

LAND VALUE CAPTURE IN THEORY AND PRACTICE

Larry Walters

HENRY GEORGE, *PROGRESS AND POVERTY*, 1879

Goal: "We must make land common property."

Method: "It is not necessary to confiscate land; it is only necessary to confiscate rent."

Justification: "It is the taking by the community, for the use of the community, of that value which is the creation of the community."

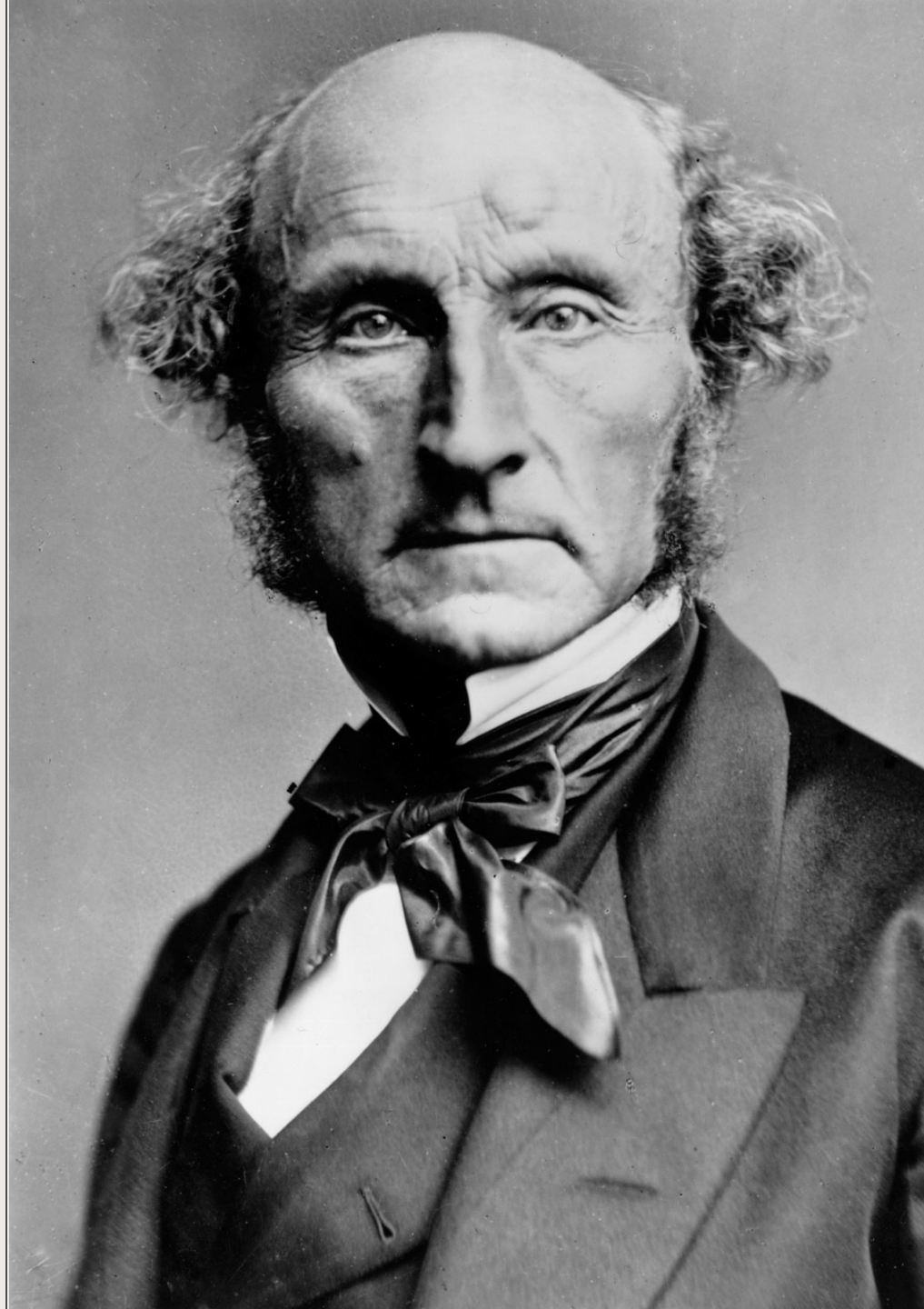


ADAM SMITH, 1776

“Ground-rents are a still more proper subject of taxation than the rent of houses. A tax upon ground-rents would not raise the rents of houses. It would fall altogether upon the owner of the ground-rent, who acts always as a monopolist, and exacts the greatest rent which can be got for the use of his ground.”

JOHN STUART MILL, 1848

Suppose that there is a kind of income which constantly tends to increase, without any exertion or sacrifice on the part of the owners: ... In such a case it would be **no violation of the principles on which private property is grounded, if the state should appropriate this increase of wealth, or part of it, as it arises**. This would not properly be taking anything from anybody; it would merely be applying an accession of wealth, created by circumstances, to the benefit of society, instead of allowing it to become an unearned appendage to the riches of a particular class.



UN-HABITAT

1976: VANCOUVER ACTION PLAN

The unearned increment resulting from the rise in land values resulting from change in use of land, from public investment or decision, **or due to the general growth of the community** must be subject to appropriate recapture by public bodies (the community).



2016: HABITAT III, NEW URBAN AGENDA

We will promote best practices to capture and share the increase in land and property value generated as a result of urban development processes, infrastructure projects and public investments.

