



# **Assessment of applying Land Value Capture for public transit finance in Jakarta Metropolitan Area: Challenges and opportunities**

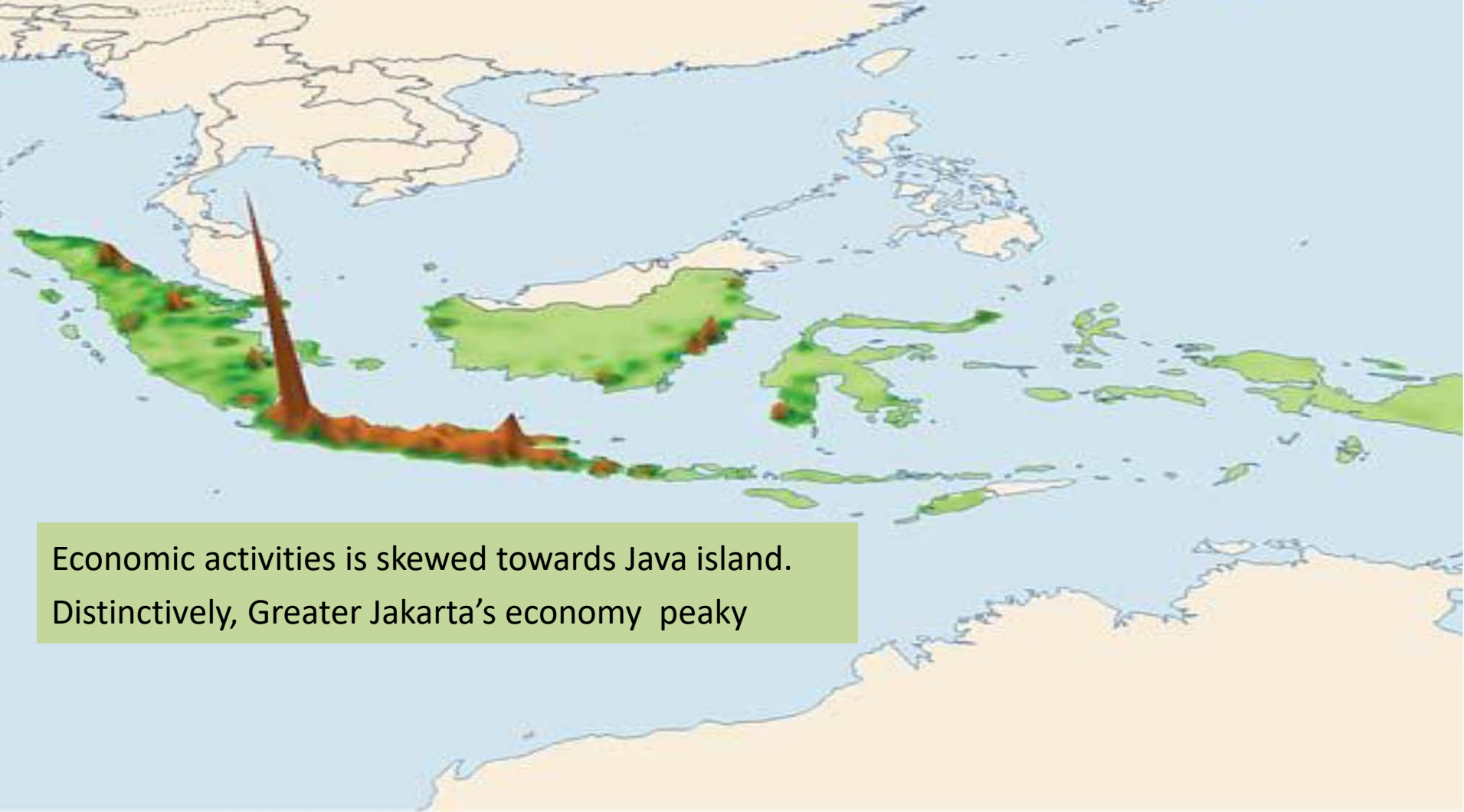
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Economic activities is skewed towards Java island.  
Distinctively, Greater Jakarta's economy peaky

# Typology of Urban Problems: Location and Land Status

## Location

Urban *Kampung*  
(city center)



Economic activity



River bank/  
coastal area



State land

Privately-owned  
land (corporation)

Privately-owned  
land (individual)

