

Review on the Consolidation Process of the Local Bus Operators in Asian Megacities

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Corporate Profile of ALMEC Corporation

- **Establishment:** 1971
- **Number of employees:** about 60
- **Personnel :**Transport Planning Division (Urban Transport Planning, Public Transport, Traffic Management, Logistics) and Comprehensive Planning Division (Urban / Regional Planning, TOD, Environment, Disaster Management, GIS, Economic and Industrial Policy, PPP)

Recent Bus – Related Projects

Name	Country	Client	Completion Year
The Project for Capacity Development of Public Utility Vehicle in Metro Manila and Its Adjoining Areas	Philippines	JICA	2028
Information Gathering Survey to Study Public Transportation System and Tourist Model-route to Improve Convenience for Tourists in the Republic of Palau	Palau	MLIT	2024
Kathmandu Valley Urban Transportation System Master Plan Project, Nepal	Nepal	JICA	2027
Data Collection survey for the introduction of public transportation system that contributes to tourism and the environment in the Republic of Palau	Palau	MLIT	2023
Project for Capacity Building for Bus Operation Policy and Management in Nairobi Metropolitan Area	Kenya	JICA	2025
The Project for Urban Mobility Improvement in Kigali	Rwanda	JICA	2025
JICA Training on Urban Public Transport	World	JICA	2022
Project for Modernization of Public Urban Transport in the City of Belgrade	Serbia	JICA	2024
Preparatory survey for Public Urban Transport Development Project for Strengthening Mobility and Reducing Air Pollution in Sarajevo Province (Public Transport Policy)	Bosnia	JICA	2020
Project for Supporting Development of Interoperable Smart Card System for Public Transportation in Hanoi	Vietnam	JICA	2021
Project for Improving Bus Service in Yangon	Myanmar	JICA	2021

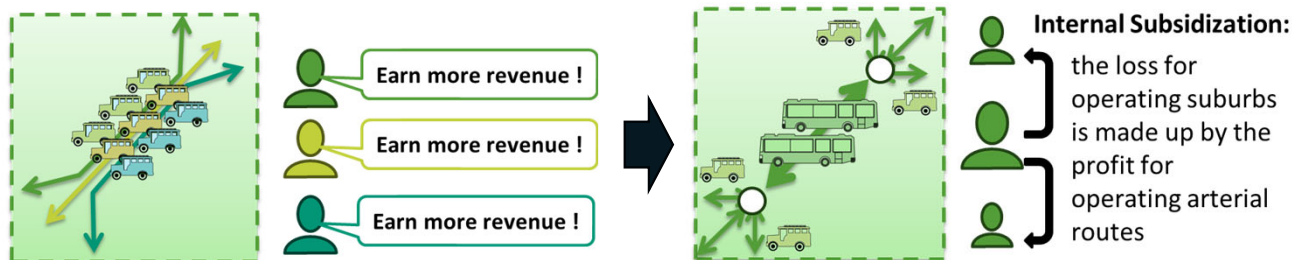
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Introduction

• Definition of Bus Service in the Urban Transport

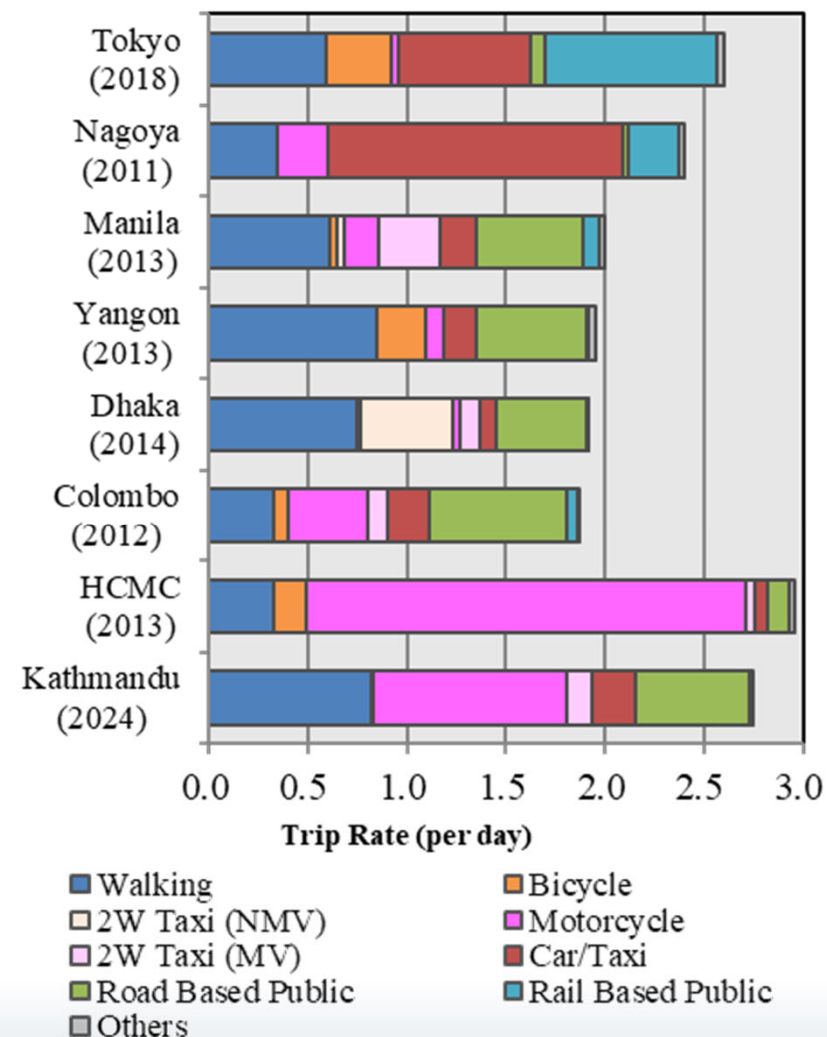
- Secondary (Feeder) Transport for the railway service
- Minor Transport (motorized cities)
- **Major Transport (less motorized cities)**

