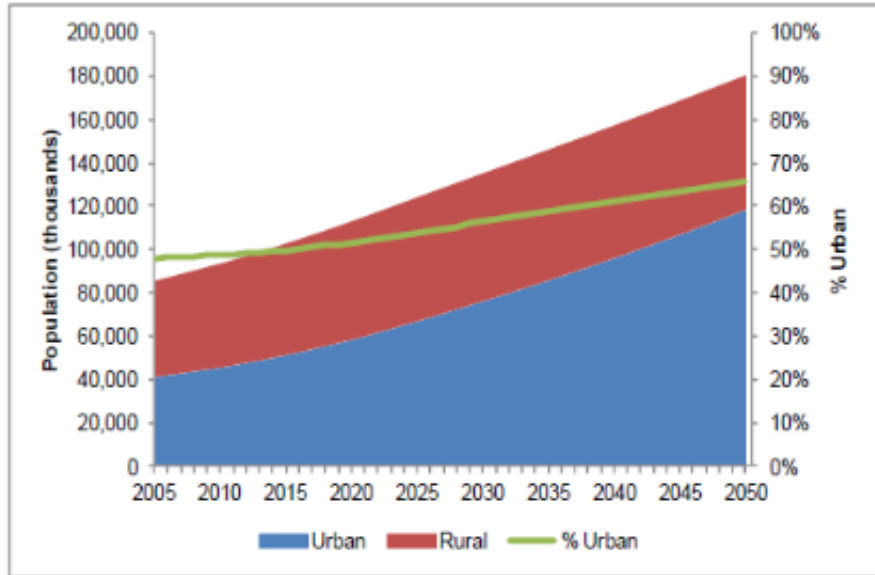




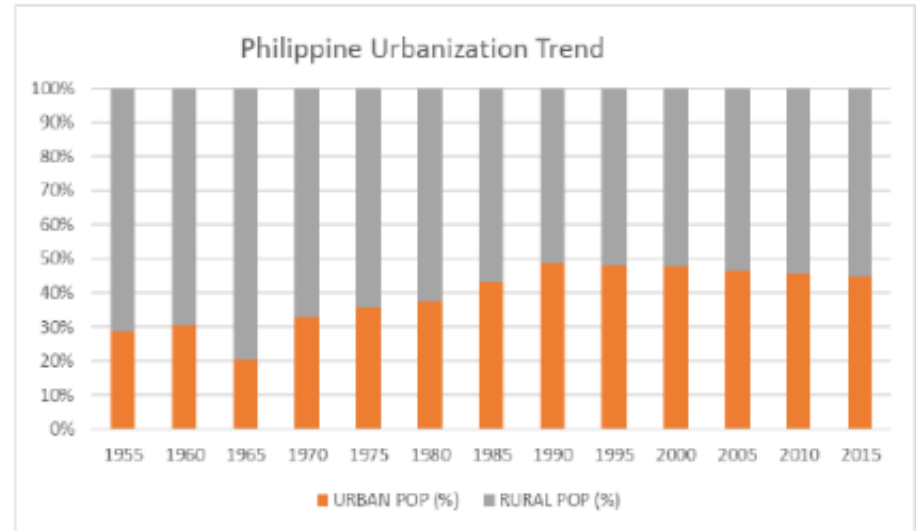
SHIFTING GEARS IN THE NEW NORMAL: THE PHILIPPINE EXPERIENCE

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CONTEXT OF URBAN TRANSPORT DEVELOPMENT



Source: UN, 2012



Source: <http://www.worldometers.info/world-population/philippines-population/>

The Daily Cost of Metro Manila Congestion*

2017 PHP 3.5 billion

2035 PHP 5.4 billion

(assuming no interventions)

*From Follow Up Survey of the Japan International Cooperation Agency (JICA) on the Roadmap for Transport Infrastructure Development for Greater Capital Region (2017). Cost expressed in terms of fuel cost and lost person-hours in traffic/congestion.

