



Labour Land Campaign
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Underground Treasure

**Land values can pay for new Underground lines, meet running costs
and reduce fares**

A fundamental shift in what we tax will recapture land value - which London Underground creates - to provide sustainable and increased finance to pay for the running of its services, fair wages, future investment and lower fares



Photo: Commons Wikimedia

Between 1992 and 2002, land values increased by £2 billion around Canary Wharf Station as a result of the Jubilee Line Extension

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Abstract

Funding the London Underground from a sustainable and fairer source of revenue

This report is an examination of the economic effects of London's Underground railway on land values and an exploration of how these unearned benefits can be recycled to fund the Underground for the benefit of all.

It is particularly strongly focussed on considering whether the unearned annual underlying income from the rental value of land in London can be utilised to fund the Underground's construction of new infrastructure and facilities, renewal, refurbishment and maintenance of the existing system, support its revenue costs and optimise fare levels and ticketing systems in order to encourage walking, cycling and the use of public transport and thereby improve the environment and quality of living, for all people who live, work and visit London.

The authors believe that a fairer and more sustainable means for funding The Underground is available which can enhance city life, reduce traffic congestion, reduce pollution, cut Co2 emissions, reduce road casualties and address urban sprawl, at the same time as protecting London's precious Green Belt, the countryside and open spaces.

The current methods of funding public transport from general taxation on buildings, incomes, production and trade are critically examined and a sustainable alternative is explored.

The conclusion drawn is that the most efficient and fairest way to fund the London Underground is to recognise that the biggest financial beneficiaries from a good public transport system are not the travellers, not businesses per se, but wealthy landowners.

Consequently, London needs to mobilise the unearned rental value of land wealth for infrastructure and transport expenditure and to gradually reduce taxation on buildings, production, incomes and trade.

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Table of Contents

1. Introduction 4

2. Executive Summary 5

3. Secure and Stable Funding 6

 How much LVT from London? 7

4. Winners and Losers Today 9

 Railways, Land and Land Values 9

 Who gets the value? 10

 The Funding Imbalance 11

 Workers under attack 12

 Delays and Uncertainty 13

 Cheapskate Design and Investment 14

 Balancing the funding 14

5. Past Pitfalls 16

 Land Taxes to Avoid 16

6. LVT is right 17

7. Administering LVT 19

 Annual Land Value Tax (LVT) 19

 Advantages of LVT 19

8. Changing the Political Climate 21

 Supporters of LVT 21

 How LVT could pay for The London Underground 21

Appendix A. Past funding of TfL and the Underground 23

 Underground Funding Chaos 23

 GLC 23

 Political Ideals and Legal Challenges 23

 Operation Strikeforce, Treasury and Waste 24

 Annuity 25

 PFI 25

 PPP as a response to PFI 26

 GLA & London Mayor 27

 Crossrail 27

 Funding for the future 28

Appendix B. More Formal Economic Theory 29

Appendix C. International Experience 31

1. Introduction

Of all unions and institutions, the RMT well understands the central role of railways to the well-being of our society. Railways provide the safe, rapid, effective transport for people and goods that have shaped our cities and countryside and that help make them good places for people to live and work. Railways can provide large scale transport that is climate friendly and wholly free of air pollution. As well as offering a unique service to passengers and carrying freight in a sustainable manner the railways provide secure, worthwhile livelihoods for many thousands of British workers.

What may be less well understood is how land and railways are so deeply intertwined. Railways have lasting, deep and profound impacts upon land, land uses and land values. Land and landholdings have deep, lasting, and sometimes pernicious impacts upon railway planning, design and operation.

This report explores this relationship between land and railways, looking at London, Tokyo, New York and other cities from this perspective, assessing what relationships between land and railways works best, and how, when this relationship is inappropriate, working people and livelihoods come under attack, and lead to outcomes that harm almost everybody. While focused particularly on London Underground, where livelihoods are under particular and sustained attack, it looks too at the wider railways.

2. Executive Summary

The key recommendation of this report is that the RMT should campaign for a more effective tax system, and most specifically an annual Land Value Tax (LVT)¹.

Our reasons are:

- Based on location rental values created by us all, LVT can provide a secure and adequate infrastructure funding stream, sufficient to meet both capital and revenue needs, giving the Underground and Transport for London (TfL) a sound future planning foundation, and those who work in it secure livelihoods. We assess the possible scale of LVT income for Greater London at £170 billion pa.
- LVT falls on those who most gain financially from the railway and other infrastructure – principally the owners of land. In section 4 we explore the relationship between land, land values and transport, and how the privileged in society have exploited this to capture unearned benefits for themselves. The result is increased burdens on workers (for example National Insurance and Income Tax payments) and consumers (e.g. VAT). Reducing these burdens will benefit RMT members and, of course, other taxpayers.
- LVT can avoid the many pitfalls of current approaches adopted for Underground funding.
- Section 5 explores the history of the UK's failed attempts to capture land values.
- We examine the past history of Underground funding in Appendix A.
- LVT is economically and ethically sound. It is fairer than most other forms of taxation and will discourage tax avoidance. The moral case for LVT is explored in section 6.
- Despite many think tanks and academics advocating LVT some commentators and ill-informed people present LVT as being too administratively complex and difficult. This is not so. In section 7 we show how LVT can be administered and implemented.
- The key difficulties are political, with an incumbent privileged landowning establishment using their power and political will to prevent the introduction of annual Land Value Tax. Now in 2016, the academic and political climate is changing towards an honest evaluation of LVT. Section 8 explores the present (and past) support for LVT

Now is a good time to campaign for LVT. In the election of Jeremy Corbyn, the Labour Party is demanding a fairer society, focusing on the wellbeing of all citizens, less beholden to exorbitant capitalist demands.

The report is supported by appendices:

Appendix A gives a short pertinent history of funding for TfL and the underground

Appendix B outlines some of the more formal economic theory behind LVT

Appendix C describes some relevant experiences outside London & Internationally

¹Many other names are given to the concept for collecting land rent for the public purse, such as Location Benefit Levy; Site Value Rating; Resource Rentals for Revenue etc. We have chosen annual Land Value Tax as the most widely recognised, historically and today, but it is the concept that is vital, not the name.

Secure and Stable Funding

"The moment an Underground extension is projected, the value of the land is at least doubled. When the railway is built and the stations are opened, the land adjacent to the stations is at least quadrupled in value. There is every reason, in the interests of the public, why the LTPB (London Transport Passenger Board) should receive its appropriate share of the land values it helps to create."

Frank Pick, Vice-Chairman of London Transport giving evidence to Parliament's Barlow Commission in 1938

In all major cities there is a steady and constant need for maintaining and improving transport infrastructure.

- Building new Underground lines in London is essential for tackling population growth, creating new easier travel opportunities, delivering quality services and easing passenger congestion along current tube, rail and bus routes. It will enhance the wealth and well-being of society and its workers
- More reliable operations from sound and on-going maintenance and enhancement of London's railways increases the reliability

What this needs is adequate and secure funding to reflect the value added by the railways, and, ideally collected from those who gain. It needs an annual Land Value Tax (LVT).