UN-HABITAT



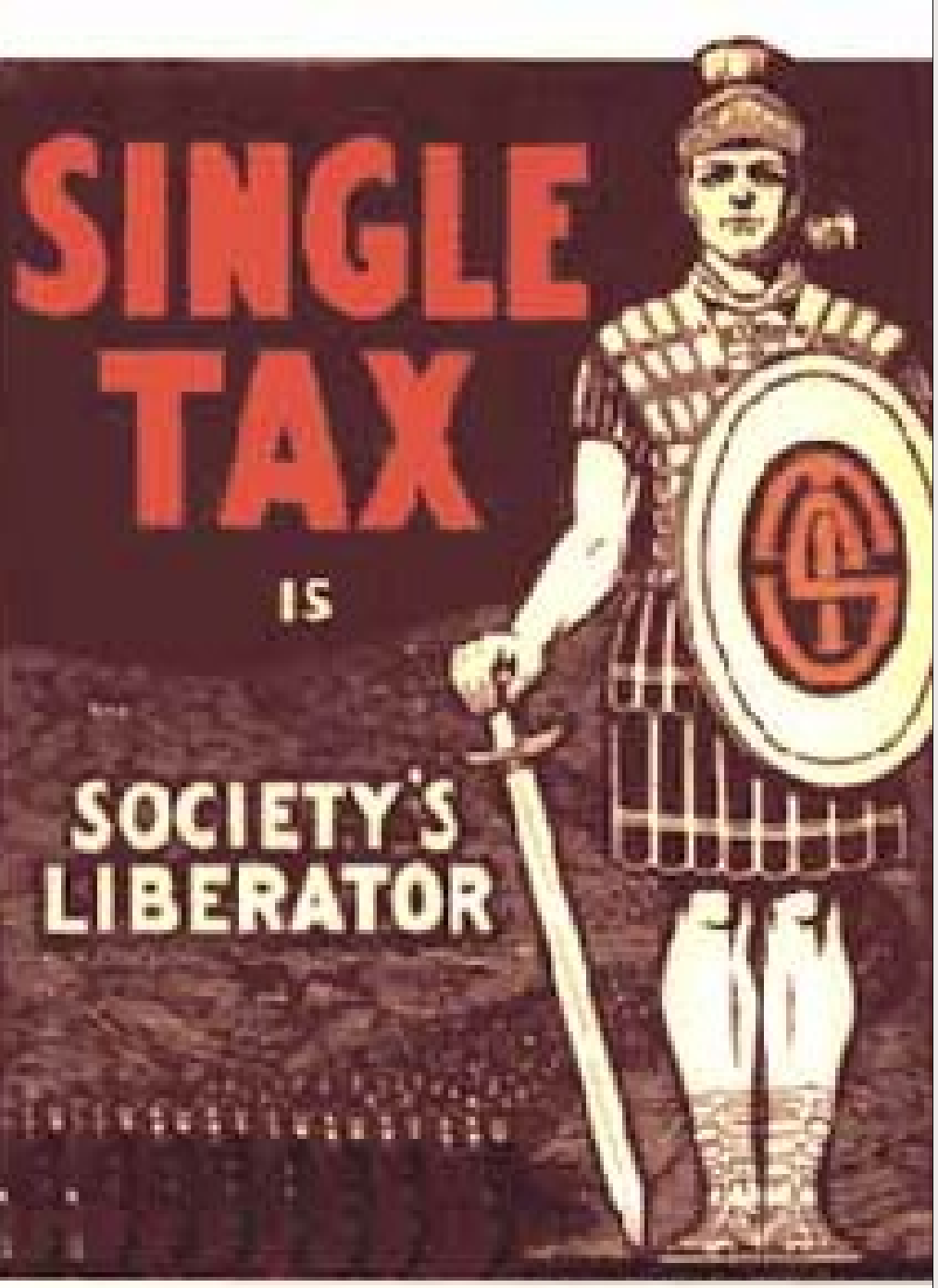
MILTON FRIEDMAN, 1978

“In my opinion, the least bad tax is the property tax on the unimproved value of land, the Henry George argument of many, many years ago”

THE CONSENSUS

The current literature on the use of LVC reflects a substantial consensus that “unearned increments” can and should be recaptured at least in part by the community.





HAS GEORGE'S PROPOSAL EVER BEEN TRIED?

Short answer: Not really

Enclaves like Arden DE and Fairhope AL come closest to George's **mechanism** but aren't governments

Hong Kong and Singapore come closest in **revenue share** but through ownership, not taxation

Places like Estonia, Denmark, and Pennsylvania **actually tax land value**, but only as one tax among many

OECD TAXONOMY OF CURRENT LVC TOOLS

Infrastructure levies: Taxes or fees levied on landowners whose land gains value due to government-initiated infrastructure development

Developer obligations: Cash or in-kind contributions to defray costs for additional infrastructure or services that need to be provided due to private development

Charges for development rights: Cash or in-kind contributions payable in exchange for development rights/potential above a set density baseline

These are largely event driven rather than recurring revenue sources

Land readjustment: Pooling fragmented land parcels for joint development, with owners transferring a portion of their land for public use

Strategic land management: Governments actively buying, developing, selling and leasing land to advance public needs and recoup value increments borne through public action



COLOMBIA'S TWO VALUE-CAPTURE TOOLS

A CASE STUDY IN VALUE CAPTURE · COLOMBIA

A century-old levy on public works, and a newer claim on the gains from planning decisions



Contribución de Valorización since 1921 · Participación en Plusvalías since 1997

THE BIG IDEA

TWO WAYS TO RECOVER PUBLICLY CREATED VALUE

TOOL 1 · SINCE 1921

Contribución de Valorización

The public builds something: a road, bridge, park or sewer.