- In some cities, bus is mainly operated by private operators and not controlled. Towards the motorization, **industrial restructure** is required to improve transport performance and regulate competition among operators.



- **Various Asian cities have implemented or proposed consolidation policies but faced significant difficulties** due to regulatory and institutional barriers.

Trip Rate by Representative Travel Mode



Literature Review

Author(s) & Year	Case Study	Main Argument / Contribution
Estache & Gómez-Lobo (2004)	Santiago, Chile	- Full liberalization led to market failures (oversupply, poor safety, pollution). - A hybrid regulatory model is required to restore balance.
Sohail et al. (2006)	Developing countries (general)	- Emphasizes importance of an appropriate regulatory framework and effective enforcement mechanism - Strict regulation may incite the potential for corrupt practices
Finn & Mulley (2011)	Developing countries (general)	- Framework for understanding regulatory evolution, implying proliferation of informal operators due to weak regulation. - Regulatory capacity building and coordinated service planning are critical
Ardila & Darido (2023)	Latin America (multi-country)	- Highlights shift from “competition in the market” to “competition for the market”. - Successful reforms require fare collection separation, risk allocation, and institutional strengthening.
Phyo et al. (2012)	Asian countries	Classifies the driver’s salary systems into four categories such as share of revenue, bus fleet rental, fixed salary, and fixed salary plus incentives. Identifies how the different salary systems and make impacts on service level of bus operation.
Cortez et al. (2023)	Oviedo (Spain) & Tangier (Morocco)	- Uses KPIs to compare operational performance. - Suggests to establish strategic network planning and minimum service requirements based on demand patterns and local conditions.

- Focus on **bus industry consolidation policies in Asian megacities**, aims to explore comparative insights within the cities where:
 - Regulatory interventions have improved transport efficiency
 - Facing problems with fragmented bus services that impede reform.
- To provide **policy recommendations for cities considering transport industry reform.**

Case Study Cities:

City (Nation)	Metropolitan Area Profile			Vehicle Ownership			The Number of Buses
	Population (Million)	Area (km²)	Density (/ha)	Vehicles per 1,000 Pop		(Year)	
				Car	MC		
Tokyo (Japan) *	37.8	8,775	43.1	226	34.0	2020	6,704
Fukuoka (Japan) *	2.4	505	54.1	515	28.2	2020	2,847
Seoul (Korea)	23.2	2,769	83.9	296	50	2018	7,522
Hanoi (Vietnam)	6.4	1,256	50.6	57.9	753	2019	2,034
Yangon (Myanmar)	6.4	666	96.5	41.8	36.5	2017	6,016
Manila (Philippines)	24.2	1,911	126	96.5	104	2020	5,238*
Dhaka (Bangladesh)	19.1	619	309	27.8	52.8	2018	9,027
Kathmandu Valley (Nepal) *	3.2	199	16.2	130	532	2023	4,817

