



# Introduction to bus sector modernisation

September 2020











# MODERN BUS COMPANY FORMATION



# GOVERNMENT REGULATION

# Regulating the modern bus company

# Evolution of bus sector regulation

## COMMERCIAL OPERATING LICENSE ONLY

- Individuals, collectives or companies can operate anywhere.
- The market is regulated by informal associations.



## ROUTE LICENSE ONLY

- Individuals, associations, or companies have licenses to operate specific routes.
- The company or driver collects all revenue.



## SERVICE CONTRACT

- The bus company has a contract with the government to provide services.
- The contract lays out operational standards.
- Services may be route- or area-based.

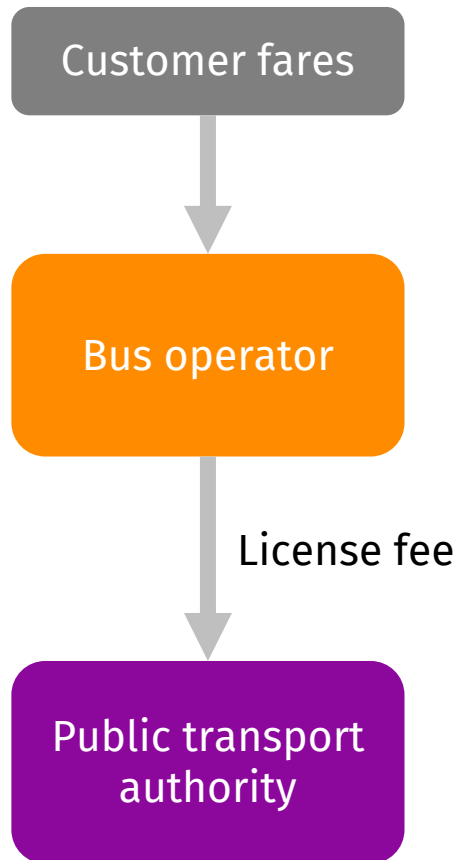
# What are the components of a bus operating contract?

- Specifications for the buses that will be used for the service.
- How the company will be paid (e.g., per kilometre, per passenger, etc.).
- Depots where the service will be based, and who is responsible for paying for what.
- Detailed explanation of quality of service bonuses and penalties.
- Process for settling disputes.
- Clear explanation of the company's responsibility versus the government's responsibility.
- Clear explanation of the assets the government is providing to the company, if any, and the terms of use.