Nearby owners pay their share of what it cost.

TOOL 2 · SINCE 1997

Participación en Plusvalías

The public changes the rules: rezoning, new uses, more density.

The owner who gains pays a share of the land's increase in increase in value.

Colombia's 1991 Constitution (Article 82) says public bodies shall share in the land value gains their urban actions create.

Sources: Constitución Política de Colombia (1991), Art. 82; Lincoln Institute of Land Policy

TOOL 1 · CONTRIBUCIÓN DE VALORIZACIÓN

A BETTERMENT LEVY TIED TO A SPECIFIC WORK

Feature	How it works
Trigger	Building a specific public work: a road, bridge, park or sewer
Timing	May be billed before, during or after construction; Bogotá usually bills ahead
Who pays	Every owner in the work’s designated “zone of influence”
Calculation	The project cost, split by benefit factors such as distance, lot area and use
Cap	The lowest of: project cost plus administration, estimated benefit, ability to pay

Sources: Law 25 of 1921; Decree-Law 1604 of 1966; Lincoln Institute (2011); Ministerio de Vivienda

1921

Law 25 creates the levy; in continuous use for over a century

45%

of Medellín's revenue in the late 1960s (Bogotá: 16%)

~30%

of Cali's total revenue in the early 1980s

US$1bn

Bogotá road charge spread over over 1.5 million properties

Sources: Lincoln Institute — Barco & Smolka (2000); Borrero et al. (2011); Borrero, Working Paper (2014)

VALORIZACIÓN · WEAK POINTS

LAWSUITS AND BROKEN PROMISES

Owners and developers sue

To delay, reduce or escape the charge, they challenge where the zone of influence was drawn and whether procedural and timing deadlines were met.

Fairness of the split

Auditors faulted Bogotá’s formula as regressive and its exclusions as uneven.

BOGOTÁ’S 2005 WORKS PLAN

41 of ~140

planned works finished 12 years later; COP 1.1 trillion collected of 2.1 trillion planned

COP 224bn

ordered refunded to taxpayers; the auditor warned it eroded trust eroded trust

Sources: Contraloría de Bogotá (2013, 2017); Concejo de Bogotá, Acuerdo 180 of 2005

TOOL 2 · PARTICIPACIÓN EN PLUSVALÍAS

A SHARE OF GAINS FROM PLANNING DECISIONS

Feature	How it works
Trigger	Rural land made urban or suburban, a change of permitted use, or higher density
Timing	Set when the decision is adopted; due when the owner builds, changes use or sells
Who pays	Owners of the specific parcels granted new development rights
Calculation	Appraised land price per m² before and after the decision
Rate	30% to 50% of the increase, set by the city council; payable in cash, land or a stake

Sources: Law 388 of 1997, Arts. 73–90; Decree 1077 of 2015; CEPAL Plataforma Urbana

PLUSVALÍAS · HOW IT ARRIVED

FROM CONSTITUTIONAL PRINCIPLE TO BOGOTÁ'S FIRST BILLS

1989

Law 9 creates a precursor charge on development

1991

New Constitution, Article 82, sets the principle

1997

Law 388 (July 18) creates plusvalías and 10-year master plans

2003

Bogotá's council adopts adopts it (Acuerdo 118, 118, December 30)

2004

First assessments issued in April, at a 30% rate

2006

Bogotá's rate reaches the 50% maximum

Bogotá collected about COP 123 billion in its first nine years: roughly 0.35% of its own revenue.

Sources: Lincoln Institute; Bogotá Secretaría de Planeación, Res. 220 of 2004; MinVivienda guide; Bogotá Hacienda (2013); UCLG (2016)

PLUSVALÍAS · ADOPTION VERSUS COLLECTION

ON THE BOOKS, RARELY COLLECTED

386

municipalities include plusvalías in their local rules

48

reported collecting anything at all, 2009–2017

Of roughly 1,100 municipalities, only about 1 in 20 received any plusvalía revenue in a decade. Most of it came from Bogotá and its fast-growing neighbors.

Sources: Evolución de la participación en plusvalía en Colombia 1997–2017 (Redalyc); MinVivienda guide; DNP, CONPES 3819 (2014)

PLUSVALÍAS · WHY IT STALLS

FOUR OBSTACLES BETWEEN LAW AND REVENUE

Valuing before and after

Every affected parcel needs two appraisals, and each one invites a dispute.

Thin capacity

Small and mid-sized cities lack an up-to-date cadastre and trained staff.

Political resistance

A 30–50% claim on a landowner’s gain draws organized opposition.

A long, leaky wait

Payment waits until the owner builds or sells, and permits can slip can slip through unchecked.