In many cities and countries, and for most successful railways and metros, the railways and land ownership (or leaseholding) go together. So the key question, as exemplified by the Hong Kong MTRC, is: how much land do we need to build and sustain a railway (or other infrastructure)? This is not an engineering question, but an economic / financial one. Rental income from location values sustains the railway in Hong Kong and avoids the imposition of sales taxes and high income taxes.

- However, if land is privately owned, as in London and the UK, the capital appreciation and other value goes to the landowners, and LVT then becomes a more sophisticated and fairer way to collect the value created by the railway. So with LVT, ownership of land and operation of the railways can be separated.
- Our ideal is that LVT should become a national tax reducing or replacing other taxes, such as income tax and VAT, and with a local LVT replacing Council Tax and Business Rates. London could pioneer the approach, with TfL receiving a portion of LVT. As we show below, a reasonable estimate of the collectible tax is £128 billion per annum. Quite enough, in total, to sustain a modern, effective and evolving underground network, and avoiding many of the political issues that dog further investment.

How much LVT from London?

Surprisingly, considering how many detailed statistics are kept on prices, employment, wages, profits, trade, debt, savings and pensions etc. the UK Government is unable to provide any figures for the total UK land value or land values by land-use sectors or regions including London. This is a serious gap, even in many of those USA cities that do not collect land values (cities like Toledo in Ohio) they do publish a register of land values.²

The amount of LVT collected in London will depend on political decisions. Should LVT just aim to be revenue neutral (replacing or reducing existing taxes) or should rising land values be used to fund new infrastructure and services? How can the economically benign revenue of LVT best contribute to wider (and substantial) economic benefits? A secure and adequate funding stream for railways is one of many desirable outcomes expected.

So it is difficult to give any accurate figure on how much could be collected from a particular LVT percentage because there is a lack of relevant information on land values – the data simply does not exist or where it is in the hands of landowners and developers, it is not collated and published by government. This despite land value being created from public and private services paid for by us all as taxpayers, workers, consumers and fare payers.

But a simple high-level view gives an indication of the scale:

- We know that owners of empty commercial premises and uninhabitable residential properties currently avoid paying their share of Business Rates and Council Tax, leaving those of us who do pay to unfairly pick up the extra bill for lost revenues.
- Just replacing these two local taxes alone with LVT would create a broader tax base and raise more than the current £55 billion from National Non Domestic Rates and Council Tax. (*For more information on subsidies the tax-payer gives to owners of land see “Welfare for the Rich: Who Really Receives the Biggest Subsidies in the UK?”*)³
- 2015/16, estimates show that the Government will have collected £667bn in taxes which is 33.4% of GDP. However, HMRC estimates that £35bn of tax due is not being collected (PCS reckons it is over £120bn)⁴. For the obvious reason that land is immovable, LVT cannot be avoided. So the extra tax paid can shift some burden from Income Tax to LVT. So by collecting LVT tax current lost to avoidance or evasion will contribute to public services.
- US Economists, Mason Gaffney and Michael Hudson estimate that land value is around 30% of GDP. In the UK GDP is £2 trillion per annum and so UK land rent is around £600 billion per annum.

² Tony VICKERS and Mark THURSTAIN-GOODWIN, UK. (2002). “*Visualising Landvaluescape without a Cadastre*” https://www.fig.net/pub/fig_2002/Js14/JS14_vickers_thurstaingoodwin.pdf

³ Heather Wetzel. “*Welfare for the Rich*”. Labour Land Campaign. June 2015. http://www.labourland.org/downloads/papers/Welfare_for_the_rich.pdf

⁴ <http://www.theguardian.com/politics/2013/oct/11/uk-tax-gap-rises-hmrc-avoidance-nonpayment>

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- As in 2015 GDP for London was £565 billion p.a.⁵ land rent for London is £170 billion.

This is an astounding figure and means that London Underground and other public services in London could be easily funded much more generously than at present if London's land rent were used to provide the finance.

While we think LVT is the best and purest way of securing the future of our cities and transport, there may be other approaches, based on the concept of collecting the rent of land, that can be implemented, but retain the principle of aligning the revenue collection more closely to those who benefit.

⁵ "London's Economic Plan – The Development of London's Economy. The Mayor and GLA. City Hall. London."
<http://www.uncsbrp.org/economicdevelopment.htm>

3. Winners and Losers Today

“Roads are made, streets are made, services are improved, electric light turns night into day, water is brought from reservoirs a hundred miles off in the mountains -- and all the while the landlord sits still. **Every one of those improvements is effected by the labor and cost of other people and the taxpayers.** To not one of those improvements does the land monopolist, as a land monopolist, contribute, and yet by every one of them the value of his land is enhanced. He renders no service to the community, he contributes nothing to the general welfare, he contributes nothing to the process from which his own enrichment is derived”.¹

Winston Churchill. 1909 when he was a Liberal MP supporting Lloyd Georges Peoples' Budget. http://www.wealthandwant.com/docs/Churchill_TPL.html

Railways, Land and Land Values

Economies (and so societies) do not work well when the interests of those paying become too different from those who benefit. It leads to argument, conflict and even crime so generally slowing everything down, and this is harmful to everybody. While we are social creatures, generous to others and keen to contribute to the well-being of everyone, this personal generosity breaks down when it is not perceived as fair.

Today's poor arrangements for funding London's transport infrastructure create such conflict. Too much is collected from fare-payers and taxpayers, and too little from those whose wealth is increased because of the railway – broadly, those who own the land. Too little is paid to those who gain their livelihood from the railway, and over many decades too little has been spent on enhancing and extending the railway.

This chapter explores this disparity, and in particular:

- The relationship between railways and land
- How the value of the railways is captured by landowners
- How fare-payers are charged too much (and get poor value for it)
- Why railway workers are under attack.

How railways change land values

Building new Underground lines in London is an important method for creating new easier travel opportunities, delivering quality services and easing passenger congestion along current tube, rail and bus routes.

Could London exist without The Underground?

If the world's first underground railway had never been built, London would certainly be a very different city to the one we enjoy today.

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With the loss of up to four million Underground passenger journeys a day London's roads would be impossibly over-crowded, many homes would not exist, London's population would be much smaller, without sufficient customers many businesses wouldn't exist or be unable to recruit staff, London would lose its international advantage, tourists would be deterred, 43 Universities could not exist and obviously the total GDP for London would be a fraction of its present £565 billion.

So, without The London Underground, London's economy would shrink, our population would be much smaller, roads would be unacceptably overcrowded and a limited number of businesses would be producing fewer goods and services, employing fewer workers on lower wages.

Just imagine what this would do to land values!

With fewer people seeking homes, half-empty hotels, commercial premises, warehouses, shops and office space not built or lying empty and unwanted, landowners would see their unearned income from location values (land rent) collapse.

Fortunately for London, its residents, its businesses, its commuters, its visitors and most importantly its landed gentry, in 1845, Charles Pearson, the City of London's Solicitor and a radical Liberal MP, commenced his 17 year campaign to create an underground railway. Sadly, Charles Pearson died in September 1862 just four months before the first Underground trains began to run.

The development of The Underground has been cited as the major factor enabling the rapid growth of London and the doubling of its population from 3 million in 1862 to over 6 million by 1901.⁶

"...the ten stations between Waterloo and Stratford have accumulated a gain of around £13 billion, which is three times the £3.5 billion it took to build the line."