Old Normal: Inadequate PT Capacity

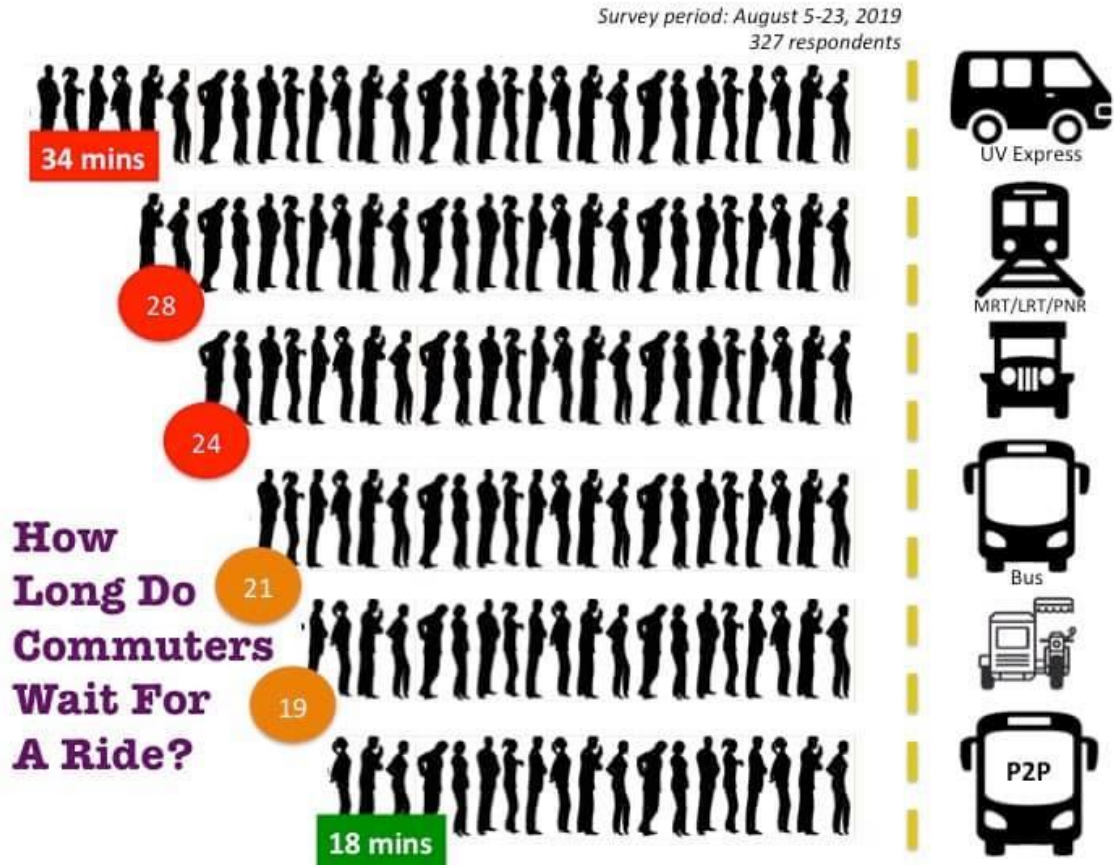


Photo credit: Regin Regidor, 2020

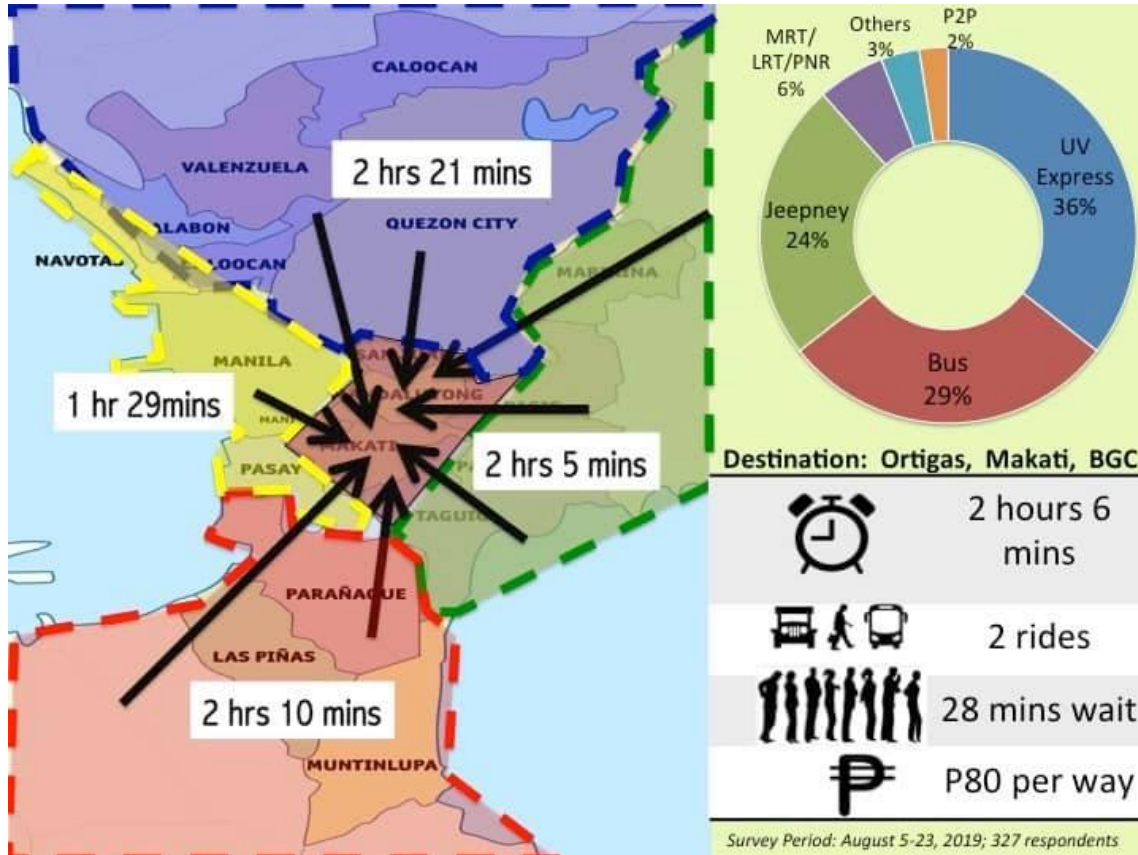


Photo credit: Robbie Siy, 2020

The Old Normal: Long Waiting Times



The Old Normal: Long Travel Times



Reference: Cerna, 2019 (grabbed from NAST Presentation of Dr. Regin Regidor, 06July2020)

The Old Normal: Public Transport Operations