Sources: Barco & Smolka, Lincoln Institute (2000); Bogotá Hacienda (2013); UCLG (2016); Universidad del Rosario (2025)

SIDE BY SIDE

RELATIVE STRENGTHS AND WEAKNESSES

	Valorización	Plusvalías
What people see	A road, park or bridge	A decision on paper
Basis	Project cost, capped by benefit	Estimated rise in land value
Who pays	All owners in a zone	Owners granted new rights
When paid	Often in advance of the works	Only when the owner acts
Acceptance	Strong when works arrive	Weak; seen as a penalty
Admin burden	Moderate: cost and zone	Heavy: parcel appraisals
Track record	A century, major revenue	Mostly Bogotá; ~ 5% of towns
Biggest risk	Works not delivered	Never collected at all

TAKEAWAYS

WHAT COLOMBIA'S EXPERIENCE SUGGESTS

1

Design for cost recovery

Charging for what a work cost is easier to defend than claiming a share of "unearned" gains.

2

Tie it to chosen projects

Support rises when the charge funds a named project the public public helped plan, and money is spent as promised.

3

Build first, then recover

Law and politics often require it; Bogotá's refunds show the cost of billing for works that never came.

4

The opening for land value tax

Both tools catch one-time gains, parcel by parcel. A tax on land value would reach them steadily and everywhere.

A CASE STUDY IN VALUE CAPTURE · LONDON CROSSRAIL

ELIZABETH LINE

How London stacked many funding sources, and asked those who would gain to help pay



Opened May 2022 · £18.8 billion · 41 stations

THE PROJECT

LONDON'S BIGGEST TRANSPORT ADDITION IN A GENERATION

41

stations from Reading and Heathrow to Shenfield and Abbey Wood

10

new stations, most in tunnels under central London

£18.8bn

total funding package (about US$24 billion)

2022

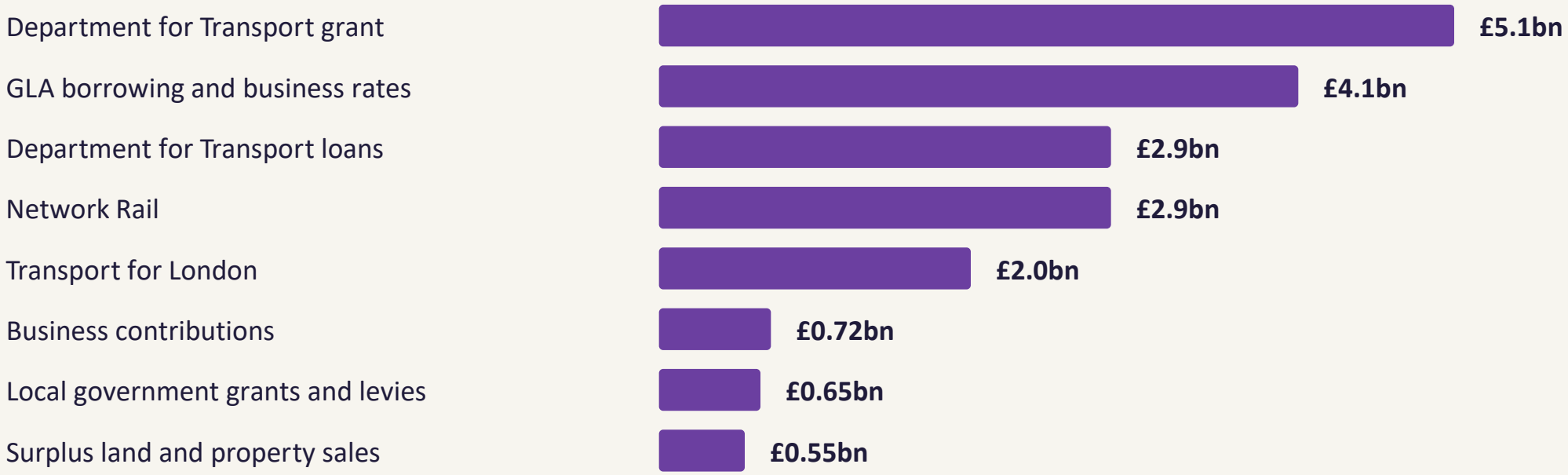
opened in May; full through-service from May 2023

Original 2010 budget: £14.8 billion. Delays and overruns raised it to £18.8 billion, and London itself covered much of covered much of the increase.

Sources: TfL; Railway Gazette; National Audit Office reporting

THE FUNDING MIX

NO SINGLE SOURCE CAME CLOSE TO PAYING FOR IT



Source: breakdown of the £18.8bn package as reported in Rail magazine, May 2022. Figures rounded.

TOOL 1 · BUSINESS RATE SUPPLEMENT

A 2P SURCHARGE ON LONDON'S LARGER BUSINESS PROPERTIES

2p

per £1 of rateable value, on top of ordinary business rates

~4%

added to a typical affected ratepayer's bill (2026–27)

87%

of properties exempt: only rateable values above £92,000 pay

2009

Business Rate Supplements Act; levied from from April 2010

£3.3bn

borrowed up front by the GLA, repaid from the supplement

2041

latest end date (target 2037–38); ~£4bn collected by 2027

Source: Greater London Authority, Mayoral Decision MD3465 (January 2026)

TOOL 1 · A CLOSER LOOK

THE BRS TAXES RENTAL VALUE, NOT LAND VALUE

	London’s supplement (BRS)	Land value tax
Tax base	Annual rental value of land and buildings together	Value of the land alone
Who pays	The business occupying the property	The landowner
Coverage	Larger properties anywhere in London, at a flat 2p	All land, in proportion to its value
Link to the new line	Indirect: a station’s uplift is diluted London-wide	Direct: the tax rises where land values rise

English rateable value is the estimated annual open-market rent of the whole property.

