

# Sustainable Financing for SDG 11.2

Based on: Sustainable Urban Transport Financing  
from the Sidewalk to the Subway  
Capital, Operations, and Maintenance Financing

Vientiane  
International  
Mayors Forum  
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World Bank



# Sustainable Development Goal 11

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**Make cities and human settlements inclusive, safe, resilient and sustainable**



# Sustainable Development Goal 11.2

By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons



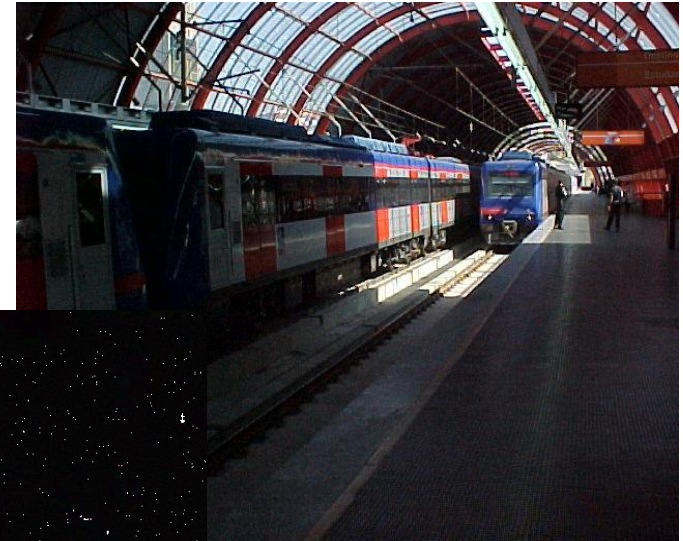
# Sustainable Development Goal 11.2

Associated Indicator:

11.2.1 Proportion of population that has convenient access to public transport, by sex, age and persons with disabilities