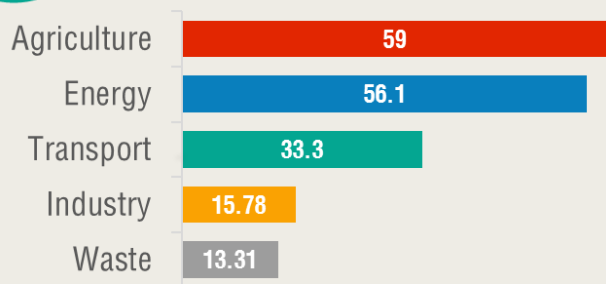
- Drivers earned based on passengers carried (non-salaried)
- Competition for passengers
- Drivers work for 13-15 hours per day



Photo credit: Robbie Siy

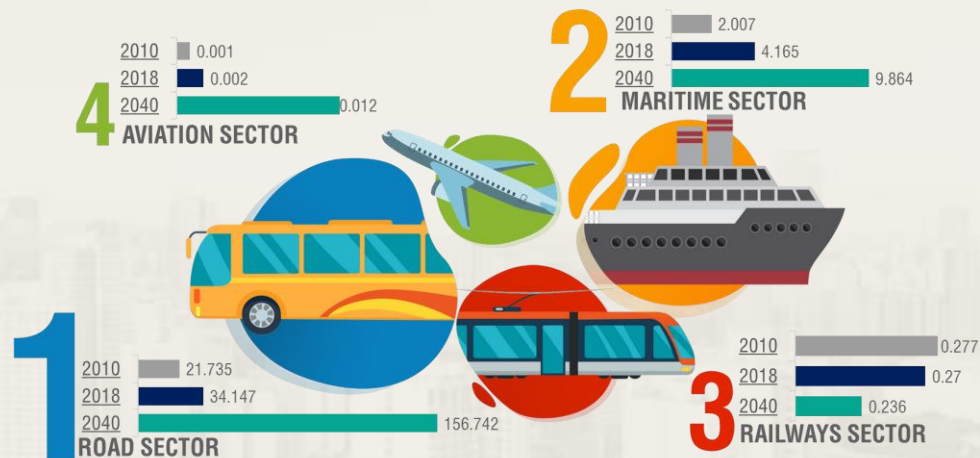
3RD

largest contributor of the Philippines' greenhouse gas emissions, next to **Agriculture Sector** and **Energy Sector**.