Don Riley 'Taken For A Ride' 2001. The Centre for Land Policy Studies

Who gets the value?

It is very clear that the major financial beneficiaries of transport infrastructure are those who own the land whose usefulness and attractiveness creates the capital appreciation from which they profit:

- The owners of commercial properties gain from greater business activity, and the willingness of business and people to pay more rent for the convenience and scale of business they do. This provides both rent increases and growth in capital values;
- The occupiers of residential property gain from the opportunities for more attractive (and better paid) work and leisure that the location now provides;

⁶ 1861 data – 1861 Census: England and Wales. 1901 data – 1911 Census: England and Wales. Recompiled in "Total Population table". A Vision of Britain Through Time. Retrieved 6 June 2009.

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- The owners of residential property gain from the capital appreciation from the greater rents from occupiers. Owner occupiers gain from the capital appreciation, even if the rent is imputed.
- Bankers and developers, who provide the capital finance that contributes to the building of the railway and associated development.
- Tenants and first time buyers lose out because of increased rents and higher mortgage costs;

Who pays

They key payers for the railway are:

- **Fare-payers.** The current Mayor of London has increased Underground fares by more than 34%.⁷ A New Yorker now pays £81.38 for a Metrocard giving 30 days travel on the complete Subway system and local buses whereas a Londoner pays almost three times more, £227 for a full month's equivalent travel for zones 1-6. The New York Subway provides a service on 24 lines serving 468 stations compared to London Underground's 11 lines, serving 219 stations. What about population served? And how is the NY subway funded? Why so different?
- **General Tax payers.** A great deal of government revenue is collected from individual workers and their employers in the form of PAYE and National Insurance. Further substantial revenue is raised by the regressive tax on all purchases (VAT). These taxes discourage economic activity, so are economically oppressive. Further taxes are raised from property taxes (Business Rates and Council Tax.), which do bear some relationship to the attractiveness of the locality, but are botched, unfair, badly valued (and sometimes oppressive.) Clearly, these tax-payers will wish to minimise their spend on the railway – they get little specific benefit from it.
- **Railway staff.** Railway staff may not get fair and appropriate income from their contribution. They will face higher living costs (from the high costs of housing).

The Funding Imbalance

The current funding imbalance has many adverse consequences, which we look at later in this chapter:

- **Cuts.** There is constant political pressure to reduce costs. Those who pay do not perceive value for money, and so seek to reduce costs, hence workers and staffing are under perpetual attack.
- **Delays and Uncertainty.** Without a clear value stream for those paying, huge barriers are in the way of new investment (or even just maintenance).

⁷ Seven day TravelCard. Zones 1 to 4. 2008 - £34.60 2016 - £46.50.

Darren Johnson AM. Green Party. GLA. Left Foot Forward. 31 January 2014.

<http://leftfootforward.org/2014/01/passengers-face-massive-disruption-if-boriss-cuts-to-ticket-offices-happen/>

- **Cheapskate design and Investments.** There are many past examples of poor design and implementation aimed to save short term money, but at a cost of long term operation (or even safety).

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Workers under attack

One consequence of the imbalance between cost and benefit is the political pressure to reduce costs, regardless of the public and general benefit or loss.

TfL's government grant is being cut to zero by 2019 – a reduction of £2.8bn.⁸ These cuts in grant are totally unnecessary and are questioned by many observers who recognise that cutting staff levels and raising fares does not make for a good transport policy. Why should today's workers work for less pay and take a 40% cut in pensions and lose hundreds of jobs?

These same Underground workers who provide us all with a safe, convenient and efficient railway, who support businesses, who welcome visitors, who provide access to theatres, cinemas, museums and art venues, who enable commuters to find jobs, who allow relatives to meet, friends to fraternise, lovers to enjoy "brief encounters" and perhaps most significantly enable landowners to charge high, unearned land rents – these same Underground workers are under attack by the Mayor of London who wants to reduce their pay, decimate their pensions (up to 40% less on retirement)⁹ and make many of them redundant.

The London Underground's success would never be achieved without a dedicated workforce who risk their lives digging tunnels, laying tracks, building and maintaining stations, lifts, escalators, depots and trains, providing tickets and information, keeping the system safe, clean and free from flooding, and planning, engineering and managing the whole operation.

Boris Johnson's attack (see box) on railway station staffing is a particular deceitful (and perhaps typical) example of the political manoeuvring to reduce costs.

⁸ City AM. 25 November 2015.

<http://www.cityam.com/229564/autumn-statement-2015-transport-for-london-loses-millions-in-spending-review-as-subsidies-cut-from-department-of-transport>

⁹ RMT <http://www.rmt.org.uk/campaigns/underground/transport-for-london-pensions-dispute/>



Delays and Uncertainty

Funding for The London Underground – revenue and capital - has suffered from a history of inefficient, unpredictable, stop-go decision-making from the Treasury (the UK’s finance ministry) that has led to inefficiencies and challenges in delivering a value for money service, bedevilled long-term investment plans and prevented fares being kept to a reasonable level.

By studying the history of London Transport funding we can highlight the inefficiencies in the system and seek an alternative funding model for the London Underground specifically and for transport generally in the UK and overseas.

Congestion? – “You are not stuck in traffic. You are the traffic!”

This delays and uncertainty inflicted on TfL are extensive and numerous, and we give some of them in an appendix A, along with an analysis. Some brief examples are:

- **Crossrail.** We are delighted that this project is going ahead, after many years of stop-go and huge political negotiations and will soon be serving the public and enhancing the economy of much of London. It got the go-ahead by Alistair Darling because Bob Kiley and other LVT advocates within TfL convinced The Treasury that a Supplementary Business Rate could be charged on the larger business premises within London in order to raise

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£4.1bn towards the total £16bn cost. The biggest beneficiaries contributed little and already landowners are seeing Crossrail providing huge increases in their land values.

- **Northern line extension.** Again, now at last going ahead, with a small contribution from the Battersea power station development – where the land lay derelict (and paid no tax) for nigh on 30 years.
- **Crossrail 2.** Should be funded by LVT and not taxpayers.

Cheapskate Design and Investment

London's underground is riddled with examples, although with good fortune (and LVT) they could now be history.

- Inadequate Victoria Line escalators. When they needed (predictable) refurbishment, the station function was seriously impaired
- Poor Victoria line finishing. While some of the Victorian finishes are still in use (and attractive) after 100 years or so, most travellers have become use to unfinished works replacing shoddy stuff installed in the late 60s (well after the real post war austerity)
- Poor railway alignments. Many lines and some stations have sharp corners. Largely an historical consequence of landlords requiring the railway to run under the streets (and not under their buildings)
- London's mainline stations are positioned outside of the central area because landowners in the 19th Century would not allow the new railways to traverse London.
- Notice how many railways cross each other with no station offering interchanges. A result of private greedy railway companies building the new railways in the 19th Century not wanting to lose passengers to their opposition but now imposing costs and inconvenience to the 21st Century travellers who miss out on the opportunity to make more efficient journeys.