# Public transport to access jobs



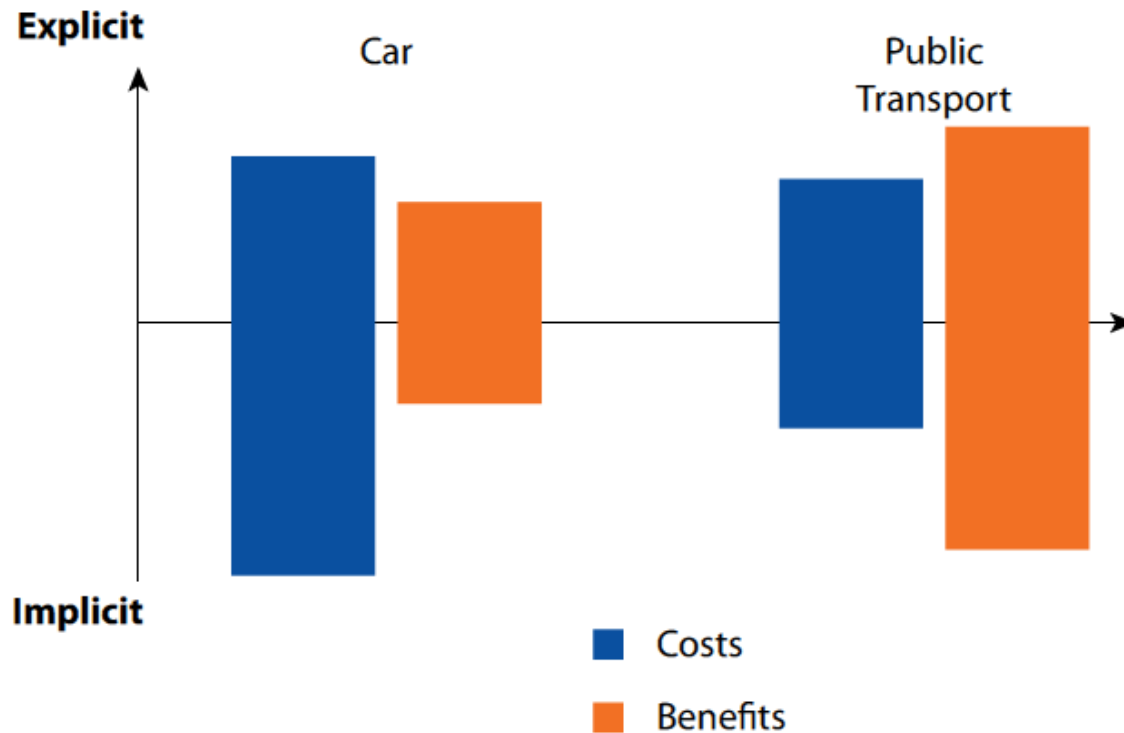


However, the playing field is biased against public transport



# Low revenue - Implicit subsidies

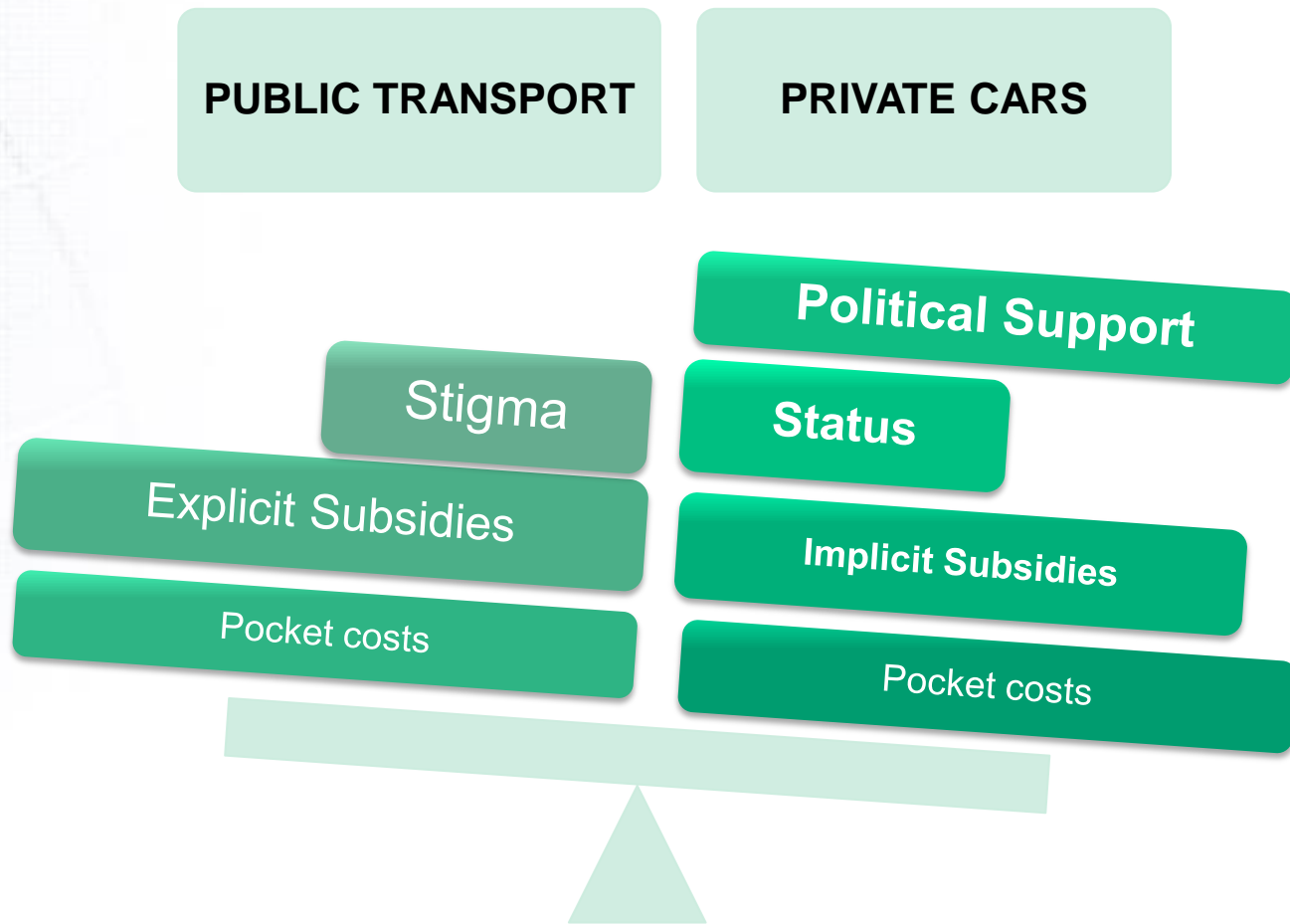
Figure 1.5 Total Costs (Explicit and Implicit) and Benefits of Cars and Public Transport