Greenhouse gas emissions by sector, Philippines, 2016
In million tons of carbon dioxide-equivalents (MtCO₂e).

Source: CAIT Climate Data Explorer via. Climate Watch
OurWorldInData.org/co2-and-other-greenhouse-gas-emissions

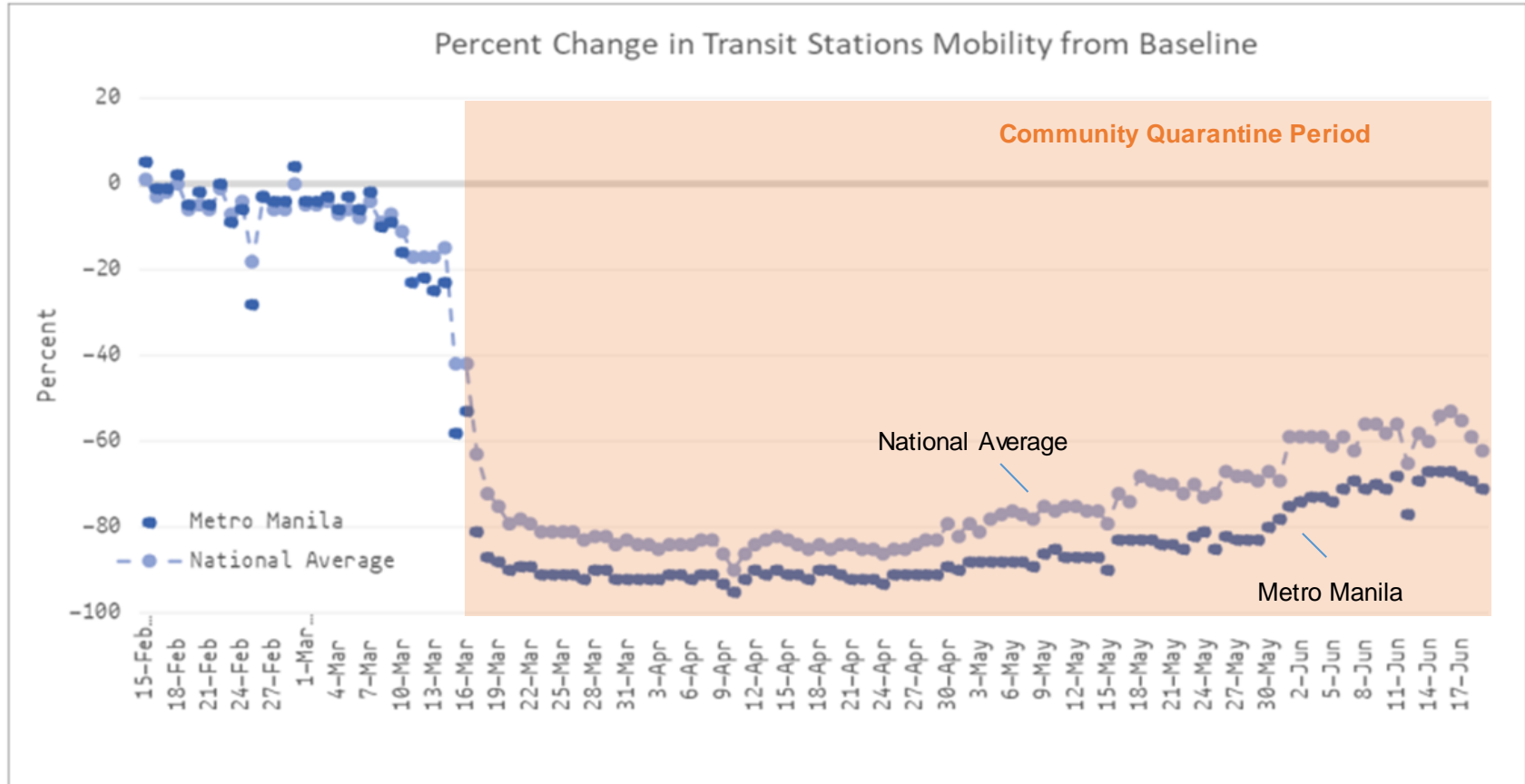


PHILIPPINE TRANSPORT SECTOR BASELINE GHG EMISSIONS
IN MILLION TONS OF CARBON DIOXIDE-EQUIVALENTS (MTCO₂E)
The baseline and projections were estimated considering the economic growth targeted under the **Medium-Term Philippine Development Plan – Ambisyon 2040**, and the expected growth in population.

While we were sleeping ...

- On 11 March 2020, the World Health Organization (WHO) declared the novel Coronavirus Disease 2019 (COVID-19) a global pandemic