TOOL 2 · MAYORAL COMMUNITY INFRASTRUCTURE LEVY

DEVELOPERS PAY PER SQUARE METRE OF NEW FLOORSPACE

Charged across all of Greater London since 2012. The rate depends depends on where the building goes up and what it is used for. used for.

- Three charging bands by borough
- Higher rates for offices, retail and hotels in central London and the northern Isle of Dogs
- Exempt: health and education buildings, charities, affordable housing

£1.33bn

raised by mid-2024, plus £168m from a related Crossrail charge on central offices

Where (2026 rates)	Per m²
Band 1: highest-value boroughs	£96.97
Band 2: middle boroughs	£72.73
Band 3: outer boroughs	£30.30
Central London and Isle of Dogs: offices, retail, hotels	£169.70–£224.24

Sources: GLA MCIL2 charging schedule, indexed rates for 2026; TfL Finance Committee, July 2024

TOOL 3 · LAND AND DEVELOPMENT RIGHTS

STATIONS WERE DESIGNED WITH THE BUILDINGS ABOVE THEM

12

over-station developments, about 3.5 million sq ft of offices, shops and homes

~£500m

targeted from selling development rights and surplus land (about £550m £550m reported)

£860m

spent acquiring land, mostly to build the railway itself

Because the public body owned the sites, it could sell the right to build over the new stations at their post-railway value.

Sources: Crossrail Learning Legacy (land acquisition; over-site development); Rail magazine, May 2022

THE BIGGER PICTURE

VALUE CREATED, VALUE CAPTURED

£20bn+

forecast rise in residential property values within 1 km of stations by 2026, residential alone

≈£6bn

raised from London property and development: supplement ~£4bn, developer levies ~£1.5bn, land and air rights ~£0.5bn

Sources: GVA, Crossrail Property Impact & Regeneration Study (2018); GLA MD3465; TfL Finance Committee (2024)

WHO MADE IT HAPPEN

CHAMPIONS AND A BROAD COALITION

Ken Livingstone

Mayor of London, 2000–08

Pressed for the line and agreed the 2007 2007 funding deal with government

Boris Johnson

Mayor of London, 2008–16

Introduced the business rate supplement and held the 2010 settlement

Gordon Brown and Alistair Darling

Prime Minister and Chancellor

Gave the go-ahead and announced the funding package, October 2007

Sir Adrian Montague

2004 review for government

Doubted private finance alone; pointed to a blended funding structure

Bridget Rosewell

GLA Chief Economic Adviser

Built the economic case and the commercial vision for the line

London First and the City

The business voice

Accepted that business should pay; the City secured voluntary contributions

Supported in turn by Labour, Coalition and Conservative governments.

TAKEAWAYS

WHAT LONDON'S EXPERIENCE SUGGESTS

1

Stack many sources

Grants, loans, levies, rates and land sales together closed a gap no single tool could.

2

Ask those who gain to pay

London businesses, developers and land sales funded more than a third of the cost.

3

Build a lasting coalition

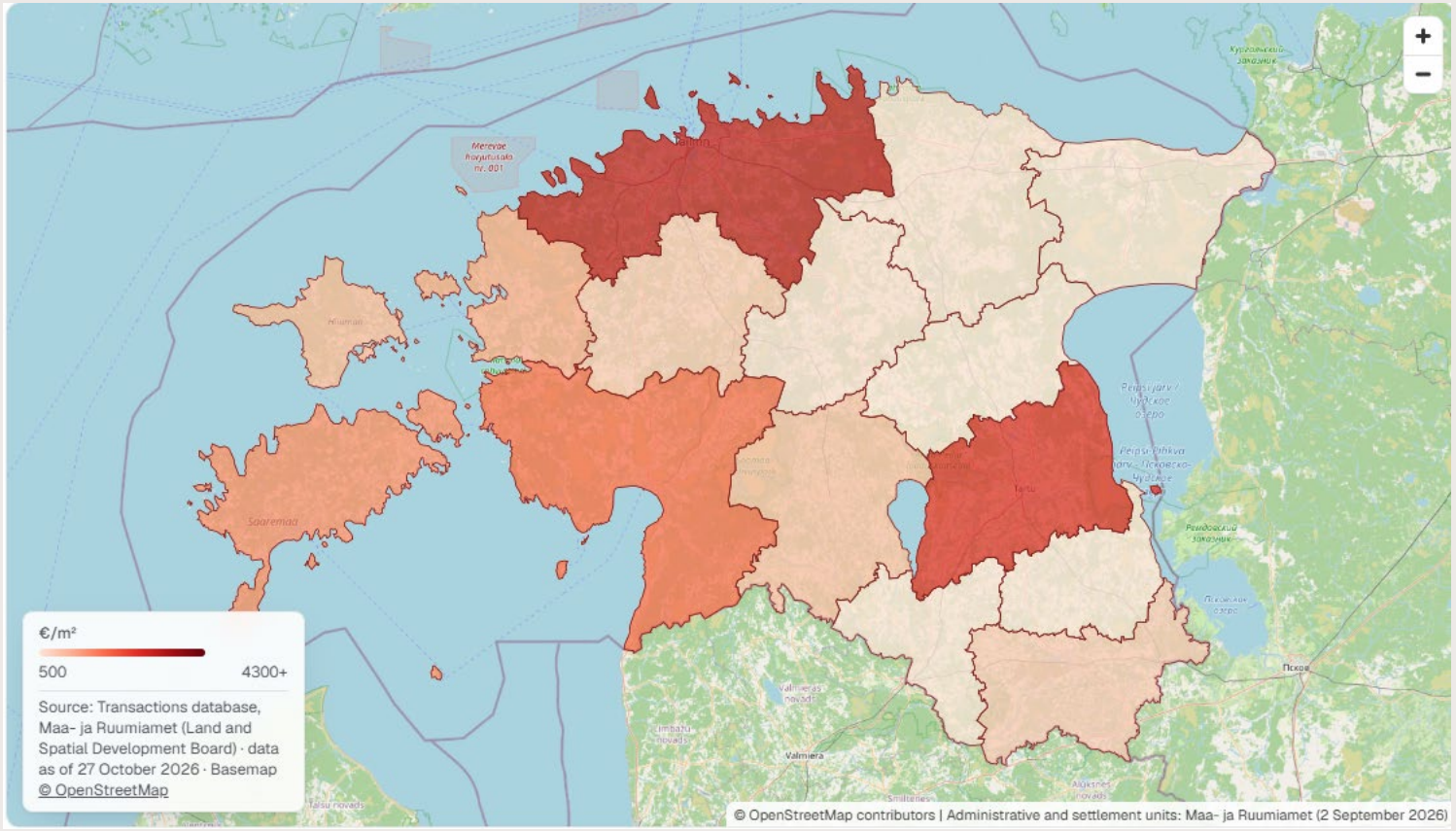
Mayors and governments of different parties kept the project going for two decades.