Source: Authors.



# Low revenue - Implicit subsidies

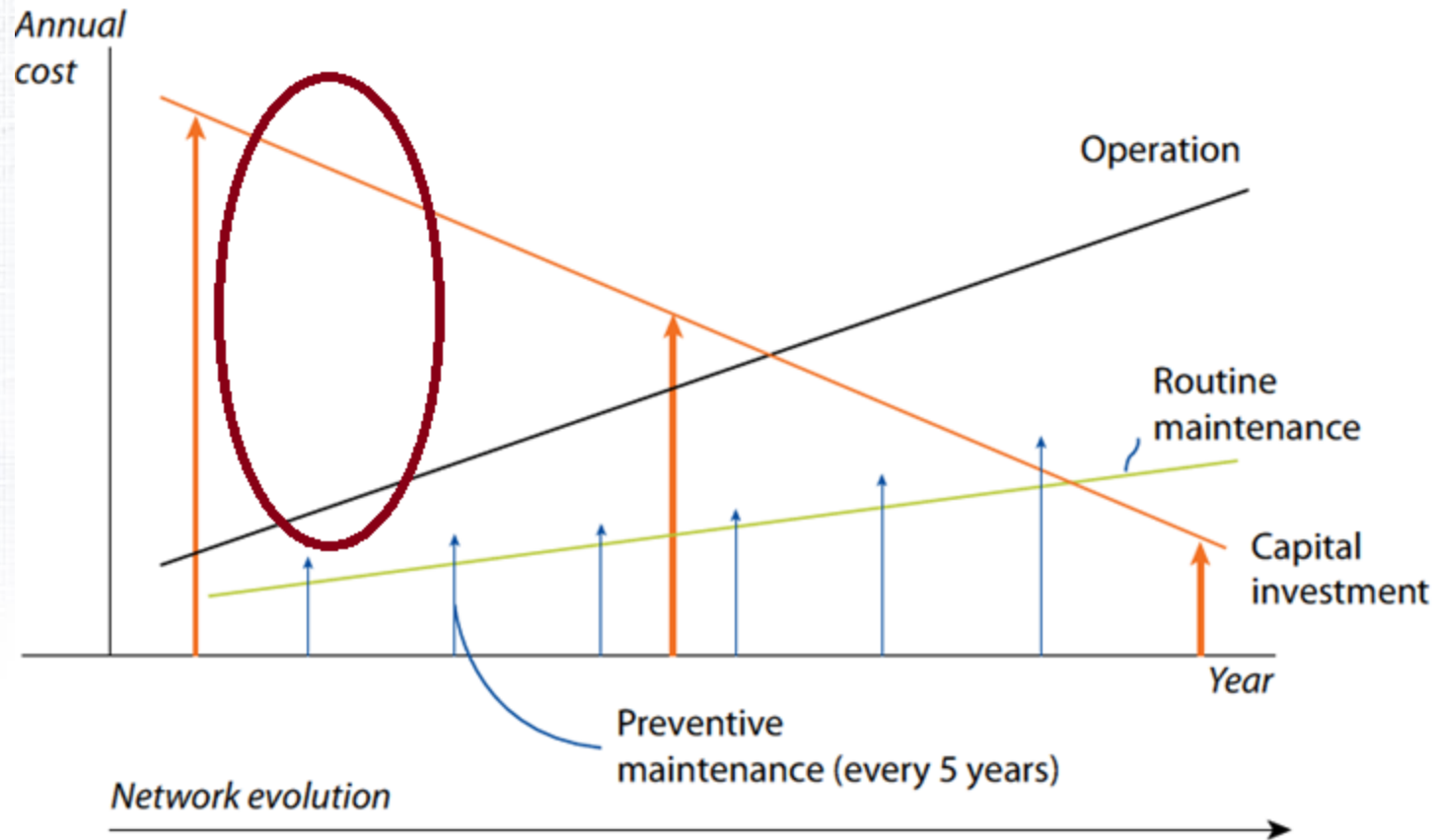




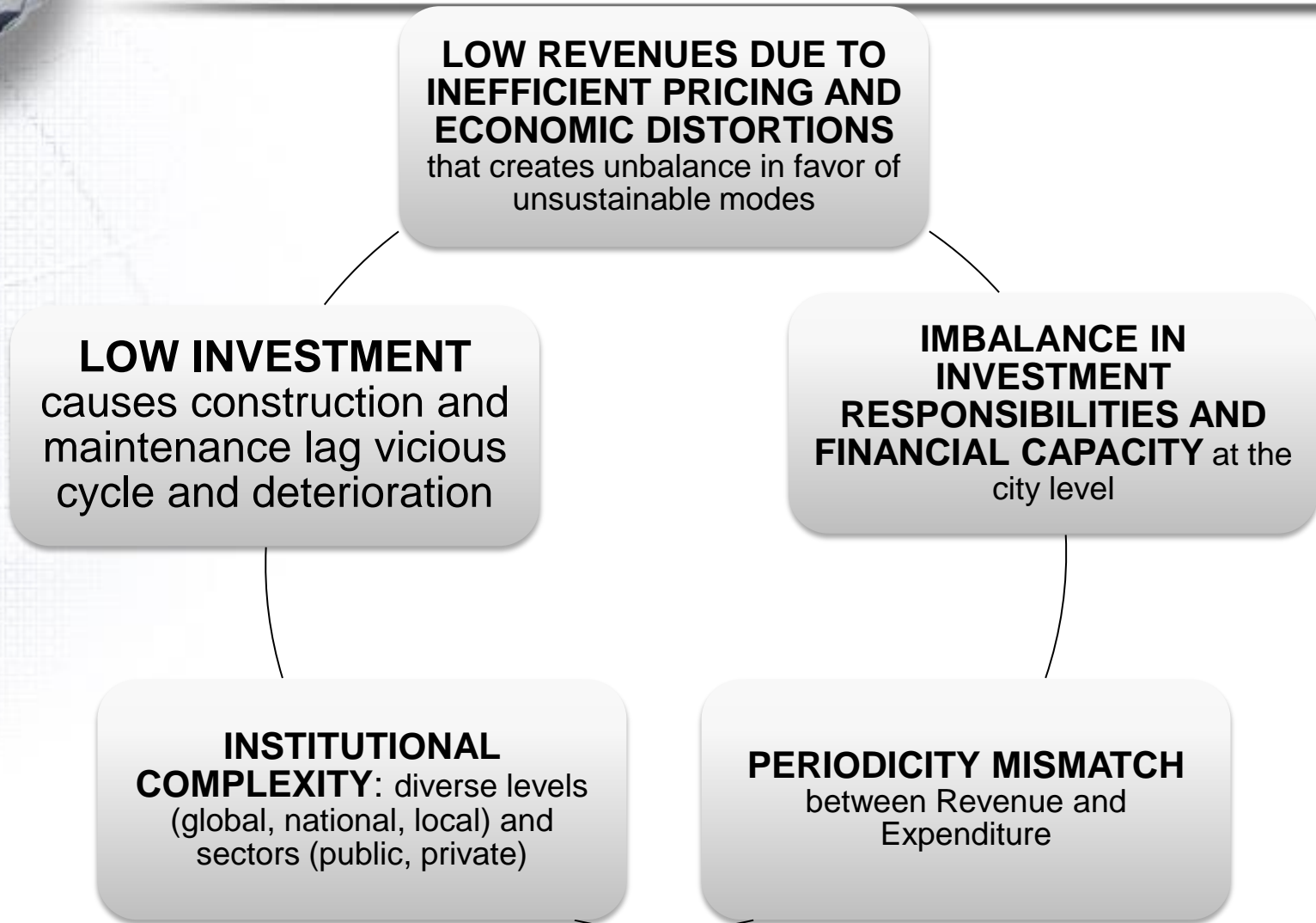


# The underfunding trap

**Figure 1.1 Typical Pattern of Capital, Operation, and Maintenance Expenditures for