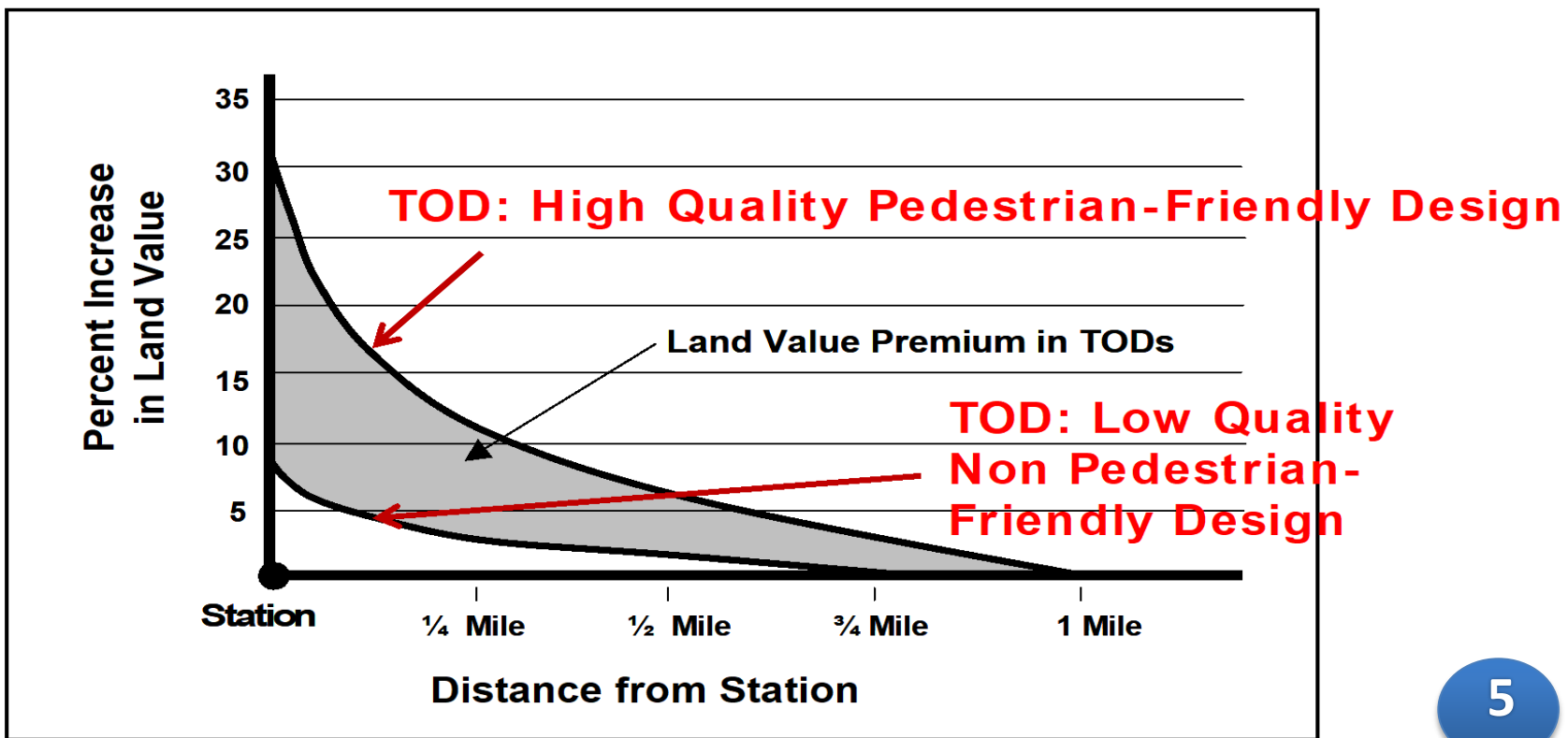
## Land status



Land Formalization through : Land Legalization,  
Land Redistribution, **Vertical LC**, Land Dispute  
Resolution, Resettlement