Balancing the funding

The financial contributions from landowners need to be properly aligned with the benefits they receive. In their analysis of the impact of Crossrail on London's Property Market the international firm of estate agents, CBRE concluded that: *"Crossrail will completely transform London's public transport system with huge impact on the economy of London and the South East"*. CBRE estimated that at an estimated cost of £14.8 billion Crossrail would generate a benefit of £42 billion to the economy of London and the South East of England with the greatest proportion of that benefit accruing to landowners whose property was close to Crossrail's stations. *"We anticipate total house price growth of 13% around Crossrail stations between now and 2018, with up to 20% in Central London"*.¹⁰ Thus, those whose job it is to put figures to the uplift in land values from this major transport investment have a clear message. It is now for policy-makers to

¹⁰ CBRE 27 November 2013. "RESIDENTIAL PROPERTY VALUES IN LOCATIONS SERVICED BY CROSSRAIL SET TO SOAR BY £14.7 BILLION"

http://www.cbre.co.uk/uk-en/news_events/news_detail?p_id=15905

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appreciate that it is not only economically efficient to match benefits with costs in securing the revenue for the capital's transport system but also to understand that it is essential to take land values into account in striking a fair balance between what comes from the farebox, the general taxpayer and landowners who benefit most directly from investment in and provision of urban transport.

We believe that the radical (but not new) concept of LVT offers a far better balance between the various stakeholders. Why doesn't the Government or the Mayor recognise that the wealth created by The Underground – land wealth - could be utilised in part to provide adequate funding to retain staff and maintain a safe, reliable, efficient railway operated by dedicated and highly motivated people receiving a just reward for their services and charging fare levels that are modest in comparison to overseas railways?

4. Past Pitfalls

Land Taxes to Avoid

Three times (in 1947, 1967 and 1976) Labour Governments have introduced development land taxes in order to tax the planning gain that arises when the owner of an agricultural field receives a massive boost to their land value with a change of planning use to residential.

For further information see “Labour’s Flawed Land Acts 1947-1976”

by Vic Blundell (The Economic and Social Science Research Association 1993): on the Labour Land Campaign website www.LabourLand.org.

Any form of Development Land Tax (DLT) is detrimental as landowners can easily avoid it. If the government taxes an event the tax can be avoided by the taxpayer not completing the event. The effect of DLT is to leave all gains on development sites (and all sites with buildings) as an unearned gift to landowners and encourage landowners of development land to defer building homes and workplaces until the tax is repealed. This “sterilisation” of development sites has had the effect of freezing development, increasing land prices and destroying jobs.

Similarly, a sales tax or stamp duty on land transactions distorts land transactions, discourages people moving to more suitable premises and only collects a small percentage of land wealth.

5. LVT is right

By abolishing current inefficient property taxes and reducing taxes on incomes and savings, it is argued that GDP will grow and therefore LVT will raise more income than currently collected plus it is unavoidable and is a sustainable source of revenue to pay for our total public services.

With a 5% LVT (raising £8.5 billion per annum) there would be sufficient income to expand and improve services run by London Underground increasing jobs and not cutting services or numbers employed. Revenue and Capital expenditure would be increased, passengers would increase in number and benefit from better services and our environment would see car emissions and road deaths and injuries reduce. Win-Win all round.

For most of the history of humankind, land was treated as a common good with no private ownership. Humanoids have walked this planet for over 2 million years, with Homo Sapiens emerging two hundred thousand years ago. For most of that time we were hunter-gatherers wandering the planet freely surviving on a subsistence basis. With the advent of farming, only ten thousand years ago, farmers needed the security of tenure to ensure the person or family that sows the seed reaps the harvest and so humankind's relationship with nature started to change, and so did its customs and laws about tenure. Because of the surplus created by agriculture, towns and cities began to grow in the Middle East about 8,000 years ago. These towns were popular because tradespeople were able to specialise in particular skills and with the division of labour the total output from labour was increased and often the quality improved.

Originally the rental value of land was shared in order to pipe fresh water, maintain roads and provide other communal civic services. However, over time the private ownership of land rents crept in and the burden of providing public services fell upon traders and merchants and then all producers including working people.

We witnessed this in the UK after 1066 when William The Conqueror did not reward his Barons with free land but declared himself the owner of all land and leased it out in return for services to the King, such as providing trained and equipped knights, archers and foot soldiers in the case of Barons and education and health services in the case of the church.

The history of our Parliament from Simon de Montfort in 1258 is the history of the landed classes increasing their wealth at the expense of everybody else. First the legislators (all landowners) gradually removed their duties to the Monarch so that they could hold their land free of any obligations. Later from the time of Elizabeth I parliament was used to legalise the theft of common land that had sustained working people in the countryside. This legalised theft was known as The Highland Clearances in Scotland and the Enclosure Acts in England. As villages were destroyed and smallholdings replaced by roaming sheep (for higher profits) the enclosures led to poverty, destitution, starvation and crime. In the 18th and 19th centuries the displaced workers were forced to leave the countryside and become manual labourers in the factories and mines created by the industrial revolution.

It is worth remembering that land is provided free by nature.

Comment [DRH1]: No, this is likely factually incorrect)

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There is no expenditure of labour or capital to create land or the numerous gifts of nature.

Surely every citizen, walking this planet today, should be able to enjoy the financial fruits provided by creation.

These fruits include the dry surface of our planet (location value), oil, coal and precious mineral deposits, the oceans, the right to use the electronic spectrum for our mobile phones, satellite orbits in space, landing slots at airports – in fact all things that nature provides that no person has made.

Land Value Tax is one simple way we can begin to rectify an historic injustice and begin to share nature's bounty.

6. Administering LVT

Annual Land Value Tax (LVT)

LVT is only one form of land value capture, but it is far superior to other methods discussed in academic literature. An annual Land Value Tax is very simple to collect and represents a minor tax reform, delivering major improvements to the economy. To implement LVT:

First, the owners of all sites need to be registered.

Second, the value of every site has to be assessed regularly.

Third, the taxing authority levies a percentage rate on the land value each year.

This is very similar to the current business rating system except there is no penalty for taxpayers who improve their buildings and no dispensation for empty sites owned by speculators.

For more details of LVT see the Labour Land Campaign's Manifesto: <http://www.labourland.org/manifesto/intro.php>

Advantages of LVT

The total amount collected by a London LVT would need to be divided between the GLA, the London Boroughs, the Metropolitan Police, The London Fire Brigade and Transport for London. TfL's portion would split between the different operating arms including the London Underground.

This is far preferable than trying to pinpoint exactly how much land value is directly attributable to Underground services alone and only collect a portion of total land value.

The beauty of LVT is that it will increase London's GDP, create more job opportunities, reduce welfare expenditure, reduce commuting as homes become affordable and help to make London a nicer, greener and more pleasant place to live and work.

The biggest advantage of LVT is that unlike taxes on production (income tax, NICs, vat, corporation tax etc.) it not only raises funds for public services without reducing GDP, lowering wages and creating unemployment, but by bringing idle urban land into use, it actually aids the production of goods and services, creates jobs, and makes it cheaper to buy land for homes and commercial premises without urban sprawl into the countryside. LVT is impossible for taxpayers to evade or avoid because, unlike income, profits or trade, land is fixed and cannot be hidden, land cannot be taken to a tax haven in a suitcase or transmitted overseas by a global company accountant pressing a button on a computer.

If Labour wants to build a million more houses they will need the land to build on. As soon as landowners get wind of this, land prices will escalate, unless LVT is applied.