Transport**



# Underfunding Trap: structural causes





# Analytical framework to assess and design urban transport financing

The framework addresses the following elements:

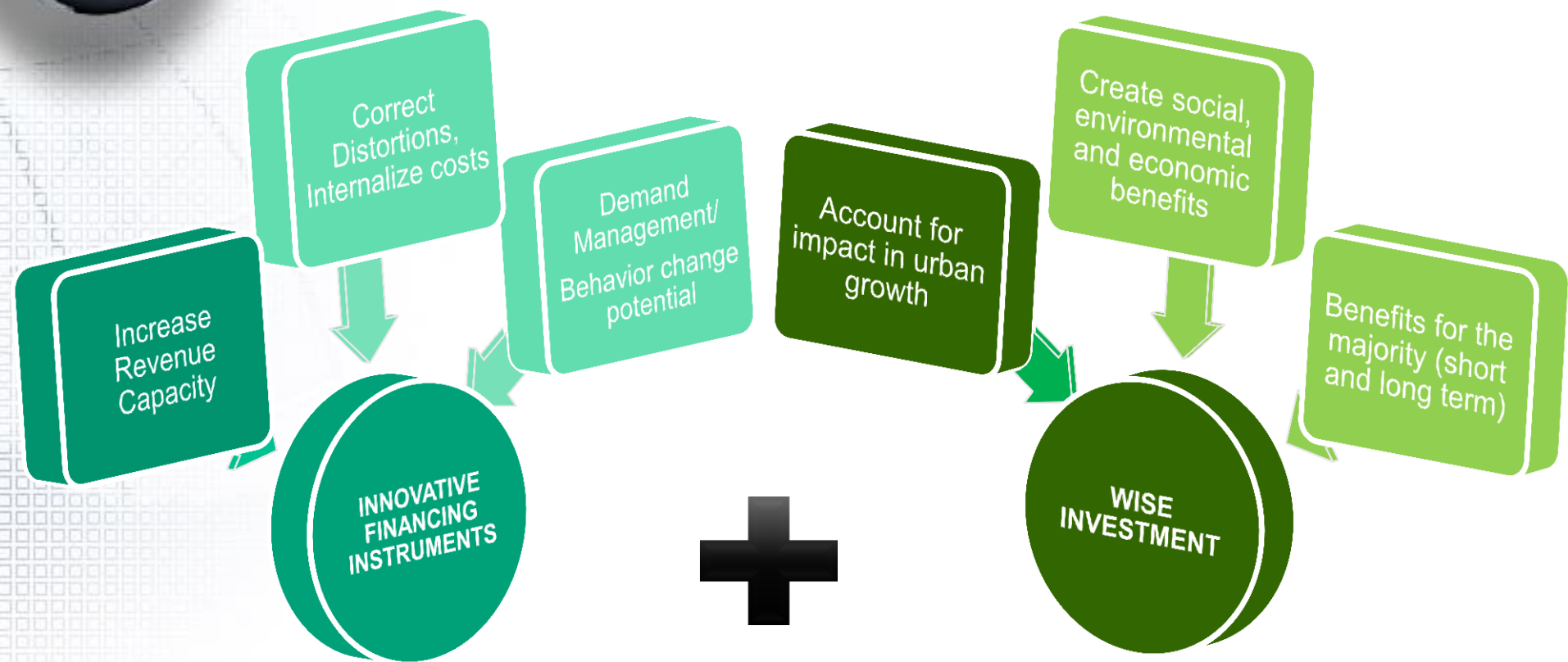
- **Economic distortions and institutional complexity** through application of the “**Who Benefits Pays**” principle based on the identification of beneficiaries (general public or direct and indirect beneficiaries)
- The need for **wiser investments**, which can reduce the financing gap in the long term