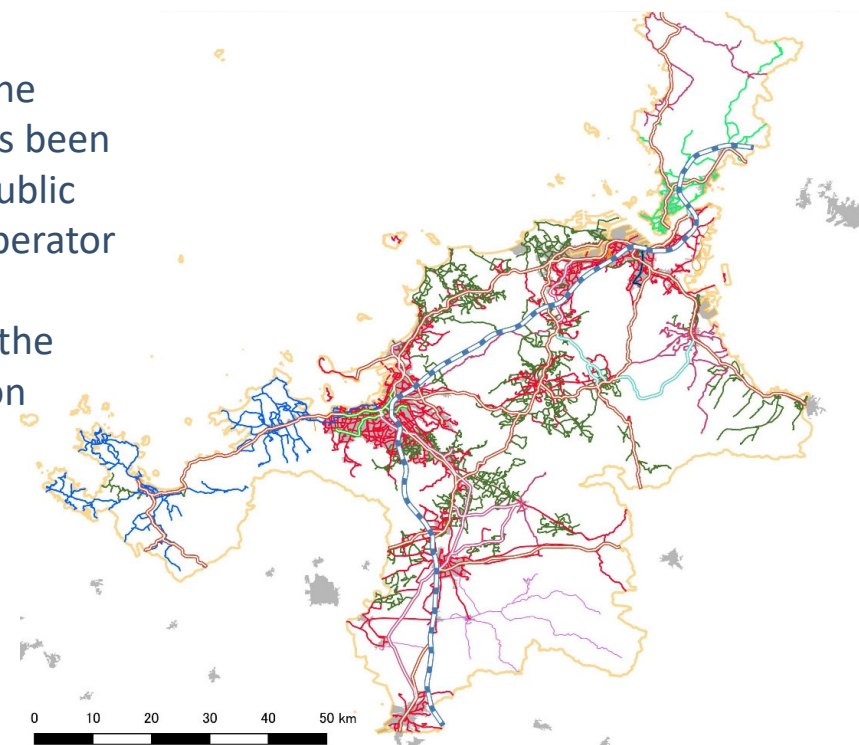
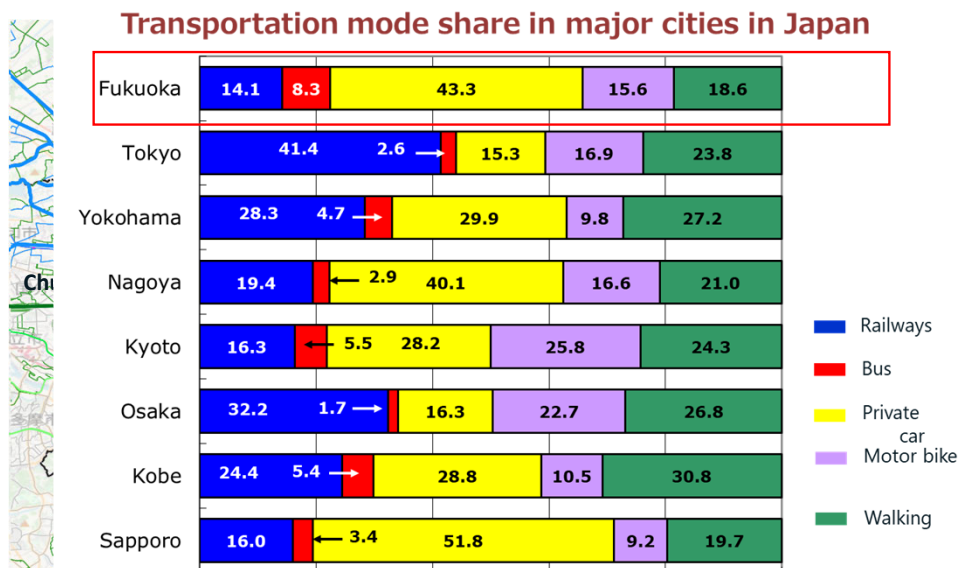
* Not included in the manuscript

Bus Industry Reform in Japan

- In 1938 (year before WWII. Procuring fuel and parts had become difficult), **Land Transport Business Adjustment Act** was executed to consolidate transport operators to improve management by reducing excessive competition (Planned consolidation from 1,166 to 154 operators).
- Even after WWII, the consolidation promoted by the law is the basis of the catchment areas of the operators in the City.

Tokyo: divided into 5 blocks. The central block is managed by public and others are by dominant railway operators.

Fukuoka: One operator has been dominant public transport operator in the City succeeding the consolidation



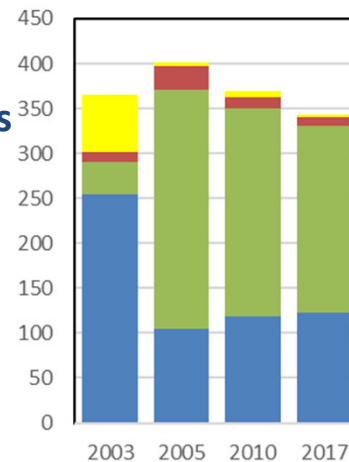
Monopolistic Market is better than Competitive Market