Remoter areas of the country (with lower land values) would contribute less in LVT and so these regions would enjoy economic stimulation, see employment grow and need fewer state resources to mitigate for depressed incomes.

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At an international conference in Barcelona, a speaker suggested that even if the city threw the proceeds of LVT into the Mediterranean Sea it would still be beneficial to collect LVT for the positive effects it has on the economy. Of course, the income would be spent on services and reducing harmful taxes.

7. Changing the Political Climate

Supporters of LVT

In the UK at the present time only a handful of MPs support LVT but they can be found in all political parties. These include Tim Farron LibDem MP, John McDonnell Lab MP and Nick Boles Cons MP. Andy Burnham Lab MP included LVT in his 2010 leadership bid.

At the 2010 General Election both The Co-operative Party and the Green Party included LVT in their manifestos. Many think tanks including the Fabians, CLASS, Compass, The Institute of Economic Affairs, The Institute of Fiscal Studies (including their “Mirrlees Report”) and Progress have published literature supporting annual Land Value Tax.

Lloyd George, included a diminished version of LVT in his 1909 People’s Budget but in 1931 the Labour Government included LVT in the Finance Act but when Ramsay McDonald formed a National Government with Conservatives, to tackle the economic crisis, one of their first decisions was to discontinue the land valuation making it impossible to collect LVT. The 1935 Conservative Government took LVT off the statute book. Herbert Morrison also moved a Private Member’s Bill in 1938 calling for the Site Value Rating (local LVT) of the LCC. In 1985 Tony Benn promoted a Ten Minute Rule Bill in Parliament calling for “The Common Ownership of Land” and suggesting the creation of a Community Land Trust to collect land rent. In 2013, Caroline Lucas, Green MP, moved a Private Member’s Bill (with Lab and LibDem MPs supporting) calling for a study of the benefits and practicality of LVT.

In recent times there has been much discussion in the press about LVT. The Financial Times has carried articles promoting LVT by Nick Boles (now a Conservative Minister), Sir Sam Brittan and Martin Wolf. Similarly The Guardian, The New Statesman, The Economist, Tribune and other publications have published articles supporting LVT by George Monbiot (environmentalist), Andy Wightman (Scottish economist), Richard Murphy (Tax Justice Network), Will Hutton (political economist and former Chief Exec of The Work Foundation), Merryn Somerset Webb (Editor of Money Week), Phillippe Legrain (economist and author), Larry Elliott (The Guardian’s Economics Editor) and Polly Toynbee (journalist and former BBC Social Affairs Editor).

The OECD, The World Bank, UN Habitat and other international organisations have drawn attention to the benefits to be gained from adopting LVT).

How LVT could pay for The London Underground

In this document we have demonstrated that there are alternatives to the Conservative Government’s and Boris Johnson’s cuts.

Given this analysis, the Trade Unions, the wider Labour Movement, academia and our few friends in the media can mobilise to demand that a more reasoned and rational approach can and needs to be taken.

The Underground Treasury

The first step towards introducing LVT to fund the Underground would be to persuade politicians, trade unionists, businesses and business groupings (London First, The Federation of Small Businesses and London Chambers of Commerce), journalists, academics, commuters and residents in London of the desperate need for LVT and its desirability.

The politicians would need to include The Mayor, Mayoral candidates, GLA Members, London Borough Councillors (especially Borough Leaders), London MEPs and MPs and relevant Government Ministers.

Legislation would be required to allow the Mayor to switch London from Council Tax and Business Rates on buildings to a pure Land Value Tax thus creating a larger tax base (empty sites would be included for the first time) and thereby reducing bills for most Council Tax payers.

It would be useful if one of London's 43 Universities (LSE perhaps?) carried out extensive research how individual household types and business sectors might benefit from LVT and perhaps the RICS (the Royal Institute of Chartered Surveyors) could calculate exactly how much land values are worth in London.

Once a body of London opinion is supportive then the Government would have to take notice. The legislative framework already exists with the 1931 Finance Act (Budget), the 1938 LCC Site Rating Bill and a draft Bill being prepared by The Professional Land Reform Group.

The total amount collected by a London LVT would need to be divided between the London Boroughs, The Met Police, The London Fire Brigade and Transport for London. TfL's portion would split between the different operating arms including the London Underground.

This is far preferable than trying to pinpoint exactly how much land value is directly attributable to Underground services alone and only collect a portion of total land value.

The beauty of LVT is that it will increase London's GDP, create more job opportunities, reduce welfare expenditure, reduce commuting as homes become affordable and help to make London a nicer, greener and more pleasant place to live and work.

Appendix A. Past funding of TfL and the Underground

Underground Funding Chaos

Procrastination, changes of strategy, changes of funding approach, changes of mind, and uncertainty are a sure way to raise costs and delay projects, and this will increase fares, increase the need for taxes, and delay projects.

In this appendix we outline the history of funding for TfL, and indicate where problems have arisen. We indicate how a secure, reliable, and fairer system of taxation on values of land would have avoided many of the problems.

GLC

London Transport was created as an integrated transport system for London in 1933.

Christian Wolmar (2002) describes the surprising managing partnership of businessman Lord Ashcroft and socialist Herbert Morrison who formed the robust leadership of the newly fashioned London Transport Passenger Board. Between them they ran an integrated system that led to a transport heyday.¹¹ Following wartime, Britain had very limited funds so that new lines were not considered and old lines were very poorly maintained.

In 1970 the responsibility for London Transport (LT) was handed to the Greater London Council (GLC) which was able to increase funding via political channels. Whilst the increase should be applauded, the gap between what was required and what was provided was still very large and initial funding went towards new trains and not towards much needed station refurbishment.

Political Ideals and Legal Challenges

In 1981, Ken Livingstone was elected Leader of the new GLC administration with Dave Wetzel as Transport Chair and brought a passion for good, affordable, integrated and accessible public transport. Within months, after consultation with the public, the Labour GLC introduced their "Fares Fair" policy of cutting fares on buses and the Underground by a third and introduced a zonal system to replace graduated fares (costing £64.5 million). Together with an inherited fares deficit from the previous Conservative administration (£48 million), the need to run additional services (£4.7 million) and to replace lost central Government grants (£111 million), the total extra rates (local property tax) that had to be collected amounted to £228 million.

As a result of the cheaper fares and improved services, car commuting to Central London dropped by 6 percent and the number of people using London Transport services rose by 11 percent.¹²

Unfortunately the Conservative controlled London Borough of Bromley on December 17 1981, won a legal challenge in the House of Lords against paying the extra London rates, arguing that

¹¹ Christian Wolmar, *Down The Tube*, Aurum Press Ltd, 2002

¹² *The London Transport fares experience (1981-1983)*; J F Lindsay. [M H Fairhurst. London Transport. June 1984.](#)

The Underground Treasury

their residents were paying the subsidy but, as they had no Underground lines, not all their residents were benefiting. (The GLC had tried to include British Rail services but British Rail was stopped from accepting the GLC fares grant by Margaret Thatcher's Conservative Government).

Dave Wetzel complained about the political judgement and described the five Law Lords as "Vandals in Ermine" because of the destructive effects of their judgement on traffic congestion, road crash casualties and pollution being far more damaging than anything a group of young vandals could ever achieve.

