DECARBONIZING TRANSPORT IN THE PHILIPPINES

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DEPARTMENT OF TRANSPORTATION, REPUBLIC OF THE PHILIPPINES
INADEQUATE PUBLIC TRANSPORTATION AND FACILITIES
INADEQUATE PEDESTRIAN FACILITIES
UNRELIABLE TRAVEL TIMES, DISCOMFORT AND DISTRESS
UNORGANIZED MODES AND LACK OF DISCIPLINE
POLLUTION PLAGUE

Fumes kill 16 daily

BY CARLITO PABLO

UNKNOWN to its residents, pollution, caused mainly by poisonous vehicular fumes, has become a plague that kills an average of 16 people in Metro Manila and its immediate environment.

If the victims don’t die, they contract deadly diseases, said Mitsuo Sato, president of the Asian Development Bank, in a report relating to the approval of $2.975 million in ADB loans for the Philippine government to clean up Metro Manila’s air.

Most of the victims are poor people, Sato said.

“Transport is the major source of air pollution in the Philippine capital,” Sato said. “This has resulted in the loss of at least 6,000 lives a year in the metropolis,” Sato said.

Sato also said the financial costs of reducing air pollution would amount to more than $5 billion a year, considering not only deaths and sicknesses but also economic losses from “restricted activity days” and “IQ (intelligence quotient) points lost.”
UNSAFE VEHICLES AND RECKLESS DRIVERS
RESISTANCE FROM TRANSPORT GROUPS
POPULATION GROWTH AND URBAN SPRAWL LEADING TO CONGESTION

2030 Volume/Capacity Ratio

- V/C > 1.50 (beyond capacity)
- V/C = 1.00 – 1.50 (at & above capacity)
- V/C = 0.75 – 1.00 (reaching capacity)
- V/C < 0.75 (below capacity)

If nothing is done by 2030

Source: JICA Study Team
PHP 2.4 BILLION ($51 MILLION)

DAILY ECONOMIC LOSSES DUE TO TRAFFIC CONGESTION IN METRO MANILA (JICA, 2014)
DISPARITY IN TRAVEL DEMAND MODE SHARE AND ROAD SHARE

72% of road space
33% of demand
PRIVATE VEHICLES

28% of road space
67% of demand
PUBLIC VEHICLES
<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minibus</td>
<td>2,253</td>
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<tr>
<td>TNVS</td>
<td>2,784</td>
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<tr>
<td>School Service</td>
<td>11,383</td>
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<tr>
<td>Tourist &amp; Shuttle</td>
<td>14,376</td>
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<tr>
<td>FILCAB</td>
<td>15,177</td>
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<tr>
<td>Buses</td>
<td>21,961</td>
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<tr>
<td>UV Express</td>
<td>22,237</td>
</tr>
<tr>
<td>Taxi</td>
<td>46,878</td>
</tr>
<tr>
<td>Jeepney</td>
<td>209,124</td>
</tr>
</tbody>
</table>

- 60% are PUJs
- 30% are in NCR (majority)
- 1.2 units per franchise on average
ORIGIN OF PHILIPPINE JEEPNEY

They were originally made from US military jeeps left over from World War II and are well known for their flamboyant decoration and crowded seating.

http://www.tourisminthephilippines.com/
209,124
TOTAL NUMBER OF JEEPNEY UNITS (NATIONWIDE)

90%
15 YEARS OLD AND ABOVE
Road Transport and Infrastructure Sector Vision

By 2022, Filipinos will have a pleasant commuting experience wherein:

- Public transport is adequate, inclusive, safe and comfortable;
- Travel time is predictable;
- Public utility drivers are disciplined, competent and mindful of the common good;
- Rules are fair, stable and consistently applied.
ROAD-BASED PUBLIC TRANSPORT REFORM PROGRAM

PUV Modernization Program

Integrated Terminal Exchange

Bus Rapid Transit System

Intelligent Transport System
(Interoperability for Planning & Operations)
PUBLIC UTILITY VEHICLE (PUV) MODERNIZATION PROGRAM