“Successful” Bus Industry Reform

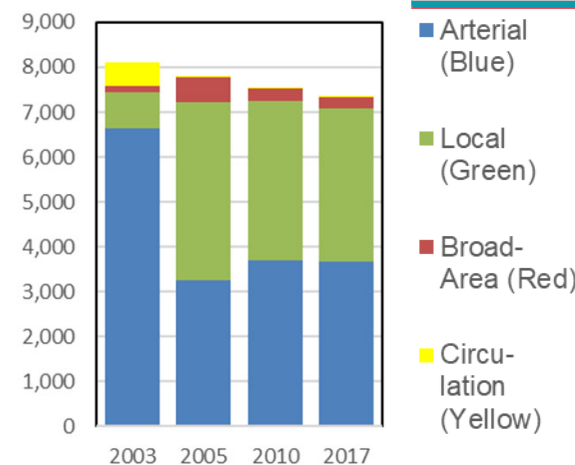
■ Seoul, South Korea (296 cars and 50 MCs per 1,000 pop)

- Due to competition with cars and expanding **metro-system**, many firms **went bankrupt** or curtailed their service (The number of operators: **89** in 1995 to **58** in 2002).
- In 2004, “**semi-public operation system**” was implemented and the centralized management by the government had been conducted:
 - Route restructure with the hierarchical network
 - **Fare pooling and distribution according** to the operating distance
 - Automated Fare Collection (AFC)

of Routes



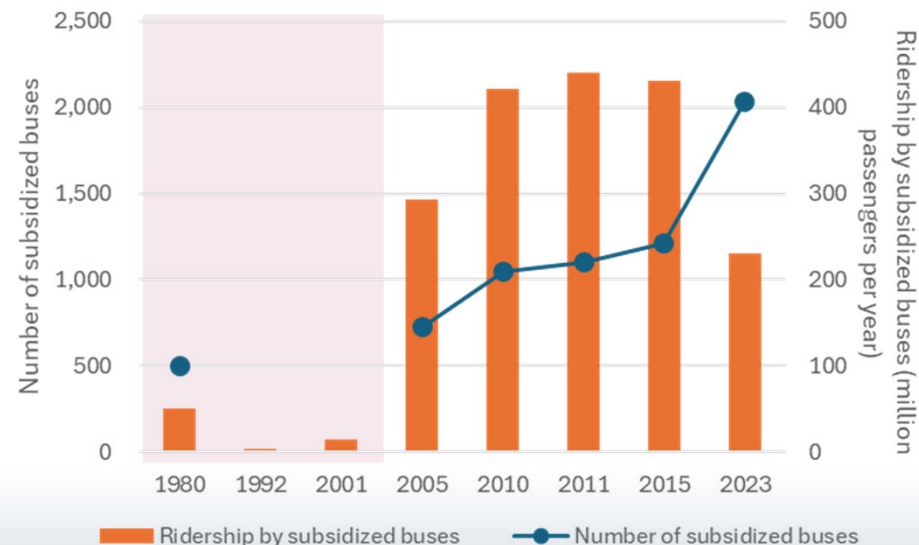
of Registered Bus



■ Hanoi, Vietnam (58 cars and 753 MCs per 1,000 pop)

- The subsidization for bus was phased out in 1986, and the bus service was drastically declined. The subsidies were reintroduced in 1993 but the ridership was not recovered.
- In 2004, Public company as a conglomerate **comprising 10 companies, 9 subsidiaries and 4 JVs** was established as **TRANCERCO**. Some initiatives supported by state subsidies, led to rapid ridership growth
- In 2015, the farebox revenue covered only 42.8% of the total cost.

of Buses and Ridership of Subsidized Buses in Hanoi



(Examples of the) bus operator's classification by the fare revenue

Characteristics of Managing Company (a & b)