# Analytical framework to assess and design urban transport financing

- **Match periodicity of revenue and expenditures**, specifically for capital, operation, and maintenance expenses.

# Escaping the underfunding trap



A comprehensive multi-level financial strategy that corrects structural causes from revenue and expenditure side



# Analytical framework to assess and design urban transport financing

Standardized Assessment of 24 urban transport financing instruments with respect to

## □ FINANCIAL SUSTAINABILITY (Innovative financing)

- stability, political acceptance, and administrative ease of instrument implementation

## □ TRANSPORT SUSTAINABILITY (Wise investment)

- economic efficiency, social equity, and environmental impact

# Financing Instruments Assessment: General Beneficiaries

▲ Upfront    ▬ Recurrent    ▲ Both

● High    ● Average    ● Low

FINANCING INSTRUMENT	REV LEVEL	FINANCIAL SUSTAINABILITY			TRANSPORT SUSTAINABILITY			COST	PERIOD
		STABILITY	PUBLIC ACCEPT	ADMIN EASE	EFFICIENCY	EQUITY	ENVIRON. IMPACT		
Public transport subsidies		● Low	● High	● Average	● Average	● High	● Average	M/O	▬
Property tax		● High	● Average	● Average	● Low	● Average	● Low	C/M/O	▬
National and international loans and grants		● High	● High	● Average	● High	● High	● High	C/M	▲
Carbon market		● Low	● High	● Low	● Average	● Average	● High	C/O	▲
Global Environment Facility		● Low	● High	● Average	● Average	● Average	● High	C/O	▲
Clean Technology Fund		● Average	● High	● Average	● Average	● Average	● High	C	▬
PPPs for public transport		● Average	● High	● Low	● Average	● High	● High	C/M/O	▲

# Financing Instruments Assessment: General Beneficiaries

▲ Upfront    ▬ Recurrent    ▲ Both

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FINANCING INSTRUMENT	REV LEVEL	FINANCIAL SUSTAINABILITY			TRANSPORT SUSTAINABILITY			COST	PERIOD
		STABILITY	PUBLIC ACCEPT	ADMIN EASE	EFFICIENCY	EQUITY	ENVIRON. IMPACT		
Public transport subsidies		●	●	●	●	●	●	M/O	▬
Property tax		●	●	●	●	●	●	C/M/O	▬
National and international loans and grants		●	●	●	●	●	●	C/M	▲
Carbon market		●	●	●	●	●	●	C/O	▲
Global Environment Facility		●	●	●	●	●	●	C/O	▲
Clean Technology Fund		●	●	●	●	●	●	C	▬
PPPs for public transport		●	●	●	●	●	●	C/M/O	▲