4

The opening for land value tax

The railway's gains landed on land values. A tax on land itself would reach them directly.

ESTONIAN LAND VALUE TAX



ESTONIA · LAND VALUE TAXATION

HOW ESTONIA DETERMINES LAND VALUES

WHAT GOES IN

Sales and parcel data

- Every land sale in the past six years
- Cadastre: location, size, intended use
- Zoning, plans and building rights
- Soil quality, forest type, restrictions

HOW IT'S CALCULATED

Statistical mass appraisal

- No site visits: registry data only
- Regression models price each feature and each location
- Land Board with professional valuers

WHAT COMES OUT

A value for every parcel

761,286

parcels, worth €32.5B in total, valued as of 30 June 2022

Land only

Buildings and growing timber are left out

Market-based

Values are derived from actual sale prices

Every four years

Set in law; 2022 was the first since 2001

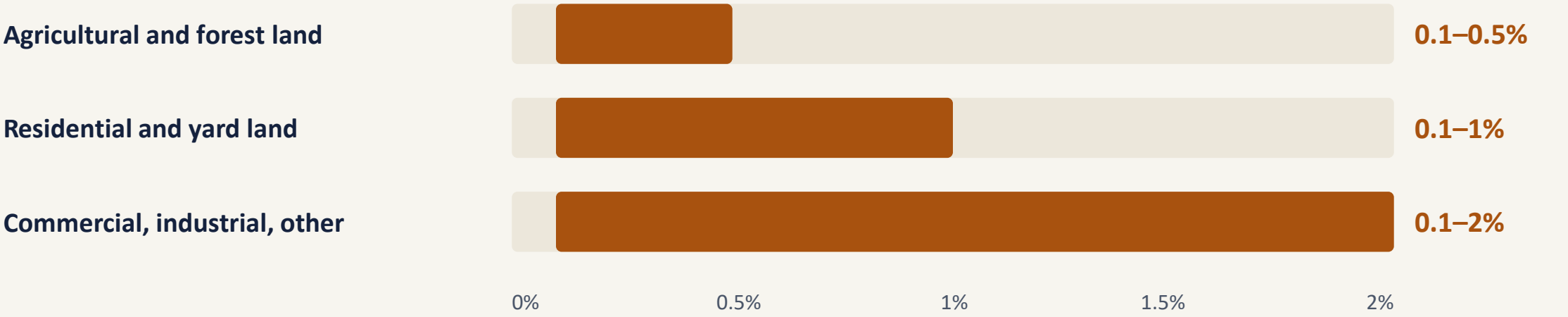
Open to owners

Each value is public online and can be corrected

Sources: Estonian Land Board; T. Tiits, Lincoln Institute of Land Policy; Baltic Times; ERR News.

ESTONIA · LAND VALUE TAXATION

MUNICIPALITIES SET RATES WITHIN NATIONAL BANDS



A share of land value, per year

Tax = assessed land value × rate. Buildings never count.

Chosen by 79 councils

Each sets its rates before the tax year begins.

Ceilings doubled in 2025

Residential max rose from 0.5% to 1%; other land from 1% to 2%.

Sources: Land Tax Act (in force 2026); ERR News; Viljandi Parish council explanatory note, 2025.

ESTONIA · LAND VALUE TAXATION

WHY THE NEW VALUES ARE BEING PHASED IN

8.3×

Average rise in land values between the 2001 and 2022 valuations

11.6×
Residential land

22.5×
Agricultural land

2024	New values take effect. Rate ceilings cut 2.5–5×; bills may rise at most 10% a most 10% a year.
2025	Yearly increase limit raised to 50% (or €20).
2026 →	Each council picks its own cap of 10–100% a year; 51 of 79 chose 10%.
Reliefs	Councils may also exempt up to €1,000 for homeowners and for pensioners.

Sources: Estonian Land Board 2022 valuation; Tax and Customs Board (EMTA); ERR News; Baltic Times.