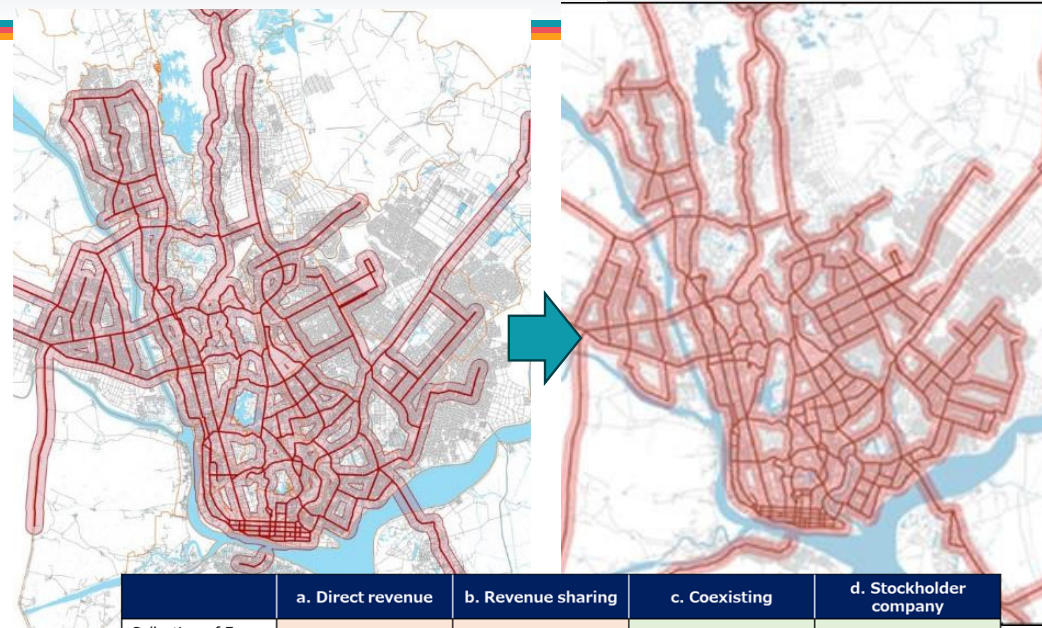
- **Competition among the operators can't be eliminated** completely.
- It is **difficult to take coordinated action** to improve services in response to motorization.
- **Financial information is unclear** and discussion on subsidies is difficult

		a. Direct revenue	b. Revenue sharing	c. Coexisting	d. Stockholder company
Collection of Fare Revenue		Owner	Owner	Operator	Operator
Distribution of revenue or profit	From	Owner	Operator	Operator	Operator
	To	Operator (e.g. Owner pay fee to operator)	Owner	Owner and Stockholder	Stockholder
Operation cost		Owner	Owner	Owner and Operator	Operator
Vehicle owned by		Owner	Owner	Owner and Operator	Operator
Driver hiring		Owner	Owner	Owner and Operator	Operator
Business Scheme		The Business Scheme section contains four diagrams illustrating the flow of funds in different bus ownership models: a. Direct revenue: Two Bus Owners (represented by bus icons) collect fare revenue from passengers (blue circles). Each Bus Owner pays an 'operation fee' to the Operator (represented by a box). The Operator is the sole entity that collects fare revenue from passengers. b. Revenue sharing: Two Bus Owners collect fare revenue from passengers. Each Bus Owner pays an 'operation fee' to the Operator. Additionally, the Operator shares a portion of the fare revenue (labeled 'fare revenue') with each Bus Owner. c. Coexisting: A Stockholder (box) owns the Operator (box). The Operator collects fare revenue from passengers and pays an 'operation fee' to a separate Bus Owner (box). The Bus Owner also collects fare revenue from passengers. The Operator pays a 'dividend' to the Stockholder. d. Stockholder company: A Stockholder owns the Operator. The Operator collects fare revenue from passengers and pays an 'operation fee' to a separate Bus Owner. The Bus Owner also collects fare revenue from passengers. The Operator pays a 'dividend' to the Stockholder.			

“On-going” Bus Industry Reform Yangon, Myanmar

- The regional government Region Government established the Yangon Regional Transport Authority (YRTA). The new public bus network called the Yangon Bus Service (YBS) was launched in 2017 and the following major actions were taken:
 - Consolidation of operators from **100++** to **21**
 - Route restructuring from 366 routes to 100 routes
 - Discontinuation of obsolete vehicles (before 1996)
 - One-man operation by a driver
- Among 21 operators, only 6 operators can be classified as companies. In most of the operators, the bus fleets are owned by the individuals.**
- Further industrial reform was stopped by the coup d'etat in 2021.

Comparison of Bus Network in Yangon
Before (2017) After (as of 2020)



	a. Direct revenue	b. Revenue sharing	c. Coexisting	d. Stockholder company
Collection of Fare Revenue	Owner	Owner	Operator	Operator
Distributi on of revenue or profit	From	Operator	Operator	Operator
	To	Operator (e.g. Owner pay fee to operator)	Owner and Stockholder	Stockholder
Operation cost	Owner	Owner	Owner and Operator	Operator
Vehicle owned by	Owner	Owner	Owner and Operator	Operator
Driver hiring	Owner	Owner	Owner and Operator	Operator
Business Scheme				