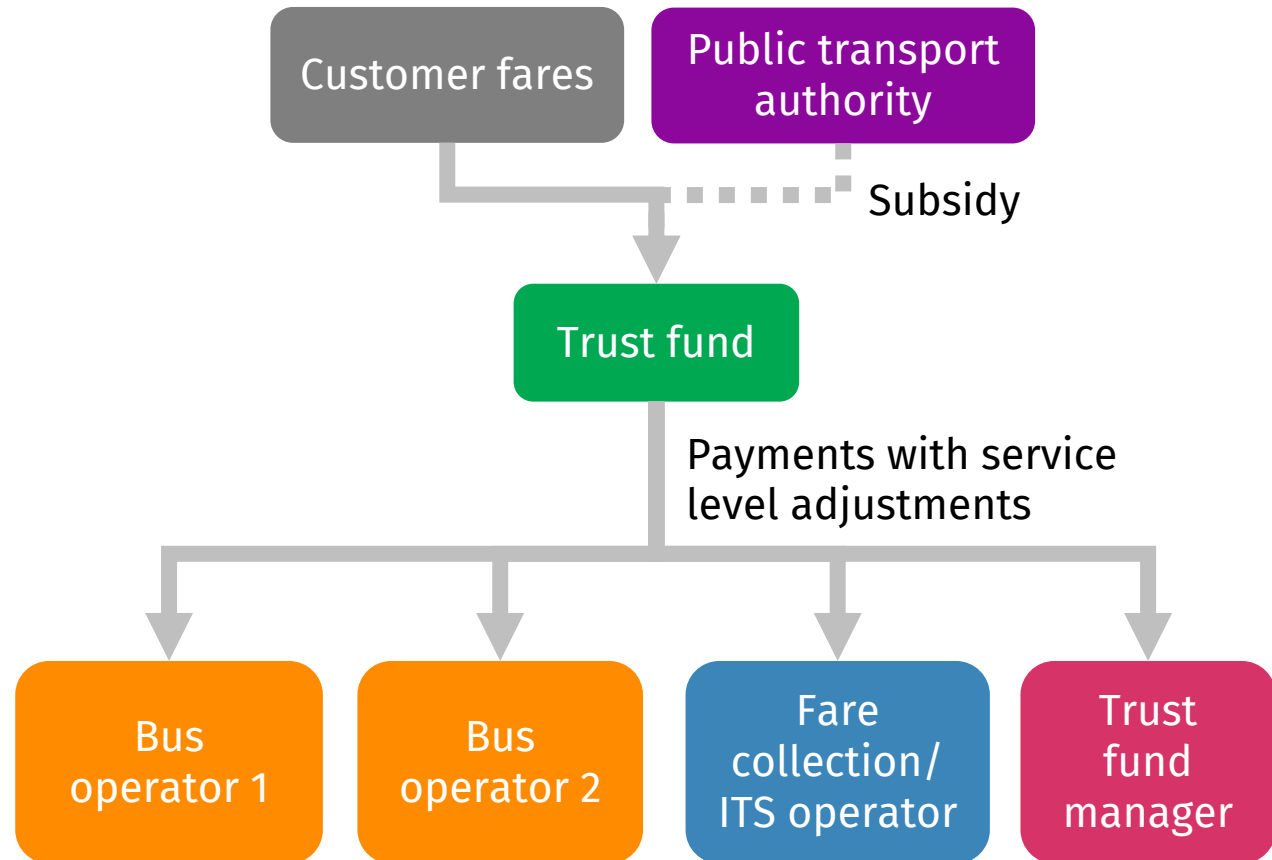


# How should bus operators be compensated?

## Net cost contract



## Gross cost contract





# New economic model for public transport services

- Company earnings based mostly on vehicle kilometres travelled rather than number of



Lloyd Wright

Bogotá before BRT: Drivers worked 16 hours per day under difficult conditions



Lloyd Wright

After: Drivers work 6 hours per day under greatly improved conditions and earn more

\*Km operated must be controlled and monitored by GPS



# How should risk be allocated between government and operators?

- Government should share financial risk with the operator
- Government takes some of the risk in exchange for demanding higher quality and higher level of service
- Financial risk sharing options:
  - Part of payment (10-20%) based on passengers
  - Or, operator payment linked to a proportion of overall system revenues
  - Govt can cut the kilometers to be operated but guarantees a certain minimum km.



# Preventing predatory competition

- Predatory competition increases the financial risks for government and operators
- Ways to reduce the risk of competition:
  - Regulate access to the market (cancel competing route licenses, police enforcement of illegal operators)
  - Facilitate an inclusive reform process so that affected operators transition to the new system rather than compete with it
  - Introduce a physical barrier to entry in the form of a dedicated BRT corridors
  - Introduce a widespread and popular fare collection media only usable with contracted operators



- Subsidies can ensure a higher level of service and improve affordability
- Potential sources of revenue: fuel taxation, parking fees, property tax, other earmarked taxes, general revenue
- How to minimize subsidies:
  - Know in advance how much subsidy will be needed, if any.
  - Design the system for efficiency
  - Increase fares if operator payments also increase
  - Link operator profits to system profits