A large-scale transformative initiative for a restructured and environmentally-sustainable transport sector aimed for Filipinos to have a pleasant commuting experience by 2022.
LAUNCHING OF THE PUV MODERNIZATION PROGRAM

Signing of DO 2017-011 (Omnibus Franchising Guidelines or OFG) and DOTr-DILG JMC 001 s. 2017
19 June 2017 | Quezon City

#SupportPUVModernization
PUBLIC UTILITY VEHICLE (PUV) MODERNIZATION PROGRAM

- Regulatory Reform
- LGU Local Public Transport Route Planning
- Route Rationalization
- Fleet Modernization
- Industry Consolidation
- Financing PUV Modernization
- Vehicle Useful Life Program
- Pilot Implementation
- Stakeholder Support Mechanism
- Communication
OBJECTIVE:
Appropriate mode based on Passenger Demand and Road Heirarchy

BASIC POLICY:
Higher capacity PUVs assigned to high demand routes

Legend
- **EDSA BRT**
- **Quezon Avenue BRT**
Corridor Demand
- Passenger Per Hour Per Direction (PPHPD)
  - Up to 500
  - 501 - 1,000
  - 1,001 - 5,000
  - *More than 5,000*
- **Metro Manila Roads**
- **MUCEP Zones**
ROAD-BASED PUBLIC TRANSPORT REFORM PROGRAM

BUS RAPID TRANSIT SYSTEM
INDUSTRY CONSOLIDATION

BEFORE:
One franchise, one unit
= Inefficiency

AFTER:
Industry consolidation:
Formation of cooperatives, corporation or consortium

✓ FLEET MANAGEMENT
✓ SAFETY OFFICER
✓ TERMINAL AND GARAGE

= EFFICIENT OPERATIONS & REDUCED COSTS
PUV MODERNIZATION PROGRAM COMPONENTS

FLEET MODERNIZATION

ENVIRONMENT-FRIENDLY
Clean Air Act complaint engine. Euro 4 emission or better. Electric, Solar, Alternative Fuel

SAFETY
Side door, Speed limiter, Automatic Braking System, Compliant with safety standards.

SECURITY
CCTV, GPS, AFCS, Dashboard Camera

COMFORT AND CONVENIENCE
PWD/elderly-friendly, Free Wi-fi
4.9 million tons

ANNUAL CARBON DIOXIDE EMISSIONS

Source: GIZ, Jeepney Market Transformation Programme
4.9 million tons to 2.8 million tons = 43% reduction in annual carbon dioxide emissions.

Source: GIZ, Jeepney Market Transformation Programme
PUV MODERNIZATION PROGRAM
BENEFITS

4,879 tons

ANNUAL PARTICULATE MATTER EMISSIONS

Source: GIZ, Jeepney Market Transformation Programme
ANNUAL PARTICULATE MATTER EMISSIONS

4,879 tons → 1,019 tons

79% reduction

Source: GIZ, Jeepney Market Transformation Programme
Potential Mitigation Actions to be included in the NDC
Cumulative Mitigation Potential 2000-2030 (millions tons CO2e)

- PUV Modernization Program: 22.36
- Motor Vehicle Inspection System: 11.40
- Bus Rapid Transit System: 6.87
- Railways and Mass Transit: 2.69
The Philippines, through DOTr, was validated as a partner country by the MYC Steering Committee this May 2017, and has highlighted the NUMP as a priority of the department.

Further support is crucial for the implementation of the NUMP.
MORE THAN VEHICLE MODERNIZATION, WE ARE FOR A HOLISTIC SYSTEM REFORM FOR THE BENEFIT OF ALL: THE TRANSPORT SECTOR, THE COMMUTING PUBLIC, AND THE ENVIRONMENT

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF TRANSPORTATION

TRANSPORT AND CLIMATE CHANGE WEEK | SEPTEMBER 2017