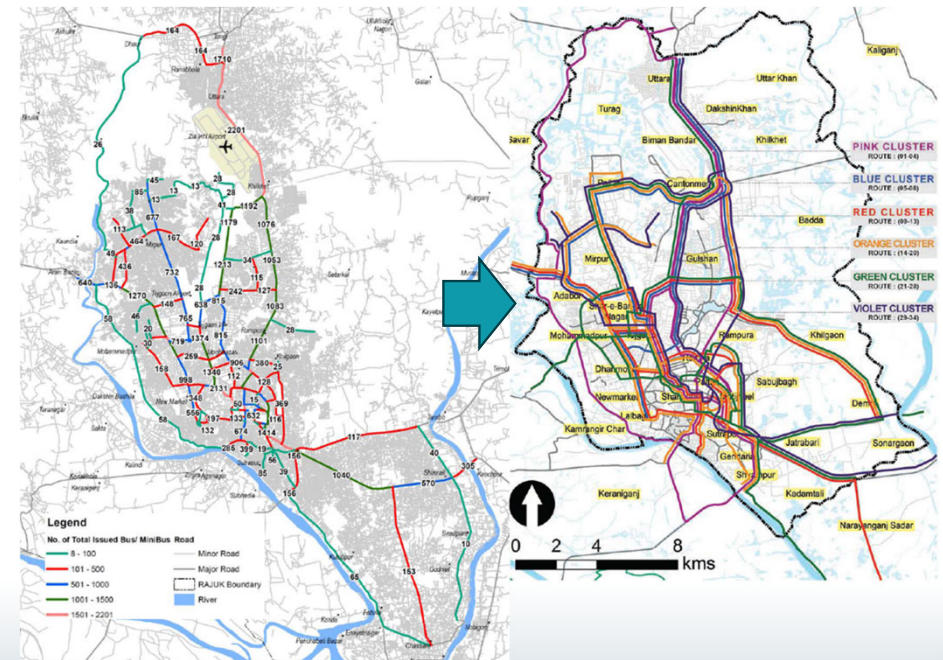
“On-going” Bus Industry Reform Dhaka, Bangladesh

- **BRR(Bus Route Restructure)** proposes to divide the City into **9 clusters**, having **42 routes** (from **289**) by **22** companies. The companies are franchised to a single private operator and the one-route-one-operator rule is applied.
- Only one route is operated as of February 2025. While the route should operate under a single company, **4** companies running **Air-conditioned (AC) buses** and **10** companies running **non-AC buses**.

Consolidation plan of the bus routes in Dhaka

Cluster (Route id)	# of Routes		# of Buses	
	Present	Proposed	Present	Proposed
Pink (#1-4)	23	4	883	1,048
Blue (#5-8)	21	4	563	509
Red (#9-13)	35	5	1,108	695
Orange (#14-20)	47	7	1,122	967
Green (#21-28)	54	8	1,433	1,212
Violet (#29-34)	34	6	1,089	1,040
North (#35-37)	40	3	1,686	718
North-West (#38-40)	30	3	992	798
South (#41-42)	5	2	99	65
Total	289	42	8,975	7,052

Comparison of Present and Proposed Bus Network in Dhaka
Before (2014) Proposed

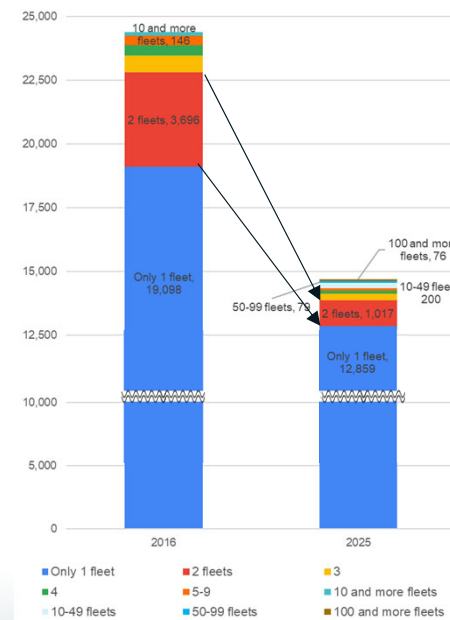


“On-going” Bus Industry Reform Manila, Philippines

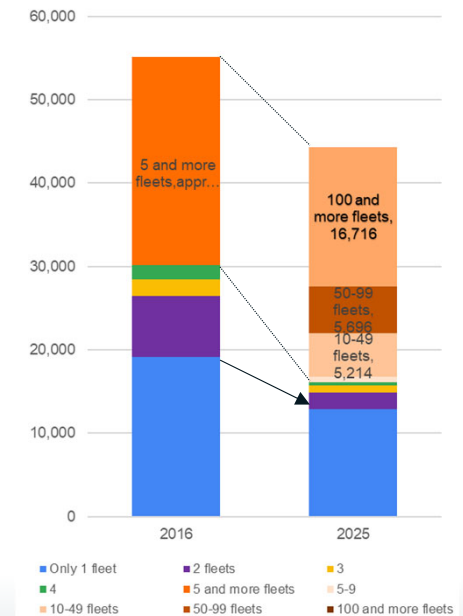
- In June 2017, the **Public Utility Vehicle Modernization Program (PUVMP)** was announced and the consolidation from individual operators and micro-enterprises into the consortium has been implemented.
- The initial target is to complete within 3 years after launch. There has been strong resistance from operators, and repeated extensions have been made.
- Currently approximately 65 % of 40,000 ++ Jeepney routes are consolidated as the **company or cooperative**. But most of them are **substantially the managing company and competition can't be eliminated**.

