TOWARDS SAFER ROADS:
ROAD SAFETY INITIATIVES OF DOTr

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ASEAN Automobile Safety Forum
May 15, 2017
# Road Safety Trends in the Philippines

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Road Crash Incidents</td>
<td>32,269</td>
<td>32,269</td>
<td>?</td>
</tr>
<tr>
<td>Fatal</td>
<td>2,144</td>
<td>2,144</td>
<td>10,012</td>
</tr>
<tr>
<td>Non-Fatal</td>
<td>15,747</td>
<td>15,747</td>
<td>?</td>
</tr>
<tr>
<td>Damage to Property</td>
<td>27,630</td>
<td>27,630</td>
<td>?</td>
</tr>
</tbody>
</table>

Source: PNP Traffic Management Group
In Manila, there are an average of 262 crashes per day. That is approximately 11 crashes per hour.

Source: MMARAS: Traffic Accidents Severity and Month of Year (2015)
TOP 3 Casualties in Road Crash Fatalities:
1\textsuperscript{st}: Motorcyclists
2\textsuperscript{nd}: Pedestrians
3\textsuperscript{rd}: Drivers

Deaths by Road User Category

- Motorcyclists (2-3 Wheelers): 53%
- Passengers: 11%
- Pedestrians: 19%
- Drivers of 4-wheeled cars and light vehicles: 14%
- Cyclists: 2%
- Other: 1%

Source: 2013, DPWH Traffic Accident Recording and Analysis (TARAS).
69.3% of Road Crash Incidents are Caused by **Driver’s Error**

Based on 2015 Data, Source: PNP Traffic Management Group
For the past six months alone, road crashes amount to **PHP 2.25 Billion** in economic loss and societal harm for the Philippines.

**ECONOMIC LOSS AND SOCIETAL HARM, MONETIZED**

- **Fatalities**: 109 Million PHP
- **Property Damage**: 795 Million PHP
- **Injuries**: 1.35 Billion PHP

Data source: DRIVER System
FIVE PILLARS OF ROAD SAFETY

1. Road Safety Management
2. Safer Roads and Mobility
3. Safer Vehicles
4. Safer Road Users
5. Post-Crash Response
UPDATING OF THE PHILIPPINE ROAD SAFETY ACTION PLAN (2017-2022) BY JULY 2017

VISION: A Philippine society with zero deaths on the road

INTERIM TARGET: Reduce road accident death rate by at least 20% by 2022 (reference base year: 2015 PSA data)
DRIVERS System
Data for Road Incident Visualization, Evaluation, and Reporting System

- DOTr-World Bank initiative for road crash database recording
- Web-based, no special software, can have multiple users nationwide
- Maps out road crashes, cause, and reflects road crash history of a location

https://roadsafety.gov.ph
**BUS RAPID TRANSIT (BRT) SYSTEM**

- **Dedicated roadway** for buses in the median lane

- Fast and reliable travel times, **free from the congestion of the normal mixed traffic lanes**

- **Fast boarding and alighting** based on level platform boarding and automatic fare collection systems

BRT is not only an infrastructure solution; it is also a **mechanism for transforming the industry**
<table>
<thead>
<tr>
<th></th>
<th>Length</th>
<th>Number of Stations</th>
<th>Target Start of Operations</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cebu</td>
<td>23 km</td>
<td>23</td>
<td>Dec 2019</td>
<td>DED</td>
</tr>
<tr>
<td>Metro Manila:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Line 1: Quezon Ave.</td>
<td>12.3 km</td>
<td>16</td>
<td>Sept 2020</td>
<td>For DED</td>
</tr>
<tr>
<td>Line 2: EDSA</td>
<td>48.6 km</td>
<td>63</td>
<td>Sept 2020</td>
<td>For DED</td>
</tr>
<tr>
<td>Line 3: C5</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>FS</td>
</tr>
<tr>
<td>Line 4: Roxas Blvd.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>FS</td>
</tr>
</tbody>
</table>

**BRT System Key Components:**
- BRT Road & Station Infrastructure
- Accessibility Infra & Urban Devt.
- System Management (AFC and ITS)
- Industry Capacity Development
- Depots
BRT ACCESSIBILITY INFRASTRUCTURE AND URBAN DEVELOPMENT

Metro Manila Greenways

- Quezon City
- Mandaluyong
- Makati
- Pasig
- Paranaque
- Taguig
- BGC
- Marikina