# Financing Instruments Assessment: Direct Beneficiaries

▲ Upfront    = Recurrent    ▲ Both

● High    ● Average    ● Low

FINANCING INSTRUMENT	REV LEVEL	FINANCIAL SUSTAINABILITY			TRANSPORT SUSTAINABILITY			TASK	P
		STABILITY	PUBLIC ACCEPT	ADMIN EASE	EFFICIENCY	EQUITY	ENVIRON. IMPACT		
Parking Charges		●	●	●	●	●	●	C/M/O	=
Road Pricing		●	●	●	●	●	●	C/M/O	=
Congestion Charges		●	●	●	●	●	●	C/M/O	=
Fuel Taxes/Surcharges		●	●	●	●	●	●	C/M/O	=
Vehicle Taxation		●	●	●	●	●	●	C/M/O	=
Farebox Revenue		●	●	●	●	●	●	O/M	=
PPPs for Urban Roads		●	●	●	●	●	●	C/M/O	▲

# Financing Instruments Assessment: Indirect Beneficiaries

▲ Upfront    ▬ Recurrent    ▲ Both

● High    ● Average    ● Low

FINANCING INSTRUMENT	REV LEVEL	FINANCIAL SUSTAINABILITY			TRANSPORT SUSTAINABILITY			TASK	P
		STABILITY	PUBLIC ACCEPT	ADMIN EASE	EFFICIENCY	EQUITY	ENVIRON. IMPACT		
Advertising		●	●	●	●	●	●	M/O	▬
Employer Contribution		●	●	●	●	●	●	M/O	▬
Betterment Levies		●	●	●	●	●	●	C/M	▲
Tax Increment Financing		●	●	●	●	●	●	M/O	▲
Special Assessment		●	●	●	●	●	●	M/O	▲
Transportation Utility Fees		●	●	●	●	●	●	M	▬
Development Impact Fee		●	●	●	●	●	●	C	▲
Negotiated Exactions		●	●	●	●	●	●	C/M/O	▲
Joint Development (PPP)		●	●	●	●	●	●	C	▲
Air Rights		●	●	●	●	●	●	M/O	▲



# Conclusions

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- ▶ Combine revenue sources to ensure financial sustainability using the Who Benefits Pays principle.
- ▶ Undertake “Wise Investments” particularly public transport and NMT lower deficit.
- ▶ Consider the effect of instruments on transport demand.
- ▶ Link urban transport planning and operations with urban planning.



# Conclusions

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- ▶ Ensure appropriate use of public subsidies with proper incentives to guarantee high-quality sustainable public transport.
- ▶ Allow cities financial autonomy and capacity. A property tax is critical as it can finance capital, operations, and maintenance, and capture value.



# Conclusions

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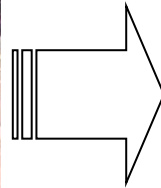
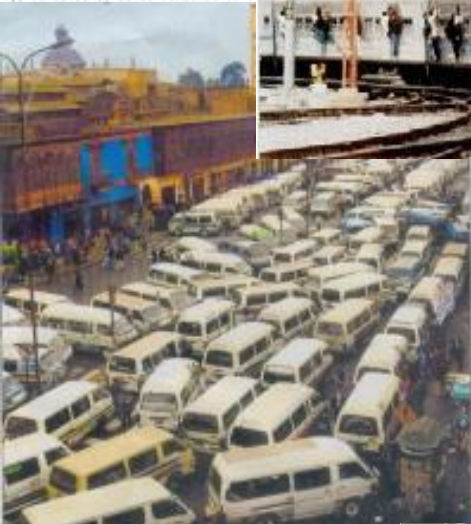
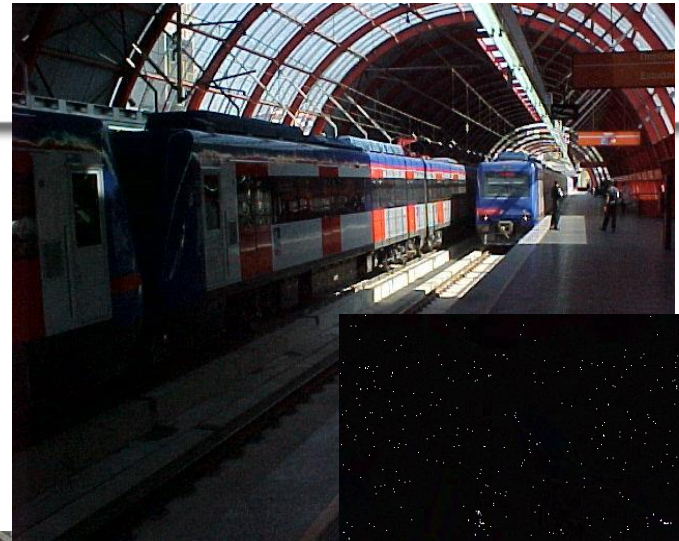
- ▶ Allow a role for national governments and international funding in light of climate change and the need to invest in projects that contribute to the global benefit of reducing emissions from the transport sector.
- ▶ Understand the need for a gradual introduction of user charges.