# Evidence of land value and building rent increased due to transit development

## Land Value Premiums of TOD in U.S.

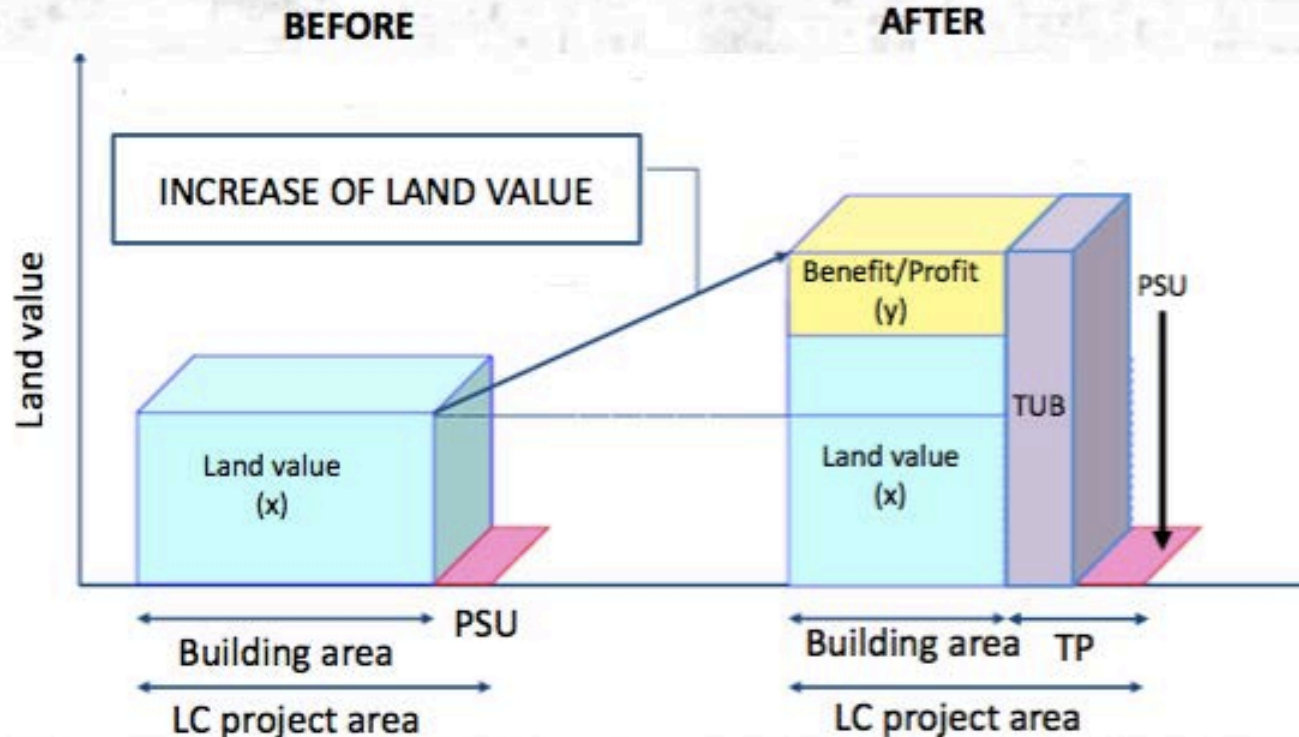


Source: R. Cervero



# LC CONCEPT

## Land Value Capture



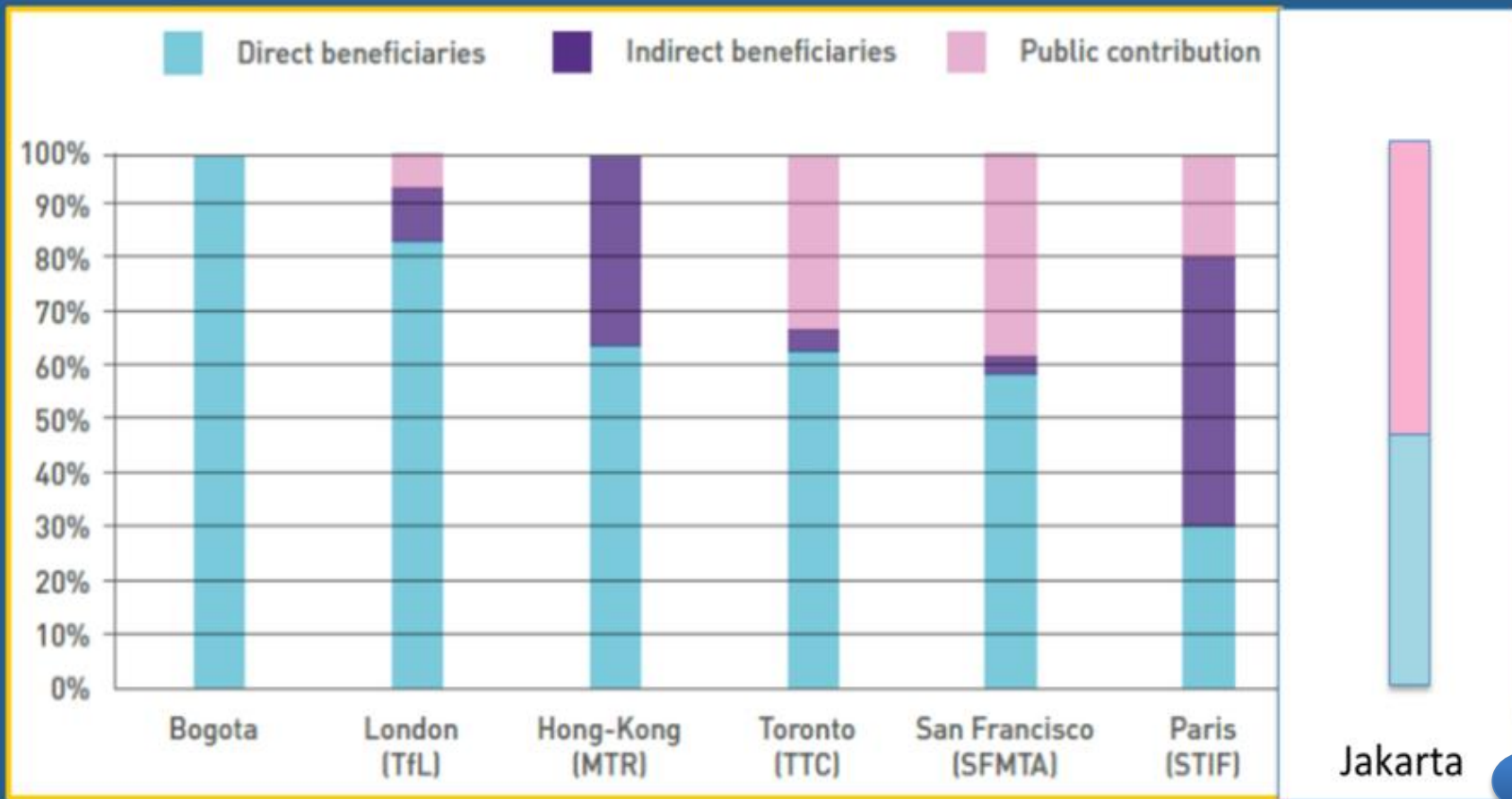
**TUB = cost-equivalent land/reserve or financial land**

**PSU = Basic services and infrastructure**

**TP = land contribution**



- “Each city must find its **own funding arrangements**”



# MOTIVATION, QUESTIONS ?

- ① **Transferability ?**: Is TOD policy concept transferable to cities in emerging countries?
- ② **Readiness level ?**: How ready are the cities, property and private entities and the community?
- ③ **Institutional arrangements & capacity ?**: planning, appraisal, appraisal, sales & marketing, and monitoring
- ④ **LVC tools, which ones appropriate ?**: To capture an increase in land value. How feasible is the implementation? Which tools are highly possible to be adapted and will be fruitful ?

# METHODOLOGY:

Questionnaire, Panel & Weekly FGD

## Issues:

- (1) legal,
- (2) financial structure,
- (3) governance and institution,
- (4) land provision and acquisition,
- (5) collaborative planning and community inclusiveness.
- (6) Technology & industries standard

## Respondents:

- a. public institution
- b. land property owners
- c. academics/researchers
- d. private / developers,
- e. users perspective