- On 16 March 2020, the President of the Philippines imposed Enhanced Community Quarantine (ECQ) and Stringent Social Distancing Measures in Luzon
- Suspension of all modes of public transportation in land, air and water for the duration of the ECQ

Transition from Old Normal to New Normal

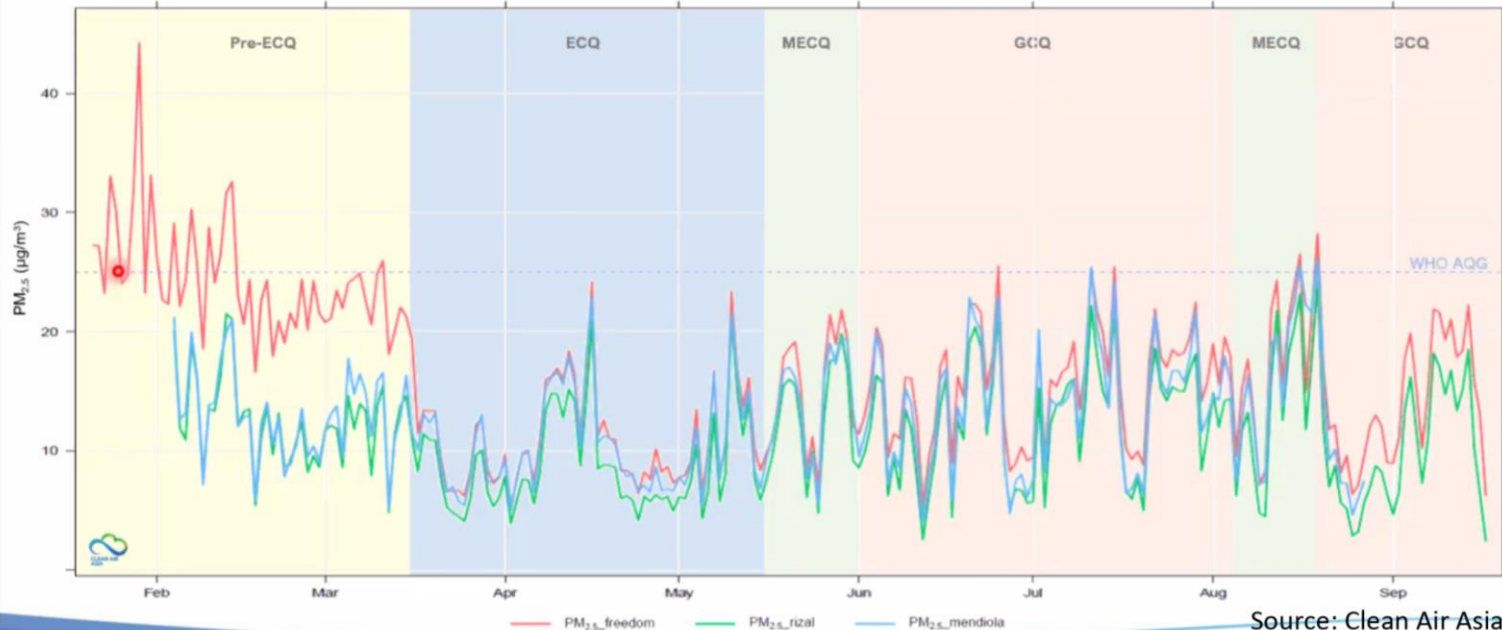


Silver Lining

Air quality significantly improved during the ECQ in the three monitoring sites in Manila, with up to 54% reduction in $PM_{2.5}$ in the roadside area, and 21 to 30% decrease in non-roadside sites. Post-ECQ, levels start to increase again, similar to pre-ECQ air quality.