ESTONIA · LAND VALUE TAXATION

LAND TAX IS A SMALL SLICE OF MUNICIPAL BUDGETS

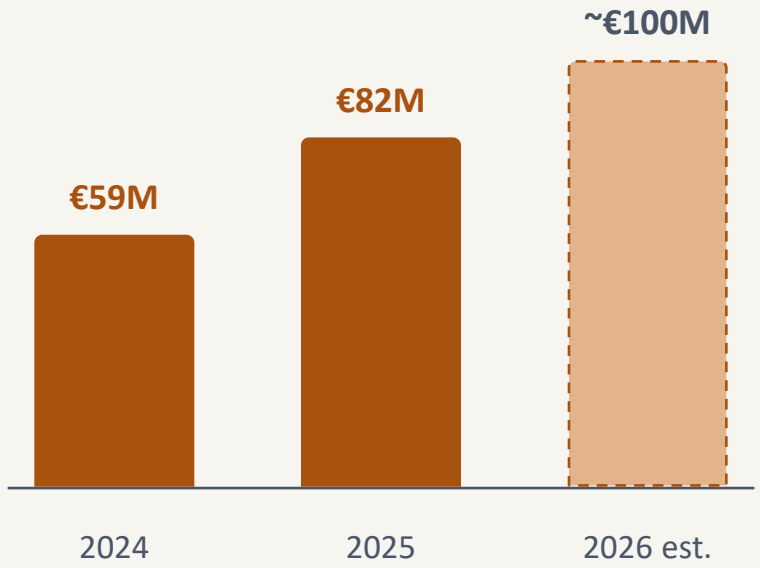
All municipal revenue, 2026 **€3.5B**

Municipal share of income tax, 2026 **€2.08B**

Land tax, 2025 **€0.08B**

Income tax supplies **about 60%** of municipal revenue. Land tax supplies **only 2–3%**.

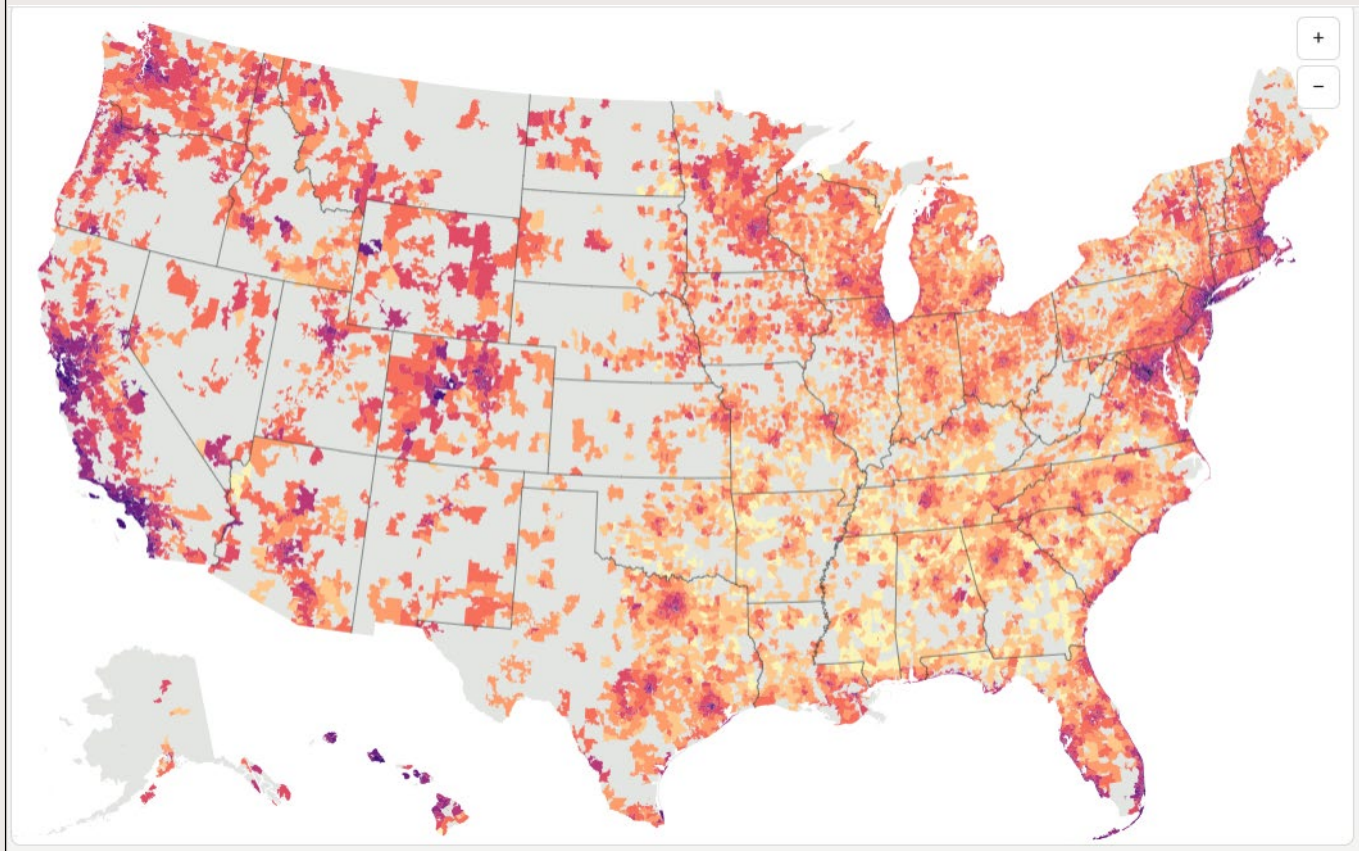
Land tax revenue is climbing



Sources: Ministry of Finance spring 2026 forecast; Ministry of Regional Affairs; EMTA; ERR. 2026 land tax estimated from municipal budgets.