Right-wing GLC Labour members, together with Conservatives and Liberals formed a majority to accept legal advice that the only way to deal with Bromley's win was to increase the fares by 96 percent in March 1982.

Unsurprisingly, this fare rise led to tube and bus use falling by 15 percent and car commuting rose by 14 percent.¹³

In retrospect, the decision to keep London's rail systems in two parts – the London Underground and British Rail – and to require different tax and subsidy arrangements for the two was poor administration, preventing either from flourishing and serving well. A united railway function funded by Land Value Tax, raised across the whole of London, and devoted in part to strategic transport management would have avoided the conflict, and enabled the Fares Fare scheme to flourish across the whole metropolis. It is only now, after decades of persuasion, that the Government is allowing TfL to plan to run and operate the surface railways into London.

Without Ken Livingstone's or the Trade Unions' support, John McDonnell, Paul Moore, Tony Banks, Paul Boateng, Valerie Wise, Deirdre Wood, Dave Wetzel and some other Labour left-wingers organised a "Can't Pay – Won't Pay" campaign (CPWP), issuing their own cheaper tickets and encouraging passengers to pay the old fares in protest. Seventeen CPWP protesters, including Dave Wetzel went to court and student rock concerts fund-raised to pay the fines.

Because of her animosity towards Ken Livingstone, Margaret Thatcher's government nationalised London Transport in 1984 and abolished the GLC in 1986, leaving a vacuum of transport decision-making on transport (and many other important matters) only resolved 14 years later by the Greater London Authority (see below).

Operation Strikeforce, Treasury and Waste

Throughout the 1980s and 1990s the then Conservative government pursued a stop-go approach to funding. Funding plans for the Underground were announced in 1991, but reduced in 1992 making the upgrade timetable impossible¹⁴. The East London Line extension was deferred to 1995, but lack of financing pushed the project back further and work only started 10 years later.

¹³ Christian Wolmar, *Down The Tube*, Aurum Press Ltd, 2002

¹⁴ Thomas Telford, *Modern Railway Transportation: Proceedings of the International Conference Railways Organized by the Institution of Civil Engineers and Held in London on 25-27 May 1993*, Paper 26 ARTHURTHON, B.H. North, 1993, p299

The Underground Treasury

The 1991 funding plans needed additional project management personnel to put the extra money to good use. As the Treasury would take back any funds not spent and a team called “Operation Strikeforce” was established to ensure authorised funds were well spent within the financial period. By the financial year of 1992-93 they were spending £800 million. Then funding commitments were rescinded and the expected £860 million was reduced to £562 million so a new team were brought in to halt the flow of money. This ‘anti-Strikeforce’ was operating at the same time as the original Operation Strikeforce, but with opposing aims! An Operation Strikeforce manager explained that they could have achieved value for money for £500 million instead of £793 million that was actually spent if the investments had been programmed rationally, and the sources of funding has been well secured before commitment.

A well administered LVT would have prevented this fiscal fiasco.

Annuality

LT’s budgets had to work within *annuality*,¹⁵ providing annual accounts to the Treasury. Annuality creates great difficulties when it comes to predicting and planning for long-running infrastructure projects. Steven Norris, former Transport Minister (1992-96), and Conservative Mayoral candidate (2000 and 2004), states that incalculable damage is done by the Treasury to Britain’s infrastructure through its absurd insistence on annuality¹⁶. The Treasury also gives little political weight to transport budgets and used them as a balancing tool, resulting in £200 million more or less than was expected in budget preparations. This crude system of annual changes led to inefficiencies. Sensible long-term planning was impossible because there was no guarantee that money would be available to see a project through. So started projects were stopped (and so the investment wasted), or were delayed, so adding to the overall costs.

PFI

In order to increase private funding for capital projects, Public Finance Initiatives (PFI) were born. Private companies bid to offer capital investment and maintain it for a typical 25-30 years. It is the equivalent of a train being built by a private company that will also maintain it for the next 25 years. This is in contrast to government borrowing which is cheaper for the taxpayer but incurs interest and raises the public deficit “on books”.

The Treasury made PFI the only way to fund capital investment and, to make the PFI more attractive, allowed for contractual commitment of funding over a longer period of years, finally undoing the difficulties associated with annuality (but also giving private funding first call on available public funds). Whilst PFI avoiding the (self-imposed) problems of annuality and so made PFI schemes superficially attractive, the detail of the scheme itself was problematic:

¹⁵ Annuality in public budgeting refers to the way in which budget allocations have to be spent by the end of a financial year or be surrendered to a central authority or budget-holder. Chartered Institute of Management Accountants.

¹⁶ Christian Wolmar, *Down The Tube*, Aurum Press Ltd, 2002 p75

The Underground Treasury

- the private sector avoided much of the risk, leaving the public sector to carry both unavoidable uncertainties, as well as the (inevitable) political risk;
- the private sector funding (and associated profit-taking) was expensive compared to cheaper government borrowing to the project;
- the project contracts were made even more complex, with multiple parties in multiple contracts, and, often, a lack of transparency about responsibilities. Associated legal and related fees added to costs;
- there was scope for bypassing or avoiding obligations to workers and unions;
- the PFI contracts were inflexible, so no party could react sensible to changes in circumstances and outlook.

Despite these issues during 1997-2002 PFI delivered an astonishing £18 billion of investment.

PPP as a response to PFI

The Government's Public Private Partnership (PPP) for the Underground represented Labour's attempt to part-privatise the Underground. Politicians were concerned that the Jubilee Line Extension (JLE) had gone over budget and wrongly made LT take funds from essential maintenance on other Underground lines in order to complete the construction of the JLE.¹⁷ The PPP was the Labour Government's attempt to keep the London Transport team away from big schemes. Ken Livingstone's response was to appoint a competent management team at TfL and in control of the Underground when it was transferred to The Mayor in 2003.¹⁸

The PPP was a highly complex contractual arrangement where renewal and maintenance was handed to Infrastructure Companies (*infracos*). The two successful bidders, Metronet and Tube Lines were a variety of companies grouped together in consortia with non-transparent arrangements between them. The infracos had to maintain the infrastructure and procure new trains, signalling, lifts and escalators, as well as refurbish the track and the stations.

One complexity of the contracts was assessing changes to passengers travel times and a monetary unit assigned to the various tasks upon which lost hours could occur. In 2002 it was a 2,800-page document with two million words and few understood it in its entirety.¹⁹

Ministers naively and ideologically assumed PPP companies would save costs, be efficient, introduce innovative ideas and new technology. Ministers also assumed the sharing of risk as infracos were penalised should they fail to deliver improved services.

The biggest criticisms of PPP was that it was confrontational (the legislation even created an arbiter to deal with predicted disputes), wasteful of management time, extremely expensive, could not deliver value for money and split the management of the Underground system.

¹⁷ Keith Harper, Transport Editor, The Guardian. 16 February 1999. "JLE Costs" <http://www.theguardian.com/uk/1999/feb/16/keithharper>

¹⁸ BBC News. 25 February 2003. "Tube Transfer Delay risk Lives". <http://news.bbc.co.uk/1/hi/england/2797387.stm>

¹⁹ House of Commons Transport Committee, *Update on the London Underground and the public-private (PPP) partnership*, Great Britain, Parliament, 2010, p56

GLA & London Mayor

The Greater London Authority was established fourteen years after the abolition of the GLC alongside the new London Mayor role, which once again had London wide transport responsibilities.