Time series data of $PM_{2.5}$ in 3 Manila sites (21 Jan to 16 Sept 2020)



Source: Clean Air Asia

ASIA BLUE SKIES PROGRAM



Social Impact on the Transport Sector



Transport Operations: New Normal

Two-pronged objective:

Efficiency: Meet mobility requirements of the commuting public and ensure unhampered movement of goods to support economic activities;

Safety: Control the spread of the virus through the reduction of transmission through the implementation of stringent health and sanitary protocols as well as reduction of contact

SANITARY MEASURES



Wearing of face mask at all times



Cashless payments



Use of thermal scanners



Alcohols/sanitizers in PUVs



Disinfection of high-touch surfaces



Disinfecting facilities















Contact tracing

Transition from Old normal to New normal

Transportation

✔ Allowed with safety protocols
 ✘ Not allowed

	ECQ	MECQ	GCQ
Public			
 Rail (PNR, LRT, MRT)	✘	✘	✔
 Bus	✘	✘	✔
 Jeepney	✘	✘	✔
 Taxi	✘	✘	✔
 TNVS	✘	✘	✔
 Tricycle	✘	✘	✔
 Public shuttle	✔	✔	✔
	For front-liners		
Private			
 Company shuttle	✔	✔	✔
	Special permit from LTFRB for rented shuttles	Special permit from LTFRB for rented shuttles (50% Capacity)	
 Personal vehicle	✔	✔	✔
	Person/Workers in permitted sectors/activities	Person/Workers in permitted sectors/activities (2 persons per row)	
 Bicycle	✘	✔	✔
		1 person max	
 Motorcycle	✘	✔	✔
		1 person max	
 E-scooter	✘	✔	✔
		1 person max	

Limited load factor
(varies by mode of transport)



PERFORMANCE-BASED CONTRACT

- a. vehicle-kilometer operated**
- b. reliability (regularity and punctuality of services based on headway)**
- c. driver and vehicle quality**
- d. passenger & staff security**
- e. customer/end-user satisfaction**

Service Contracting of Public Transportation

Government will contract operators/drivers to render public transportation services based on vehicle-kms, compared to the status quo of earning based on passenger-kms



BENEFITS OF SERVICE CONTRACTING

For the Operators/Drivers

- Stable income despite the reduction in load factor
- Reasonable working hours

For Commuters

- Predictable service (based on headways or the time between two succeeding PT mode)
- Safe travel due to standards for driver behavior as condition of the contract
- Availability of feedback mechanism for improvement of service

Promotion of Active Transport



PROTECTED BIKE LANES ON EDSA

- ❑ The DOTr, MMDA, and the Department of Public Works and Highways (DPWH) have started the construction of the bike lanes in EDSA last 13 June 2020
- ❑ 1.5 meters of space for bikers and will be done in two (2) phases – interim and long-term



SAVES LIVES



Maximize productivity of road infrastructure



Reduce load on public transport systems



Provide basic/fundamental social justice



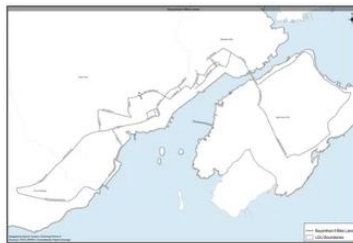
Solve traffic by encouraging shift from car to bicycle



Existing Bicycle Lane with Flexible Bollards in Julia Vargas Avenue, Pasig City

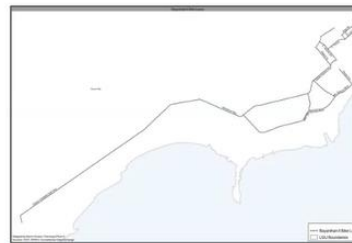
Active Transport

- 561 km of bike lanes built across Metropolitan areas of Manila, Cebu, and Davao as of April 27, 2022