# Conclusions

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- ▶ Consider land value–based financing instruments but be aware of transaction cost, political work behind and “asset rich, cash poor” problem.

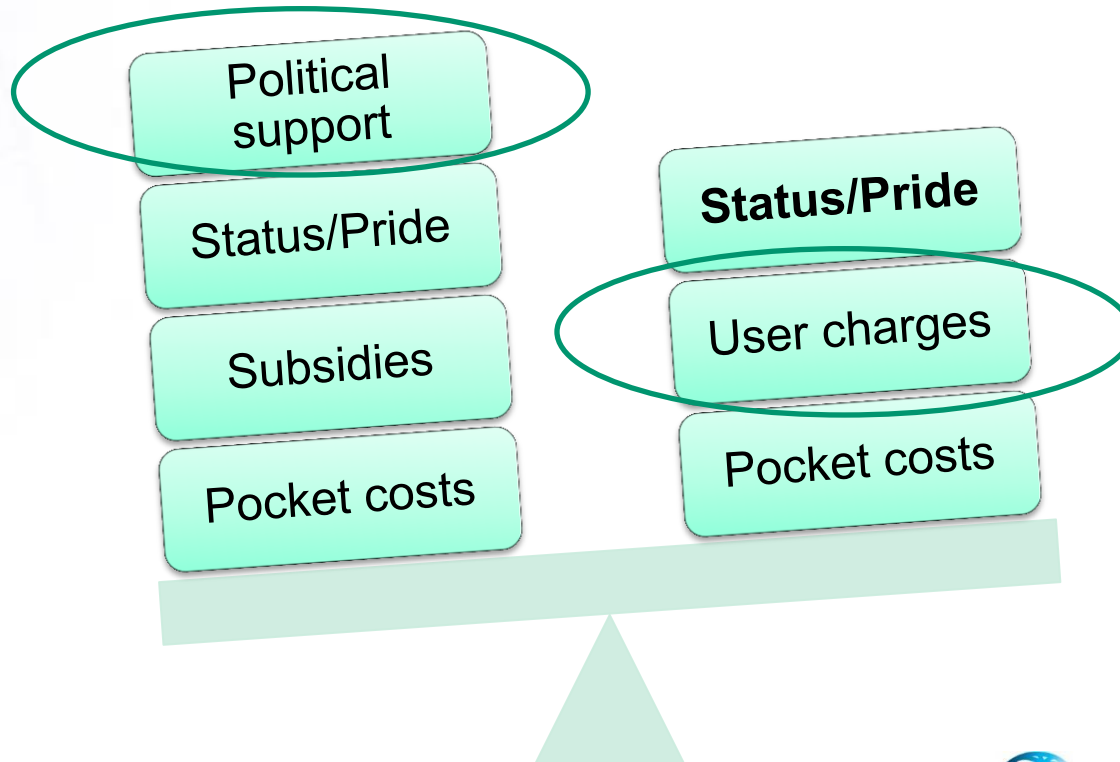




# Epilogue

PUBLIC TRANSPORT

CARS







# Download the book here

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- [Sustainable Urban Transport Financing from the Sidewalk to the Subway](#)

or here:

- <https://openknowledge.worldbank.org/handle/10986/23521>



# Thank you