In 2000, Ken Livingstone was elected as an Independent, to the new position of Mayor of London. The opening words of his victory speech:

“As I was saying before I was rudely interrupted 14 years ago...”²⁰

showed just how little was achieved during the strategic maladministration of London triggered by Thatcher’s *dictat*.

Ken He appointed Bob Kiley, an American, as Commissioner Transport for London (TFL). Bob Kiley opposed the PPP as inefficient and threatening safety.²¹ Almost all transport industry experts were against the PPP and Ken Livingstone launched two legal challenges in the law courts, but nevertheless, Tony Blair’s Labour government, urged by Gordon Brown, pushed the PPP scheme through. In the event PPP failed, Metronet was dropped in 2007 and Tube Lines in 2010. So TfL and the Underground are once again controlling the modernisation and renewal – but after great and wasted expense to Central Government, London governments, and passengers.

Crossrail

The final “investment decision” for Crossrail was achieved when agreement was reached on a (rather poor) form of Land Value Levy, raised from businesses with properties close to new Crossrail stations. A well formed LVT would have made the project funder fairer, easier, and more appropriately raised from those who benefit most – the nearby land owners.

After decades of indecision by Governments, Crossrail is currently, being built across London and is due to open in 2018. The history of the line goes back to the Regents Canal Company in the 1880s, suggested again in the Abercrombie Plan of 1943 during WW2, but in the 1980s it was hoped (a pipe dream) by Margaret Thatcher’s Government that it could be built by private investment. This failed with the property crash in the early 1990s and it was only in 2000 that the Labour Government (urged by Ken Livingstone, the first Mayor of London) started to appreciate its necessity. Crossrail has been heavily supported by The City of London.²² Unlike London Underground lines, Crossrail will be London’s first large heavy railway operating underground like the Paris RER and the German U-Bahn systems. Its effect on London will be dramatic.

In their analysis of the impact of Crossrail on London’s Property Market the international firm of estate agents, CBRE concluded that: “Crossrail will completely transform London’s public transport system with huge impact on the economy of London and the South East”. CBRE

²⁰ Paul Waugh, Andrew Grice, *Ken reclaims the capital*, The Independent, 6th May 2000

²¹ David Kynaston, *City State*, Profile Books, 2010

²² Christian Wolmar, *Down The Tube*, Aurum Press Ltd, 2002 p22

The Underground Treasury estimated that at an estimated cost of £14.8 billion Crossrail would generate a benefit of £42 billion to the economy of London and the South East of England with the greatest proportion of that benefit accruing to landowners whose property was close to Crossrail's stations. *"We anticipate total house price growth of 13% around Crossrail stations between now and 2018, with up to 20% in Central London".*²³ Thus, those whose job it is to put figures to the uplift in land values from this major transport investment have a clear message.

Crossrail 2, (the former Hackney and Chelsea Line) has been anticipated since 1970 and at last seems to be proceeding to its planning stage.

Funding for the future

It cannot be denied that government decisions have led to the inefficiencies of funding The Underground. It is indisputable that there is still a need for a better funding system to deliver accessibility, improve the passenger experience, ease congestion and answer climate change concerns. Any new method has to provide a secure revenue stream for efficient long-term planning and implementation of schemes that may take many years to complete. When funding is made available it has to be offered, as a genuine commitment that can be banked against, so that project management inefficiencies such as experienced by Operation Strikeforce cannot again be allowed to waste vast amounts of resources.

Finally, funding should reflect the fact that it is not just passengers and businesses that benefit from a modern convenient, comprehensive and well-run transport system, but the whole economy with the greatest direct financial benefit going to landowners.

The financial contributions from landowners need to be properly aligned with the benefits they receive. It is now for policy-makers to appreciate that it is not only economically efficient to match benefits with costs in securing the revenue for the capital's transport system but also to understand that it is essential to take land values into account in striking a fair balance between what comes from the farebox, the general public purse and landowners who benefit most directly from investment in and provision of urban transport.

²³ CBRE 27 November 2013. "RESIDENTIAL PROPERTY VALUES IN LOCATIONS SERVICED BY CROSSRAIL SET TO SOAR BY £14.7 BILLION"

http://www.cbre.co.uk/uk-en/news_events/news_detail?p_id=15905

Appendix B. More Formal Economic Theory

Economic theories are attempts to gain useful understanding of the collective behaviour of people in society, and to predict the results of legal, fiscal and taxation changes that the government can impose, or events and circumstances that may just happen. They are based on the behaviour of the world, (so empirical in origin), but often abstract and far simpler than reality.

As economic theories have an impact on the way people and corporations think, they also have a direct impact on how the economy behaves. So they are never politically neutral, and tend to express things in ways that are beneficial to those with power and influence.

Most modern economists are trained to ignore land as a separate factor of production and often confuse land with capital. This is gross simplification (helpful to landowners and the wealthy), and we aim here to make the distinction between capital and land clearer.

Human-made wealth is created by applying human effort (mental and physical labour) to land (and natural resources) using capital (human-made tools, machinery etc).

Capital is human-made wealth that is being used to produce more wealth. So buildings (factories, offices, shops, warehouses, barns), machinery, computers, tools and vehicles etc. that are being used in the productive process are all capital.

However, the location where a factory, office, shop or warehouse is sited or the soil of farmer's fields are patently not human-made and therefore unlike the buildings are not capital.

We know that from the wealth created, the return to labour is wages.

The return to capital is dividends, interest or profit.

David Ricardo²⁴ explained how the return to land is the surplus left after all costs and a reasonable profit have been met. This surplus is called "economic rent".

So workers have to work to earn their wages.

Investors and entrepreneurs invest savings and take risks to earn interest, dividends or profits.

However, land requires no investment, land requires no labour. So land is very different from labour and capital. Land is essential – but passive in the production process. Land (in economic terms – all the natural gifts of our planet including the oceans etc.) is a free gift from nature to mankind (costing us nothing).

Obviously, land sites of equal size are not of equal value. A site in a town with a large population and good public and private services is much more desirable (and therefore commands a higher rent) than a site in a remote village with few services.

²⁴ David Ricardo. On The Principles of Political Economy and Rent (1817)
<http://www.econlib.org/library/Ricardo/ricP1a.html>

The Underground Treasury

This differential value is the economic rent. Our desires to occupy the most beneficial sites and our ability to pay rent on it gives land its value.

As we all create land value, it is clear that land rent should be our first recourse for taxation to provide public services and amenities. Such taxation provides no disincentive to economic activity, and so is preferable to taxing producers with taxes on wages (income tax), trade (VAT, stamp duty and sales taxes), buildings (council tax and business rates) or other penalising taxes. Most taxes on production increase the cost of goods and services to citizens, increase the cost of hiring labour and so both reduce profits and increase unemployment.

Many economists have also come to this conclusion. Adam Smith proposed a tax on ground rent²⁵; Henry George²⁶ advocated annual land value tax and several Nobel-prize winning economists have suggested taxing the economic rent of land.