	a. Direct revenue	b. Revenue sharing	c. Coexisting	d. Stockholder company
Collection of Fare Revenue	Owner	Owner	Operator	Operator
Distributi on of revenue or profit	From	Owner	Operator	Operator
	To	Operator (e.g. Owner pay fee to operator)	Owner and Stockholder	Stockholder
Operation cost	Owner	Owner	Owner and Operator	Operator
Vehicle owned by	Owner	Owner	Owner and Operator	Operator
Driver hiring	Owner	Owner	Owner and Operator	Operator
Business Scheme				

of Jeepney Routes



of Jeepney Fleets

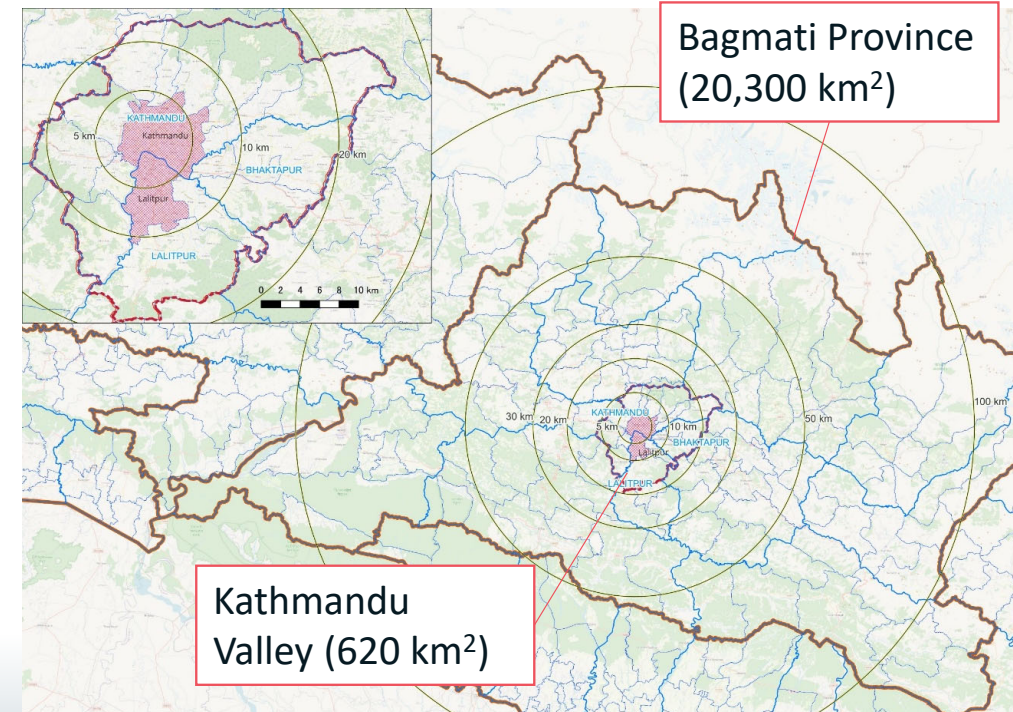


“Before” Bus Industry Reform Kathmandu, Nepal

- Under Clause 9 (1) of the Company Registration Act, 2063 (2006 AD), all **bus operators are registered as companies**.
- Only 6 of the 63 companies can be classified as stockholder companies.** The reality is an extremely fragmented market by a lot of micro individuals.
- Responsibility of the Government Authority:**
 - An office of the Bagmati Province oversees the planning, monitoring, and regulation of transport services by vehicle, including bus, but has no viability.
 - Parliament enacted the **Urban Area Public Transport Authority Act** in 2022, and **FC(Federal City)PTA** was established as the acting authority.
 - The Bagmati Province Government has complained to the **Supreme Court** that it deprives the provincial government of its rights on traffic management (**as provided for in the Constitution**).

of Operators and Vehicles by the Type

Operation Style	# of Operators	# of Registered Vehicles		
		Micro	Bus	Total
a. Direct Revenue	52	1,197	2,978	4,075
b. Revenue Sharing	4	113	68	181
d. Company	6	66	382	448
e. difficult to classify	1	13	0	13
Total	63	1,389	3,428	4,817