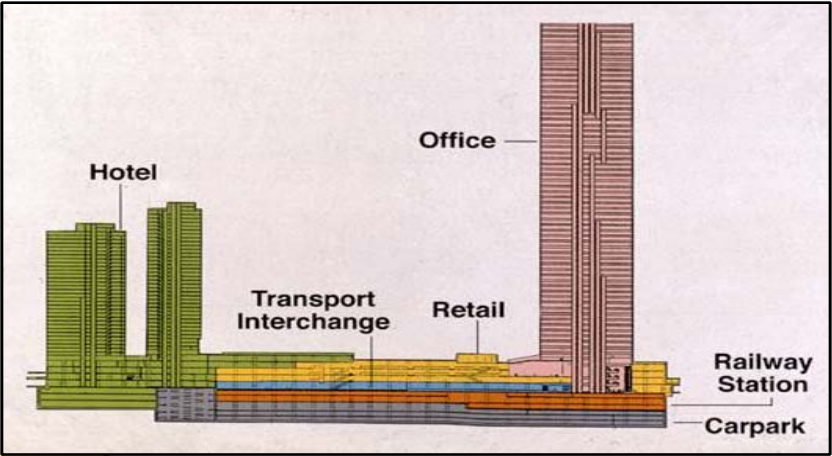
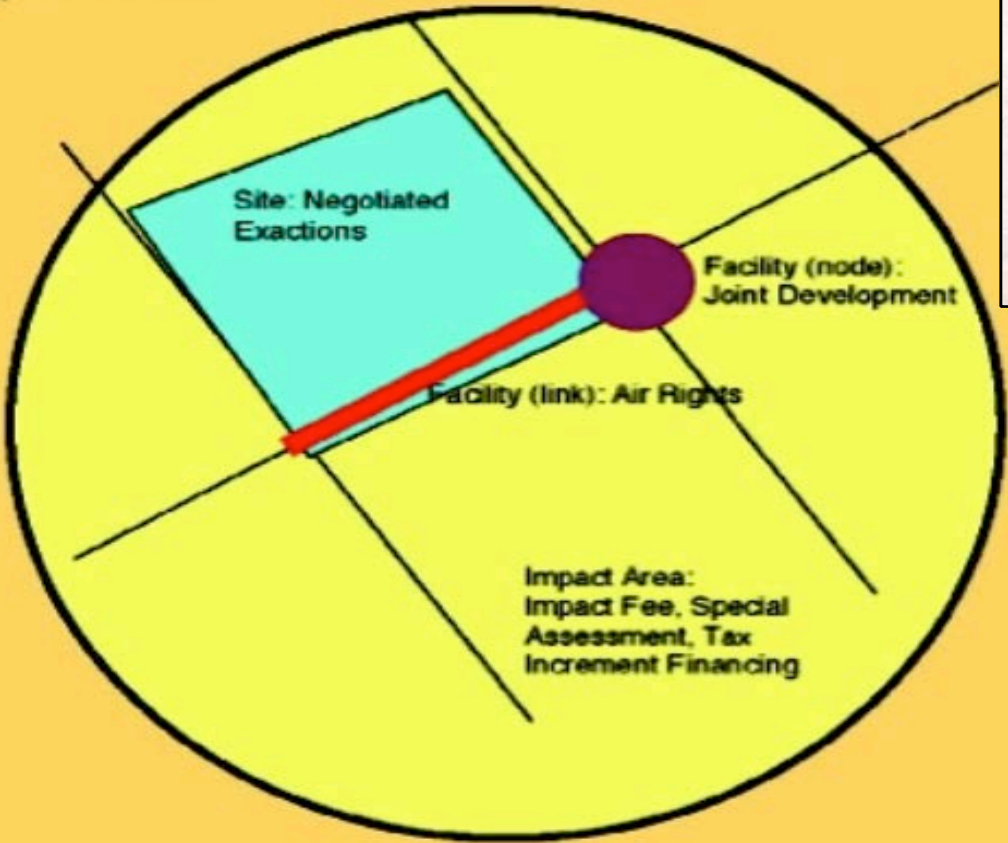
FEASIBILITY OF TOD TOOLS  
IMPLEMENTATION ?



NEXT STEPS & FUTURE  
AGENDA ?