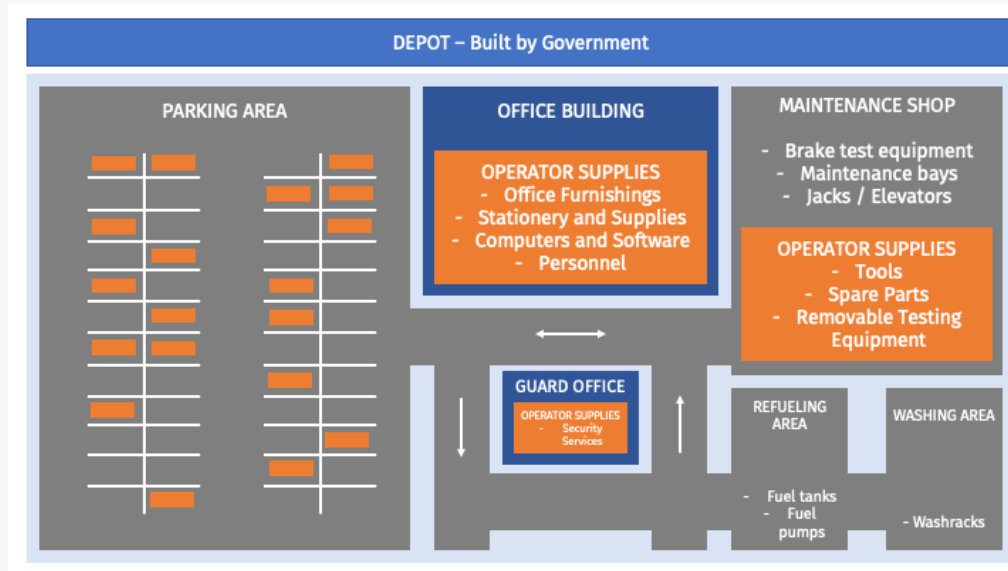


# Who should own the buses?

- Companies often know more about buses and are better able to specify the appropriate technical specifications for city conditions
- Companies have established relationships with suppliers. They can usually negotiate a lower price with more service support
- Private owners have a big financial incentive to properly maintain the buses if they own them
- The contract term should be similar to the lifespan of the buses