Cebu Urban Realm Enhancement

- LRT 2
- BRT L2

Map details:
- Greenways
- BRT Line
- Bikeways
- Open Spaces/Parks
- Cebu Greenways/Bikeways
- BRT Stations
- Bikeways Future Expansion
- URBAN REALM ENHANCEMENT FOR CEBU BRT PROJECT
BRT ACCESSIBILITY INFRA AND URBAN DEVELOPMENT
WALKWAYS AND BIKEWAYS FOR SAFER ROADS AND USERS

Improved pedestrian walkways

Bike lanes and bike racks

Conceptual Designs for EDSA BRT (Source: ITDP-China, 2016)
D. PUV MODERNIZATION PROGRAM

NATIONWIDE PROGRAM COMPONENTS

- Regulatory Reform
- LGU Local Public Transport Route Planning
- Route Rationalization
- Jeepney Specifications
- Industry Consolidation
- Financing PUJ Modernization
- End of Useful Life Program
- Pilot Implementation
- Social Support Mechanism
- Communication
1. REGULATORY REFORM
   • Omnibus Franchising Guidelines

2. LGU CAPACITY BUILDING
   • Local Transport Planning and Local Public Transport Route Planning

3. ROUTE RATIONALIZATION
   • Ongoing rationalization studies:
     – Metro Manila (Completed by December 2017)
     – Davao City (Completed by September 2017)
     – Start of Metro Cebu route rationalization study (July 2017)
   • Local Public Transport Plan / Route Plan Manual
4. PUJ STANDARD SPECIFICATIONS

- Compliant with Safety and Environmental Standards & Laws
  - PNS CLRV Standards
  - Euro IV Emission or better
- Safety features: Side entry/exit, Speed limiter
- Security, Comfort & Convenience: AFCS, Wi-fi, Dash Cam, CCTV, GPS

5. INDUSTRY CONSOLIDATION

- Cooperatives and Corporations
- Consolidation by ownership or operation
6. FINANCING PUJ MODERNIZATION
   - Financing schemes involving DOF, DBM, BOI, and GFIs
   - Special Loan Program & Guarantee Facility

7. END OF USEFUL LIFE PROGRAM (SCRAPPAGE)
   - Partnership with DOST, DENR, DTI, LTO, LTFRB

8. PILOT IMPLEMENTATION
   - Davao, Cebu, Angeles, Gen Santos & MM Cities
     (Pasig, Mandaluyong, Makati)
9. SOCIAL SUPPORT MECHANISM

• Offers training, livelihood and job opportunities programs to stakeholders affected by the modernization (TESDA, DOLE, DSWD, etc)

10. COMMUNICATION

• Effectively communicating the right message to the target stakeholders
✓ Vehicles should be Euro 4 emissions-compliant.

✓ Vehicles should meet the fuel economy requirements of the appropriate drive cycle for both classes.

✓ Main service door would be located on the right side, and should be power- or manually-operated (easily opened from inside and outside)
The vehicle should also have an emergency door at the rear.

Drivers should have an adequate frontal and periphery vision coverage.

Vehicles should be fitted with a power-steering mechanism, allow auto-steering, and that the steering system should ensure easy and safe handling.
## JEEPNEY SPECIFICATIONS

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>CLASS I JEEPNEYS</th>
<th>CLASS II JEEPNEYS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle Length</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum Rear Overhang</td>
<td>50% of wheel base</td>
<td>50% of wheel base</td>
</tr>
<tr>
<td>Maximum Front Overhang</td>
<td>25% of wheel base</td>
<td>25% of wheel base</td>
</tr>
<tr>
<td>Cabin Requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum Floor-to-Ceiling Height</td>
<td>175 cm&lt;sup&gt;b&lt;/sup&gt;</td>
<td>145 cm</td>
</tr>
<tr>
<td>Minimum Backseat-to-Backseat Width</td>
<td>160 cm&lt;sup&gt;c&lt;/sup&gt;</td>
<td>150 cm</td>
</tr>
<tr>
<td>Front Spacing Between Seats</td>
<td>50 cm&lt;sup&gt;c&lt;/sup&gt;</td>
<td>40 cm</td>
</tr>
<tr>
<td>Seat Dimensions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum Width</td>
<td>35 cm</td>
<td>35 cm</td>
</tr>
<tr>
<td>Minimum Height</td>
<td>40 cm</td>
<td>40 cm</td>
</tr>
<tr>
<td>Minimum Depth</td>
<td>45 cm</td>
<td>45 cm</td>
</tr>
<tr>
<td>Minimum Space for each standing passenger</td>
<td>0.13 sqm (3-5 pax)</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>
# PUV Modernization Program