Jurisdiction:  
Land Value Tax,  
Transportation Utility  
Fee

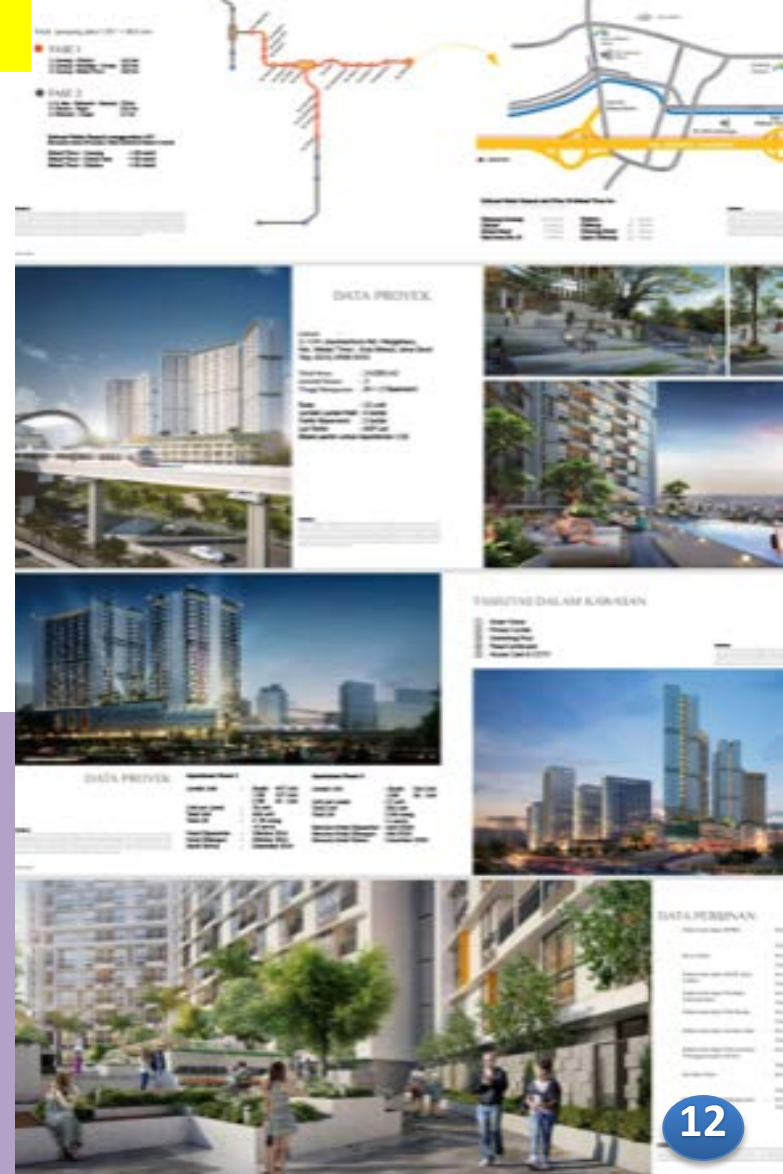
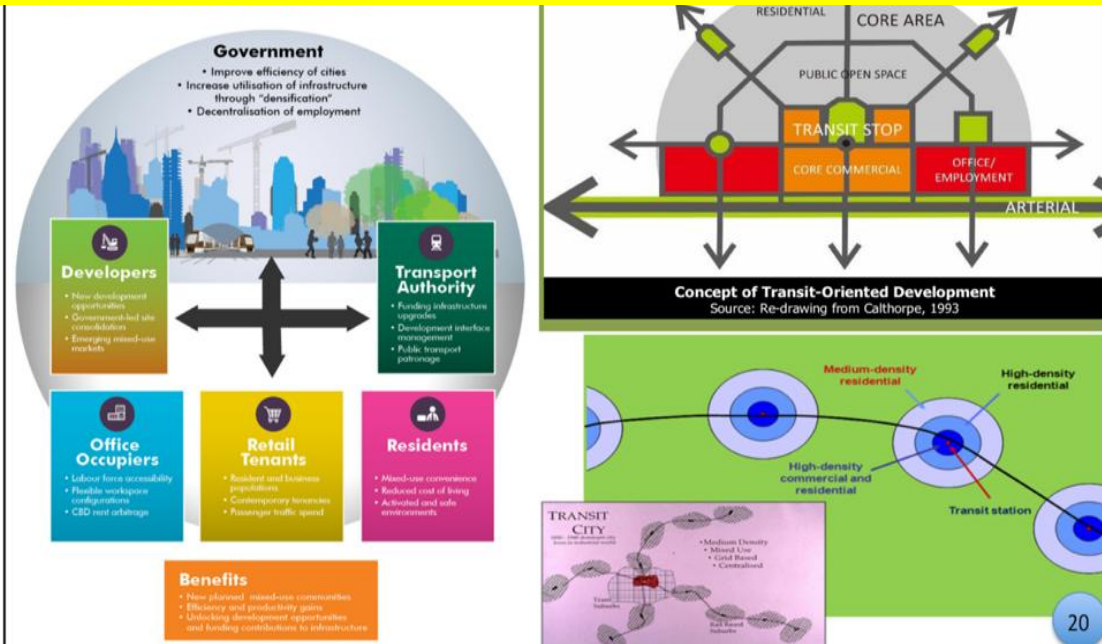