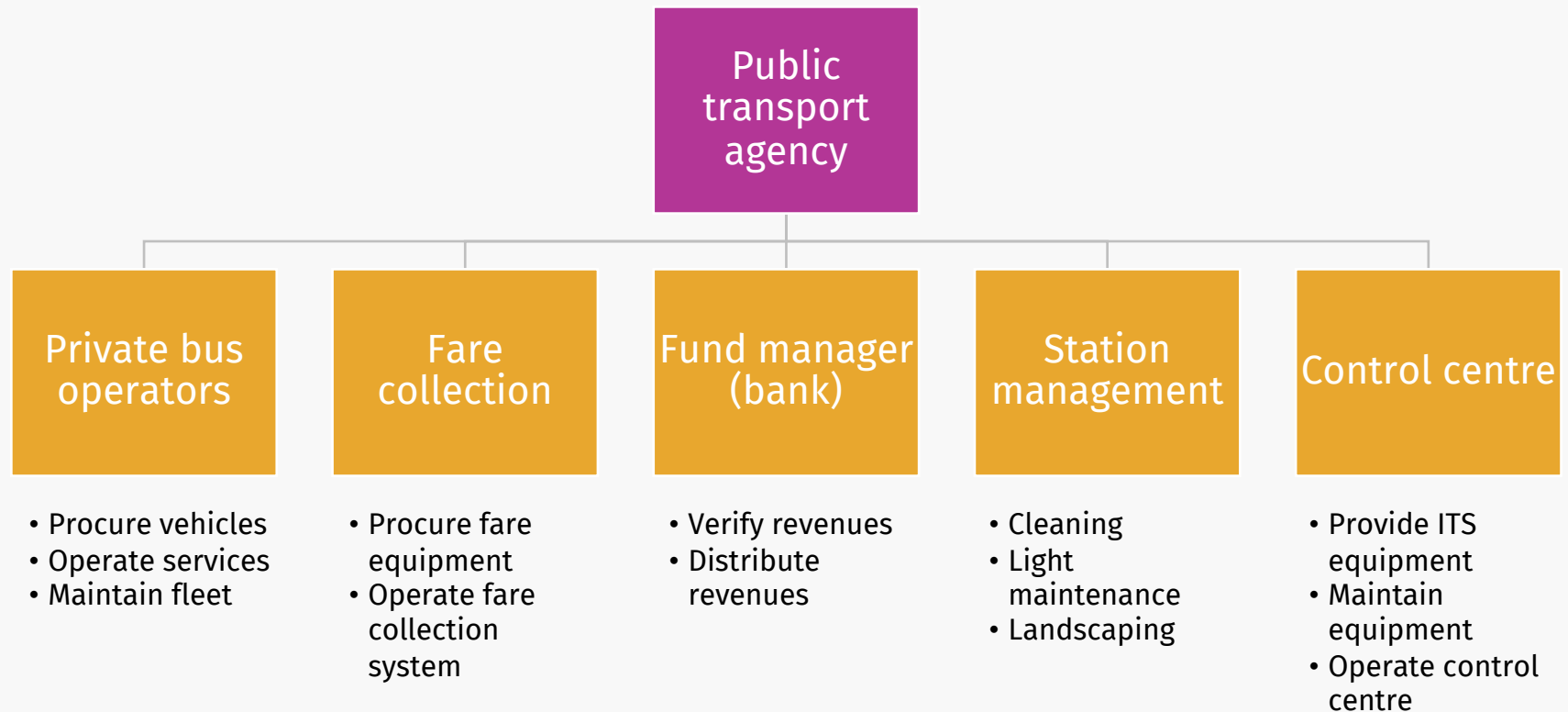


# Who should own the depots?



- Government ownership of depots allows government to retain the depots in the case of a bus operator change
- Typically, the government builds and owns the physical structures, while the operator provides removable furnishings and supplies.
- Input from operators will nonetheless be helpful in the design process

# Relationship between transport agency & operators







# Division of responsibilities between government and operators in BRT systems

	Bus operations	Bus procurement	Fare collection	Trust fund	Control center	Operations planning
Curitiba	Private	Private	Public	Public	Public	Public
Transmilenio, Bogotá	Private	Private	Private	Private	Public	Public
Transantiago, Santiago	Private	Private	Private	Private	Private	Private
Transjakarta, Jakarta	Private	Private	Private	Public	Public	Public
Rea Vaya, Johannesburg	Private	Private	Private	Public	Public	Public
MyCiti, Cape Town	Private	Public	Private	Public	Public	Public
Janmarg, Ahmedabad	Private	Private	Private	Public	Public	Public
Guangzhou BRT, Guangzhou	Private	Private	Public	Public	Public	Public
Metrobus, Mexico City	Private	Private	Private	Private	Public	Public

# Advantages of independent fare collection

- Government has more control over service quality if it controls the revenue
- Government receives clear information on the number of passengers and how much money the system is earning
- Multiple bus operators can use the same fare collection system, improving convenience for passengers



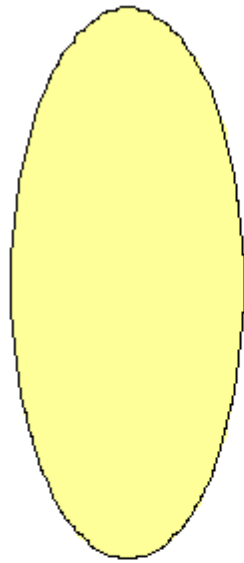
# Case studies: regulatory structure

	Competitive tender	Private bus operators	Kilometer based contracts	Separate fare collection	Quality of service contracts	Multiple operators
TransMilenio Bogota	Yes	Yes	Yes	Yes	Yes	Yes
Guangzhou	No	Yes	Yes	Yes	Yes	Yes
Curitiba, Brazil	No	Yes	No	Yes	Yes	Yes
Metrobus, Mexico City	No	Yes	No	Yes	Yes	Yes
Rea Vaya, Johannesburg	No	Yes	Yes	Yes	Yes	Yes
MiCity, Cape Town	No	Yes	Yes	Yes	Yes	Yes
Janmarg, Ahmedabad	Yes	Yes	Yes	Yes	Yes	Yes
TransJakarta, Jakarta	No	Yes	Yes	Yes	Yes	Yes

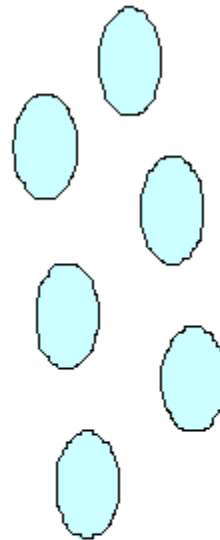


# Transitioning to a modern bus system

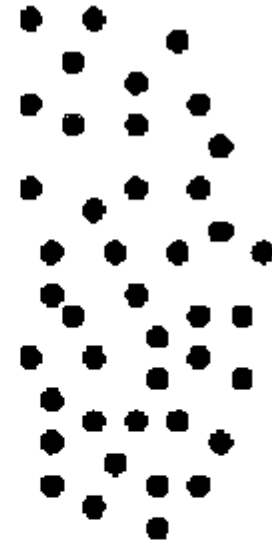
# Industry structure



**Single public  
monopoly**



**Mixed system  
(competitive  
market with  
public oversight)**



**Thousands of  
informal  
operators**

Source: Adapted from Meakin (2003)

# Evolution of the public transport industry

## INDIVIDUAL OWNER-OPERATORS

- Each vehicle is owned and operated by an individual.
- The owners are often organised into associations or cooperative societies.
- The fleet is usually maintained by individuals.