²⁵ Adam Smith. *An Inquiry into the Nature and Causes of the Wealth of Nations*. (1776)

<http://www.adamsmith.org/blog/tax-and-economy/tax-simplification-the-case-for-a-land-value-tax>

²⁶ Henry George. *Progress and Poverty: An inquiry into the causes of industrial depressions and of increase of want with increase of wealth The Remedy*. (1879). <http://progressandpoverty.org>

Appendix C. International Experience

Rail and Metro systems around the world vary in their ownership, funding and management structures. They vary greatly in their fare arrangements, but none depend wholly on their fares. London has particularly high fare levels.

The other revenues that contribute to rail and metro systems include:

- Direct funding by the state, either, including metropolitan and national governments.²⁷
- Revenues from developments associated with the railway, whose value depends, in part, on the railway.

The nature and balance of these revenues varies greatly, across the world, but the most successful and profitable metros tend to be those who capture a sensible share of the land values increased by the railway investment. We think LVT is the most appropriate way to capture these values, but the value may be captured by ownership and so rent collection from the land and developments in a symbiotic relationship with the railway.²⁸

As mentioned elsewhere, there does need to be a reasonable balance between the provision of subsidy and any benefit. The cancellation of London's Fares Fare scheme arose from a particularly unfortunate (and perhaps deliberately engineered) special case where a particular local government could claim there was no benefit from the subsidy to their residents / citizens.

There are many examples from abroad of land value capture financing transit, especially in USA where TIFs (Tax Incremental Financing) are often used to capture land value uplift in a particular corridor arising from a new transit project. Unlike UK BIDs (Business Improvement Districts) which are based upon building values, the USA uses BID to raise revenue from land rent in order to improve the policing, cleaning and general environment of a business district.

City of London - In the UK, the City of London Corporation's Charity, the City Bridge Trust, collects land rent from properties they own and this revenue pays for upkeep of the Bridges the City of London is responsible for and the surplus each year supports various charities. This Trust's origins dates back to 1097 when money was raised to repair the first wooden London Bridge and 100 years later land rent was used to build the first stone bridge in the world in 1209. It is worth noting "By the end of the 13th century the shops and houses built on the new stone London Bridge were beginning to generate not only increased cross-river trade, but also increased taxes, rents and bequests."²⁹

²⁷ Many argue that subsidy is funded by the taxpayer. This is formally incorrect, misleading, and is a form of neoliberal propaganda (or mind worms). Government spends its own money (and this actually creates our currency), and seeks some of it back from citizens by whatever means it can devise and obtain general acceptance. So the relationship between taxpayers and any government subsidy is a very indirect one. See *The Joy of Tax*, by Richard Murphy. So when we refer to subsidy, we regard it as by an organ of state on behalf of citizens, not on behalf of taxpayers.

²⁸ *Straphangers: Saving our Cities and Ourselves from the Automobile*, by Taras Grescoe, has explored my metro systems.

²⁹ City of London Corporation. City Bridge Trust.

The Underground Treasury

Although Denmark, China, the American state of Pennsylvania, Hong Kong, Singapore, Taiwan, New Zealand and Australia have not adopted a simple annual Land Value Tax applied to all land and with no exemptions, these examples show it is possible to value land and to collect at least a part of the annual rental value of each site to be used for public services including transport.

Denmark provides examples of land value capture finance as well as being an example of a country that incorporates Land Value Tax into their local fiscal system. Specifically there is the example of the new Copenhagen Metro being financed primarily through land sales.³⁰ This is not as good as LVT as once a site is sold no further land values gains are collected.³¹ This method is similar to the development in London of the Metropolitan Line where agricultural land was purchased by the private rail company at agricultural prices and after the line was built the land was sold at residential prices. This produced a one-off income for the railway and the new houses provided regular commuters from Amersham, Chesham, Harrow, and Ruislip to Central London.

China - Xing Quan Zhang cites China as using land value capture to finance 76% of local government revenue from the sale of land leases in 2007.³² Unfortunately, without other arrangements in place, this is an unsustainable method for revenue funding as it gives the new “owners” all future land value increases during the period of the lease (which may be 70 years or longer) the available land for new sale will eventually dry up. As all Chinese land is in public ownership it would be far better for local government to collect the annual rent of land to fund services and to replace their income tax with LVT.

Hong Kong and **Singapore** both employ developed and integrated versions of land value capture. In Hong Kong all land became owned by the government and is leased back to land owners via various forms of lease, and with various payments for lease extensions. Medda (2012) clarifies that with respect to transit financing the relationship is based on betterment taxes of 100% of betterment value. Singapore also funds transit via betterment taxes of 50% with an aim to incentivise urban development by leaving some of the land value benefit in the private sector.³³ Further explorations of the lessons and history of value capture from Hong Kong and Singapore is discussed in depth in UK literature on the subject from both Don Riley³⁴ and Fred Harrison (2006).³⁵

As Neil Padukone argued in an article for The Atlantic, published in September 2013: “The Mass Transit Railway (MTR) Corporation, which manages the subway and bus systems on Hong Kong Island and the northern part of Kowloon, is considered the gold standard for transit management worldwide. In 2012, the MTR produced revenue of 36 billion Hong Kong Dollars (about US \$5

<http://www.citybridgetrust.org.uk/CBT/AboutUs/History.htm>

³⁰ George E. Petterson, *Unlocking Land Values to Finance Urban Infrastructure*, World Bank Publications, 2009, p7

³¹ ELTIS. The Urban Mobility Portal.

http://www.eltis.org/index.php?id=13&study_id=2200

³² Xing Quan Zhang, *The Economic Role of Cities*, UN-HABITAT, 2011, p20

³³ F. Medda, *Journal for Transport Geography* 25, Elsevier, 2012, p154-161

³⁴ Don Riley, *Taken for a Ride: Taxpayers, Trains and HM Treasury*, Centre for Land Studies, 2001

³⁵ F Harrison, *Wheels for Fortune: Self-funding Infrastructure and the Free Market Case for a Land Tax*, The Inst of Economic Affairs

billion)—turning a profit of \$2 billion in the process. This has been achieved by judicious granting of land leased to the MTR ³⁶.

The MTR strategy is based around land values: “How much land do we need to cover the cost of building and running the railway”, and this is a strategy adopted in for individual subway lines in Beijing, Hangzhou, and Shenzhen in China, two lines on the London Overground in the UK, and the entire Melbourne and Stockholm systems. And in Hong Kong, the trains provide services unseen in many other systems around the world: stations have public computers, wheelchair and stroller accessibility (and the space within the train to store them), glass doors blocking the tracks, interoperable touch-and-go fare payment (which also works as a debit card in local retail), clear and sensible signage,”³⁷

In **Japan**, the railways are privatised with the railway companies also owning and developing land assets around their stations and termini. In Tokyo, for example, it is possible to live in a JR East owned apartment, work in a JR East owned office, and, of course, travel between them on a JR East train. Clearly, JR East is able to capture the benefits of the railway, and has, in effect, been granted land in lieu of any sort of state subsidy. It is a successful arrangement.

³⁶ No Debt High Growth Low Tax by Andrew Purves for a detailed story of HK land revenues and the MTR.

³⁷ The Atlantic 10th Sept 2013 [<http://www.theatlantic.com/china/archive/2013/09/the-unique-genius-of-hong-kongs-public-transportation-system/279528/>]