Value capture Objects  
by location

# Land Value Capture Tools Explored

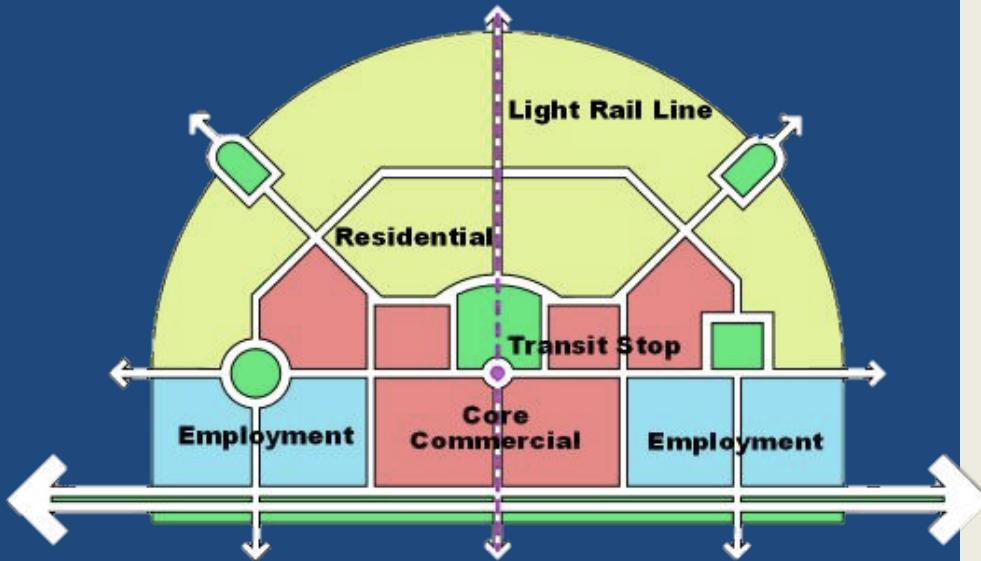
	Instrument
Tax- & Fee-Based	Property and Land Tax
	Betterment Levies and Special Assessments
	Tax Increment Financing (TIF)
Development-Based	Land Sale or Land Lease
	Air Right Sale
	Land Readjustment
	Urban Redevelopment Financing

# CURRENT LVC INSTRUMENT (INDONESIA)



- ◆ TOD & Land Consolidation regulations have been issued recently by central government (Spatial and Agrarian Ministerial Regulations)
- ◆ Local Governments adapted to local condition
- ◆ Pragmatic and piece meal exercises are underway; TOD show cases fulfilling the full TOD criteria are yet to be implemented !
- ◆ 4 LVC tools under trial (TDR, FAR+, Fiscal Bonus, LC), out of traditional land and building tax

# TOD



## 4 Strategic Planning for TOD

- ① A strategic policy framework that asserts **where centers need to occur and at what kind of density and mix**
- ② A strategic policy framework that **links** centers **with a rapid transit** base, almost invariably electric rail
- ③ A **statutory planning base** that requires development to occur at the necessary density and design in each center, preferably facilitated by a specialized development agency
- ④ A **public-private funding** mechanism that enables the transit and the TOD to be built or refurbished through a linkage between the transit and centers it will service.

# LVC in emerging economies

- **CEPAC in Sao Paolo, Brazil**
- Sale of additional floor area ratios (FAR) to developers for funding required infrastructure in redevelopment zones.
- ***Contribución de valorización* in Bogota, Colombia**
- Betterment levy charged to landowners that enjoy the benefits of proximity to public transport infrastructure.
- **Land parcel sales in Delhi, India**
- Parcels were acquired by government agencies and sold to Delhi Metropolitan Rail Corporation (DMRC) for development.



# LVC Schemes that were explored

LVC Scheme	Description
Land Value Tax	Tax on land value uplifts from infrastructure
Tax Increment Financing	Incremental tax scheme for developers used for funding infrastructure that increases the project's attractiveness
Special Assessments	Special tax for properties benefited by the proximity of public transport nodes
Transportation Utility Fee	Charge incurred by residents and/or businesses based on usage frequency of public transportation
Negotiated Exactions	Developers forfeit land parcels in exchange of transport benefits
Development Impact Fees	Charge incurred by developers from government to provide accessibility for their project
Joint Development	Infrastructure cost-sharing scheme between developers and government
Air Rights or Underground Sales	Developers purchase air and/or underground space to increase density and fund transport infrastructure
Transfer of Development Rights	Landowners sell development rights to private developers in order to increase density
Fiscal Zoning	Increase of taxable value on property in transit-oriented development locations to encourage adjustment economic use from landowners
Land Consolidation	Landowners forfeit portions of land for infrastructure development

The most voted **“feasible”** instruments were:  
negotiated exactions (development based), then  
tax-increment financing (TIF), and land value tax