## BUS OPERATING COMPANY

- The fleet is owned by the company rather than individuals.
- The company has formal fleet maintenance protocols and access to depot facilities.
- There are corporate governance standards.

Organisational structure

## VEHICLE CREW OPERATING UNDER THE TARGET SYSTEM

- Driver and conductor earnings are directly related to the number of passengers carried.
- Little or no job security.

## STAFF RETAINED IN SALARIED POSITIONS WITH FORMAL CONTRACTS

- Crew members earn a fixed monthly salary.
- Individual performance is incentivised through parameters such as driving safety rather than the number of passengers carried.

Staff compensation

# Preparing for the transition

- Incentives for the transition process: Fleet renewal, new service plan, BRT system
- The process for identifying affected operators should be transparent:
  - **Fully affected:** The full route or more than half of its initial length is included in the tender or the route is canceled
  - **Partially affected:** Less than half of its total length is included in the tender
  - **Not affected:** The route and frequency are not changed at all or are changed minimally
- Affected operators elect leadership
  - May differ from existing industry





# Transition process

**STEP 1**

Define the  
service to be  
tendered

**STEP 2**

Issue a  
prospectus of  
the business

**STEP 3**

Stop renewing  
Licenses on  
affected routes

**STEP 4**

Identify &  
register affected  
operators

**STEP 5**

Issue tender  
with incentives  
to include  
affected  
operators

# Managed competitive tender or negotiated contract?

- Managed competitive tender: Bidder is selected based on the highest quality proposal with the lowest price. Experience points awarded to bidders that include affected operators
- Negotiated contract: The government may choose to negotiate with the operators if they form a modern company and sign a new contract.
- Advantages of a managed competitive tender:
  - An open tender is more transparent.
  - The selection process can follow a clear timeline.
  - The bidding price will be lower due to competition.
  - Minimum qualification criteria (e.g., capital reserves, presence of competent managers, and corporate governance standards) can be enforced.



# Bidding criteria can reward involvement of existing operators

## Transmilenio bidding criteria

Factor	Description	Eligibility	Min. Points	Max. Points
Legal	Legally registered	X	-	-
Economic	Sufficient investment capital	X	-	-
Price	Price per km offered			350
Operations	Bus operator in city		30	150
Operations	Bus operator in corridor		50	250
Operations	International experience		-	50
Ownership	Shares held by small bus owners		32	200
Environment	Emissions, etc			200
Vehicle source	Local manufacturer			50

# Labour & gender standards

- Priority hiring list: Bus operating contracts can incentivize that some percentage of staff come from a list of bus drivers, conductors, and maintenance staff from affected and partially affected routes
- Workplace benefits: Defined work hours, paid sick leave, and paid parental leave
- Gender representation: Contracts can ensure gender inclusion in different aspects of the bus operating business, including drivers, mechanics, and management



# Inclusion of existing operators in BRT systems

	Former operators form companies	Former operators plus private investors	Former private companies under new contract form	Outside private investor	Public bus operator
TransMilenio, Bogota	X	X			
Guadalajara, Mexico	X	X			
Lima BRT	X	X			
Megabús, Pereira	X	X			
GBRT, Guangzhou			X		
BRT, Curitiba			X		
Mio, Cali	X	X			
Rea Vaya, Johannesburg	X				
TransJakarta, Jakarta	X			X	
Metrobus, Mexico City	X				X
Jan Marg, Ahmedabad				X	
HealthLine, Cleveland					X
Lanzhou, BRT					X
MiCity, Cape Town	X		X		
LAMTA (Orange Line)					X

# The modern bus company



# Measuring a company's development

- Fleet owned by the company
- Fleet secured in a depot
- Services regulated by operational control system
- Drivers are salaried employees
- Modernised fleet
- Modern fully equipped depot
- Optimised operations
- Good corporate governance
- Optimised maintenance protocols
- Sufficient reserve fleet (i.e., at least 6 percent)





## QUICK GUIDE TO BUS SECTOR MODERNISATION



Quick Guide to Bus  
Sector Modernisation  
[africa.itdp.org](http://africa.itdp.org)



# Thank you

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