Metro Cebu

129.66 kms



Metro Davao

54.74 kms



Metro Manila

377.12 kms

- Bike lanes range from Class 1 (separated from carriageway), 2 (protected with bollards, curbs, pavement markings), and 3 (prioritization in mixed traffic)



- IEC for promoting road sharing: online, through manuals and brochures, on electronic billboards in train stations and along the road

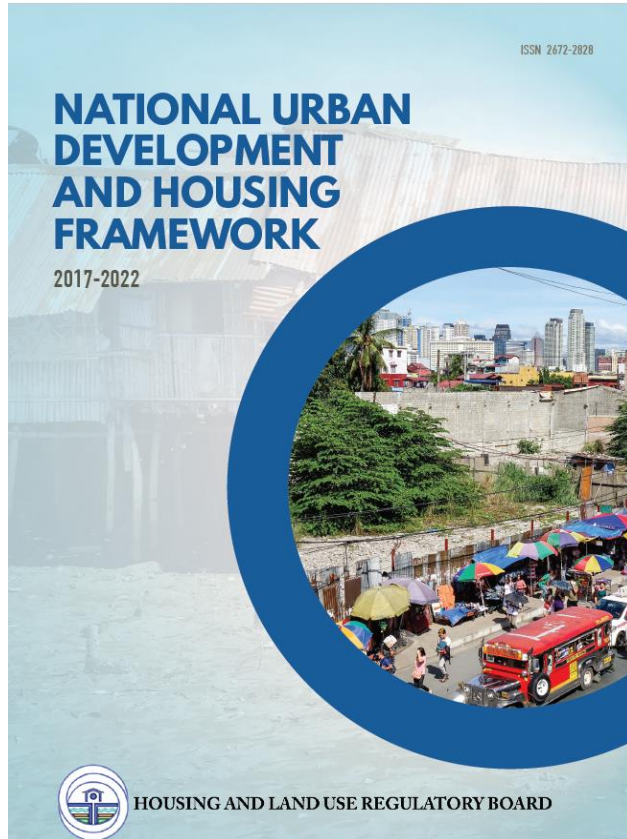


Users' Perspective

Interventions to encourage to bike more		
Provision of a safe, connected cycling route	205	89%
Amenity improvements (e.g. night lighting, covered walk, signage) of areas with intense pedestrian activity	1	0%
Enforcing lower speed limits and other traffic safety policies (1m distance between drivers and cyclists, give priority to cyclists/pedestrians)	140	61%
Availability of bicycle skills training program	37	16%

Interventions to walk more		
Provision of safe, well-connected walking route network with supporting infra	167	72%
Amenity improvement (night light, covered walk, signages)	129	56%
Enforcing lower speed limits (15-30kph) in areas that attract high pedestrian/cyclist use;Amenity improvements (e.g. night lighting, covered walk, signage) of areas with intense pedestrian activity	46	20%
Add more footbridge for crossing pedestrian strategically along CBD areas and highways with heavy vehicle traffic volume;Amenity improvements (e.g. night lighting, covered walk, signage) of areas with intense pedestrian activity	86	37%

LINKING LAND USE TO TRANSPORTATION



- Transit-oriented development
 - compact, walkable, mixed-use communities around a mass transportation system
 - well-developed pedestrian and cycling facilities connected to transport terminals and high-density, walkable districts within a 10-minute walk circle around the transport station
- Locally, this strategy can be pursued by integrating transportation planning in the development of the Comprehensive Land Use Plan (CLUP) when mapping out a locality's various land uses.

Moving towards a better future

- Build on gains in improving public transportation operations
 - Service contracting
 - Strengthen digital platform for Automatic Fare Collection System (AFCS)
 - Connecting micro-mobility modes to main PT stations
- Sustain development of infrastructure and supportive culture for Active Transportation
 - Connected and protected cycle lanes
- Support for environment-friendly transportation systems through the use of clean and energy efficient transport technology and fuels
 - Inclusive and people-oriented mobility such as TOD, prioritization of pedestrians
- Adopt alternative working schemes (i.e., 4-day work week, flexible working hours)

THANK YOU FOR YOUR ATTENTION 😊