	Academics/Re searcher	Public Institution	Transit User persepctive	Private Entities	Land owner
Land Value Tax	3.92	4.50	2.33	5.00	4.00
TIF	4.00	4.00	3.33	5.00	4.00
Special Assessment	3.92	3.75	3.33	5.00	3.00
Transport Utility Fee	3.85	3.25	2.67	3.00	3.00
Negotiated Exactions	4.08	4.50	3.67	3.00	4.00
Development Impact Fees	3.77	3.50	3.67	4.00	4.00
Joint Development	3.69	4.00	3.00	5.00	1.00
Air Rights/Underground Sale	3.00	3.75	3.33	5.00	4.00
TDR	3.69	4.00	2.67	3.00	5.00
Fiscal Zoning	3.85	4.50	3.00	3.00	4.00
Land Consolidation	2.62	4.25	3.00	4.00	4.00

# Potential LVC instruments for Greater Jakarra Area and necessary strategic actions

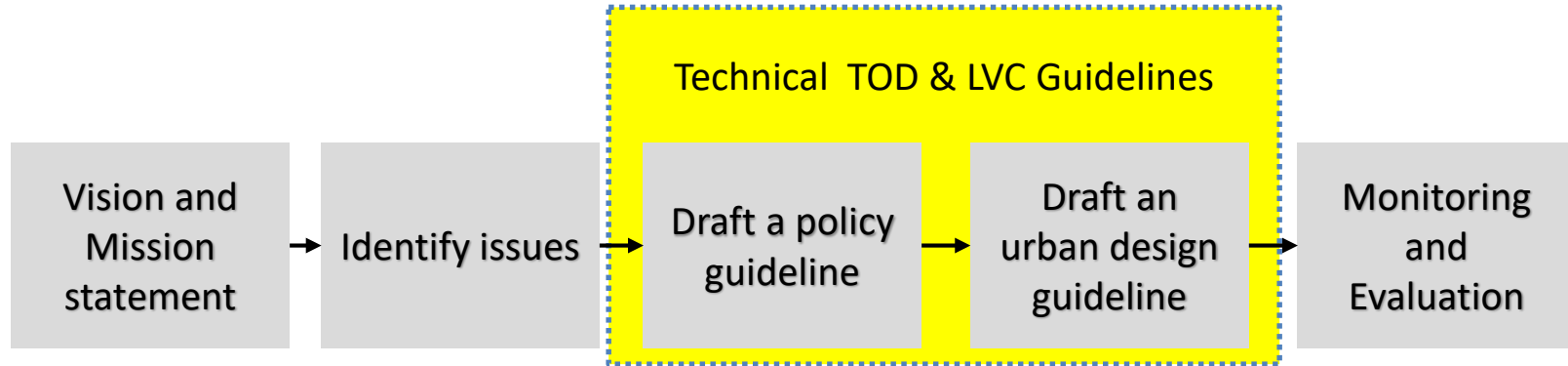
	Negotiated exactions (development –based)	Tax-increment financing	Land-value tax
Mechanism	Developers allocates funding for transit infrastructure in areas targeted for TOD by the government	Government collaborates with private developers to build underdeveloped areas in strategic locations that will lead to a rise in property tax.	Government introduces a new tax that is charged on land value uplifts after increased accessibility from the transit infrastructure built.
Necessary Actions			
Legal	Synchronize central and local level regulations	Renew current legislation for valuating tax increase.	Fiscal reform supported by legislation
Financial and business model	Government to create a dedicated revenue stream for infrastructure funding	Create a system that allocates public revenue from the LVC mechanism for funding the intended infrastructure	
Governance	Establish a government institution to take main responsibility for LVC		
Land provision and acquisition	Formulate a participatory based valuation system that results in fair compensation and inclusive land development.		
Community inclusiveness	Create a platform using PSVC to engage with the stakeholders, especially from the community, that will be impacted by the development.		Engage with landowners to gain perspective on increased value from greater accessibility created by the planned infrastructure using a PSVC framework

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# Conclusion & Next step

- Challenges from ongoing urbanization, sprawl and changing resident life style needs transformation in (1) legal, (2) financial structure, (3) governance, (4) land provision and acquisition, and (5) social community development .
- The overall affairs of the TOD and LVC must be regulated in higher-level regulation such as Government Regulation and or land consolidation law.
- A pilot project that provides facilities regulatory sandbox should be introduced for full LVC and TOD showcases.
- National TOD working group is worth established and pursued to set further improved standard !

# Further research road-map towards TOD & LVC for Greater Jakarta Area



Our Working Group comprises of academics, government officials, privates entities and CSOs





**Thank you...**