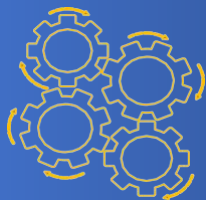




## **RESEARCH / BASELINE FORMULATION OF PROPOSALS/STANDARD**



## **TECHNICAL WORKING GROUP MEETINGS STAKEHOLDER CONSULTATIONS**



## **GOVERNMENT PROCESSES, PROCEDURES AND APPROVAL** (DEPARTMENT ORDER, MEMORANDUM CIRCULAR, LAW, EXECUTIVE ORDERS)



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# CURRENT INITIATIVES ON VEHICLE SAFETY AND ENVIRONMENT PROTECTION

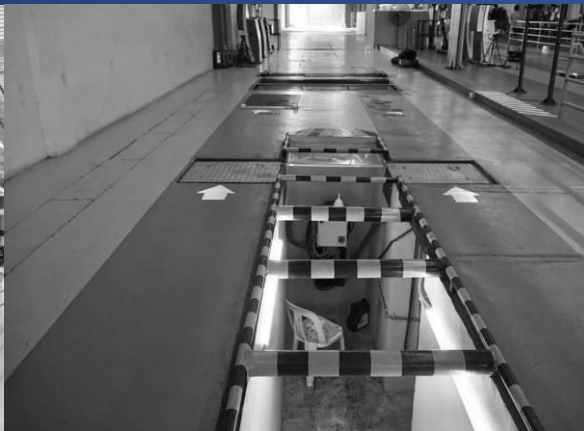




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# MOTOR VEHICLE INSPECTION SYSTEM/ PRIVATE MOTOR VEHICLE INSPECTION CENTERS

Inspection of various types of vehicles, to ensure vehicle roadworthiness and compliance with emission standards before registration





# PROMOTION OF LOW CARBON TRANSPORT SYSTEMS IN THE PHILIPPINES

- POLICY SUPPORT
- INSTITUTIONAL CAPACITY DEVELOPMENT
- PRIVATE SECTOR PARTICIPATION & INVESTMENTS

## POLICIES, STANDARDS AND GUIDELINES BEING SUPPORTED

- Electric Vehicles and Charging Stations Bill
- Energy Efficiency Labelling Standards
- Motor Vehicle Road Users Tax
- Executive Order on LCT Interagency Committee
- Green Route Selection Guidelines
- Electric Vehicles Charging Protocols

**69,013 tCO<sub>2</sub>e/**  
**100 units of Electric Vehicles**

Target direct GHG emissions reduced due to the project over the technology lifetime





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# PUBLIC UTILITY VEHICLE MODERNIZATION PROGRAM

It is a **comprehensive system reform** that aims to transform the public land transportation industry.

New vehicle standards are being developed which are based on **international standards** and **extensive consultations** with involved government agencies, jeepney associations and local and international manufacturers.

The modern PUVs are designed to be **environment-friendly, safe, secure, and convenient.**





# Environmental Impact

- Significant reductions in air pollutant emissions by:
  - Health benefits also outweigh the subsidy (PhP 160,000) of the government
  - Health benefits outweigh the cost of adoption of modern units:

Air Pollutants	Reduction (in percentage)
Non-methane volatile organic compounds (NMVOC)	93.6
Carbon monoxide (CO)	90.2
Particulate Matter (PM)	89.6
Nitrogen Oxide (NOx)	51.2
Sulfur oxide (SOx)	28.6

Modern PUV	Annual Health Monetary Benefits
Modern Euro 4	PhP 7.45 billion
E-jeepney	PhP 8.59 billion
Combined Modern Euro 4 and E-jeepney units	PhP 7.55 billion

Note: data is relative to the air pollution mortality avoidance in Metro Manila, CALABARZON and Central Luzon







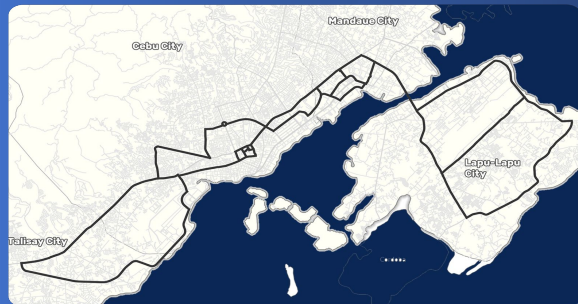
# PROMOTION OF ACTIVE TRANSPORTATION

1. **Increase the accessibility of key activity areas** and fundamental facilities through paving way for another mode of transportation - active transportation
2. **Reduce carbon emission** in the city through non-motorized mode of transportation
3. **Promote road safety for all road users** through the establishment of infrastructure and enforcement of road and traffic regulations.





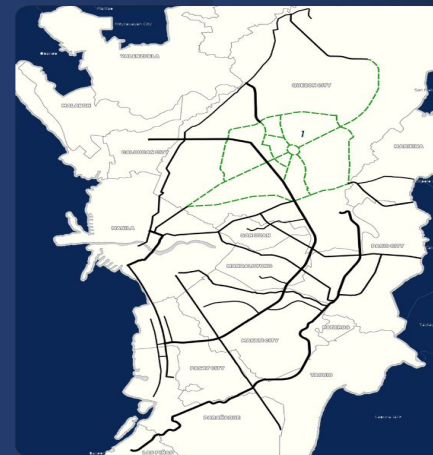
## A TOTAL OF 497 KM BIKE LANE NETWORK ESTABLISHED (under BII)



**Metro Cebu**  
129.66 km



**Metro Davao**  
54.74 km



**Metro Manila**  
313.12 km

The Department prioritized the establishment of bike lane networks in the country's metropolitan areas-- Metro Cebu, Davao, and Manila where economic activities are the highest



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# Thank you!