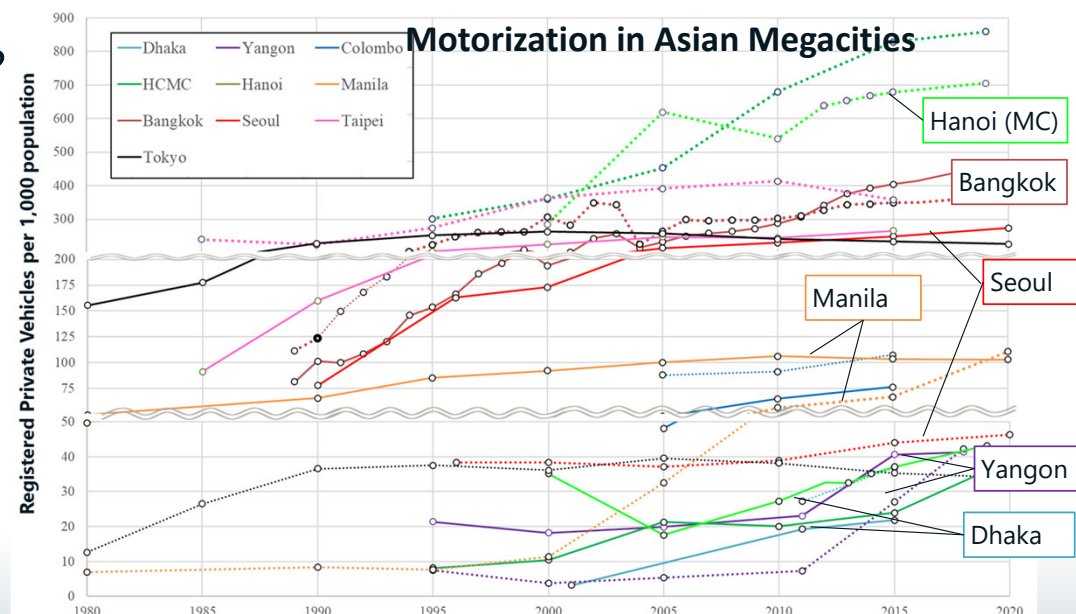


Discussion & Conclusion (1)

- The “consolidated” operators are substantially jumbles of individual owners: unable to carry out analysis to improve management.
- Difficult to see any benefit in being company and responsible for the operation of buses without any attractive incentive.
- Defining factors** of “successful” consolidation ?
 - Strong intervention by the government through regulatory framework under the clear visions
 - **The bus industry is in crisis due to the motorization and operators had no room to resist ?**
 - **Subsidization:**

How to sustain the bus service ?: As self-financing or With subsidization ?

	a. Direct revenue	b. Revenue sharing	c. Coexisting	d. Stockholder company
Collection of Fare Revenue	Owner	Owner	Operator	Operator
Distribution of revenue or profit	From	Owner	Operator	Operator
	To	Operator (e.g. Owner pay fee to operator)	Owner and Stockholder	Stockholder
Operation cost	Owner	Owner	Owner and Operator	Operator
Vehicle owned by	Owner	Owner	Owner and Operator	Operator
Driver hiring	Owner	Owner	Owner and Operator	Operator
Business Scheme				



Discussion & Conclusion (2)

- Prerequisites of public transport modernization:
 - Vehicle ownership under the company, not individual:
 - **Financial Transparency** (under standardized rules)
- **AFC (Automated Fare Collection)** system may ensure the financial transparency of the bus business.

Deployment Trends of AFC in the Case Study Cities

Seoul (Korea)	"T-Money" can be used for all bus and rail services was introduced at the same time as the restructuring of bus routes, enable the revenue pool management system under the semi-public operation.
Hanoi (Vietnam)	From 2017 to 2021, JICA supported the development of interoperable smart card systems for the public transportation in Hanoi. In December 2024, the Hanoi People's Committee issued a decision to expand cashless electronic payment across all subsidized bus routes.
Yangon (Myanmar)	Stored-value smart card called "Yangon Payment Service (YPS)" was introduced in 2020 and the distance-based fare system was introduced in 2022. As of March 2025, YPS card and YPS QR services (by mobile application) are available for more than 100 bus routes.
Manila (Philippines)	Stored-value smart card called "beep" was introduced in 2015 for the urban railway, and had been installed in the limited bus lines including Bonifacio Global City (BGC) Bus and EDSA busway line. Payment by Mastercard was also introduced for the limited line in 2024.
Dhaka (Bangladesh)	From 2014 to 2018, JICA conducted capacity development on operation of the AFC for public transport and stored-value smart card called "Rapid Pass" was introduced in 2018. It is currently being used only on Metro Rail Line 6 which was opened in 2023 and a limited number of buses operated by Bangladesh Road Transport Corporation (BRTC).

Way Forward:

- Data collection of further case studied cities:
- In-depth analysis in addition to published information collection
- Quantitative analysis to assess the impacts of the consolidation process.

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