LAND VALUE IN THE UNITED STATES

Could US communities implement an infrastructure fee based on land value?



Source: Davis, Larson, Oliner & Shui, "The Price of Residential Land for Counties, ZIP Codes, and Census Tracts in the United States," FHFA Working Paper 19-01, data file version 4.0 (June 2024), tab "Cross-Section ZIP Codes," column "Land Value (Per Acre, As-Is)." fhfa.gov/research/papers/wp1901

HENRY GEORGE'S PREMISE

LAND'S VALUE BELONGS TO THE COMMUNITY

1 · TWO FOUNDATIONS

No one produced land, and rightful property comes from labor. The community's growth and public works create location value.

2 · THE CLAIM

So the rent of land, its annual return, belongs to the community. That includes existing value, not just future increases.

3 · THE METHOD

Collect nearly all the rent, every year. Owners keep their titles, possession and every improvement, untaxed.

> *"It is the taking by the community, for the use of the community, of that value which is the creation of the community."*

Henry George, *Progress and Poverty* (1879), Book VIII, Ch. 3

SAME PREMISE, NARROWER REACH

GEORGE VS. LAND VALUE CAPTURE

	Henry George	Land value capture
What is claimed	All land rent, existing and future	Only increases in land value
Source of value	Nature and general community growth	Specific public actions: transit, rezoning
When collected	Every year, on all land	Once, at the triggering event
How much	Essentially all of the rent	A share, often capped (Poland: 50%)
Justification	Equal rights; the community created it	Benefit received; recover public costs
Typical tools	Recurring tax on land value	Betterment levies, developer obligations

> Both hold that publicly created value shouldn't go entirely to private owners. **Value capture limits that claim to new value from identifiable public actions.**

FROM MILL TO THE OECD

WHY THE NARROWER PREMISE MATTERS

1870s

J. S. Mill

Tax only future increments; spare existing values

1879

Henry George

Collect all rent, existing and future future

1976

UN Habitat I

Recapture increments, including from from general growth

2022

OECD–Lincoln

Capture increments from specific public actions

Sidesteps the transition objection

It leaves alone value that owners already paid for.

Can rest on the benefit principle

You pay toward the public works that raised your value. No ownership claim needed.

A middle path exists

A recurring land tax at a partial rate: Estonia, Denmark, Jamaica, Pennsylvania.

ESTONIA · LAND VALUE TAXATION

COLLECTING THE FULL LAND RENT COULD CUT THE MUNICIPAL INCOME TAX BY ABOUT 60%

≈ €1.4 billion

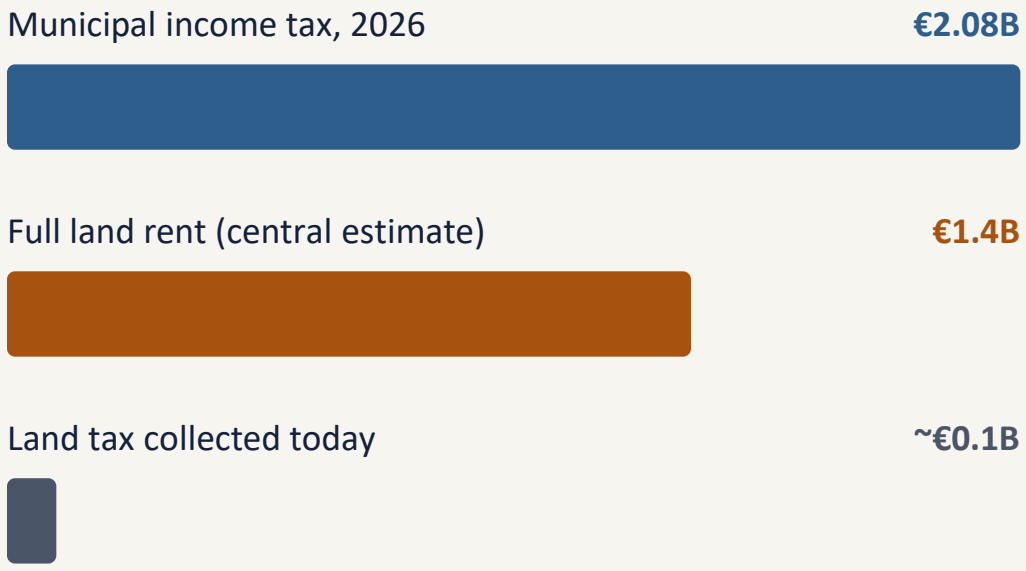
Full annual land rent: €32.5B of land × (4% return + today's 0.3% tax)

≈ €1.3 billion

Net new revenue after the ~€0.1B land tax already collected

10.64% → ~4%

Municipal share of residents' wage income could fall by about 63%



At a 3–5% return, the cut ranges from **about 47% to 78%**.

Sources: Estonian Land Board; Ministry of Finance spring 2026 forecast; EMTA; municipal budgets. Estimates are illustrative.