## Jeepney Specifications

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>CLASS I JEEPNEYS</th>
<th>CLASS II JEEPNEYS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step Board</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum height from ground of first step</td>
<td>25 cm</td>
<td>25 cm</td>
</tr>
<tr>
<td>Minimum Width</td>
<td>25 cm</td>
<td>25 cm</td>
</tr>
<tr>
<td><strong>Number of Service Doors</strong></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Number of Emergency Exits</strong></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Minimum Side Door Height</td>
<td>170 cm&lt;sup&gt;b&lt;/sup&gt;</td>
<td>140 cm</td>
</tr>
<tr>
<td>Minimum Side Door Width</td>
<td>65 cm&lt;sup&gt;d&lt;/sup&gt;</td>
<td>120 cm&lt;sup&gt;d&lt;/sup&gt;</td>
</tr>
<tr>
<td>Minimum Rear Emergency Exit Height</td>
<td>170 cm</td>
<td>140 cm</td>
</tr>
<tr>
<td>Rear Emergency Exit Width</td>
<td>40 cm&lt;sup&gt;d&lt;/sup&gt;</td>
<td>40 cm&lt;sup&gt;d&lt;/sup&gt;</td>
</tr>
</tbody>
</table>
**BACKGROUND:**
2003: LTFRB Moratorium on franchise issuance due to uncontrolled increase of franchises & problems of corruption in the system

**EFFECTS:**
- Proliferation of unauthorized franchises
- Inadequate public transport supply
- On-road competition = Unsafe road users

**NEED FOR SYSTEM REFORM:**

<table>
<thead>
<tr>
<th>Route Planning</th>
<th>BEFORE</th>
<th>NOW (OFG)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operator-initiated</td>
<td>LGU Public Transport Plan</td>
<td></td>
</tr>
</tbody>
</table>
OMNIBUS FRANCHISING GUIDELINES (OFG)

DOTr Department Order (to be signed June 2017) :
“Omnibus Guidelines on the Planning and Identification of Public Road Transportation Services and Franchise Issuance”

Salient Features of the Guidelines:
- √ Franchise applications based on Local Public Transport Route Plan
- √ Vehicles compliant with safety and environmental laws and standards
- √ Safety requirements for operators
- √ Operator consolidation
## Omnibus Franchising Guidelines (OFG)

### Safety, Security & Convenience Requirements (PUVS)

<table>
<thead>
<tr>
<th>Features</th>
<th>Bus</th>
<th>Mini-Bus</th>
<th>PUJ &amp; UV</th>
<th>FILCAB</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Body</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Curbside Entrance/Exit</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Low Entry (Urban Routes)</td>
<td>✔</td>
<td>✔</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Wheelchair Access</td>
<td>✔</td>
<td>✔</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td><strong>Engine</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engine: Euro 4 or better</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>*<em>Accessories (<em>as required)</em></em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Speed Limiters</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Anti-lock braking system</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>*GNSS (e.g. GPS)</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>*Automated Fare Coll. System</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>*CCTV, Dashboard Cameras</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>*</td>
</tr>
<tr>
<td>*Free Wi-Fi</td>
<td>✔</td>
<td>✔</td>
<td>*</td>
<td>*</td>
</tr>
</tbody>
</table>
E. SPEED LIMITER ACT (RA 10916) - IRR

NO SPEED LIMITER, NO REGISTRATION.

OFFENSES:

1. Operating w/o a speed limiter or with a non-functioning or tampered speed limiter.

2. Tampering speed limiters, and falsifying/using falsified certification documents.
F. MOTOR VEHICLE INSPECTION SYSTEM (MVIS) PROGRAM

Vehicle roadworthiness and emission testing

**Government MVIC:**
1: Mobile MVIC
2: Stationary MVIC

- Inspection of public transport, diplomat, & gov’t vehicles
- Target start of implementation: 2018

**Private MVIC (PPP)**
- Test of motor vehicles before registration renewal
- Under Project Development
G. SAFETY OF CHILDREN ABOARD MOTORCYCLES ACT (RA 10666) - IRR

COVERAGE AND PROHIBITION
All acts of driving/riding a two (2)-wheeled motorcycle with a child on board:

- Public roads where there is heavy volume of vehicles
- There is a high density of fast moving vehicles
- Where a speed limit of more than 60/kph is imposed
H. ANTI-DISTRACTED DRIVING ACT (RA 10913)-IRR

DISTRACTED DRIVING

Refers to the use of mobile communications device, electronic devices, among others, in a motor vehicle in motion, temporarily stopped at a traffic light or any intersection.
THANK YOU!