


Funding and financing options

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Transport Strategy for the South East: Funding and Financing Options



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Contents

1	Introduction.....	1
	Funding vs. Financing	1
	Beneficiary Pays.....	1
	Policy Context.....	2
	Chapter Structure	2
2	Funding Mechanisms	4
	Central Government Funding.....	4
	Network Rail Enhancement/Renewals Funding.....	5
	Highways England.....	6
	National Roads Fund	6
	Direct Contribution from Stakeholders	7
	Workplace Parking Levy	7
	Intelligent Charging/Congestion Charging	8
	Local Community Infrastructure Levy	9
	Strategic Infrastructure Tariff.....	10
	Business Rate Increment Retention	10
	Business Rate Supplement	11
	Council Tax Increment Retention	11
	Council Tax Precept	12
	Farebox Surplus/Premium Fare.....	12
	Asset Utilisation.....	13
3	Financing	14
	Financing Options.....	15
	Public Works Loan Board.....	15
	Policy Bank Lending.....	16
	Commercial Lending.....	16
	UK Municipal Bonds Agency.....	16
	Corporate Finance	17
	Non-Recourse Finance (Project Finance)	17
	Asset Backed Vehicles	17

4	Case Studies.....	18
	Nottingham Trams.....	18
	Manchester Metrolink.....	18
	Alternative Funding Sources in London.....	19
	Road User Charging	26
5	Conclusions.....	29
	Conclusions.....	29
	Next Steps.....	30

Figures

Figure 1.1: Beneficiary Pays Cycle	2
Figure 3.1: Illustrative Example of Project Finances.....	14
Figure 3.2: Financing Options	15
Figure 4.1: Crossrail 1 Route.....	20
Figure 4.2: Overview of forecast funding contribution for Crossrail 1	20
Figure 4.3: Crossrail 2 proposed route (2015).....	22
Figure 4.4: Overview of forecast funding contribution for Crossrail 2	23
Figure 4.5: Northern Line Extension plan	25

1 Introduction

- 1.1 An important question in developing and implementing large-scale transport infrastructure schemes is identifying how they can be funded. This is particularly important given the wider economic and political environment of a tighter public purse leading to the end of an era where UK central government grant funding could be made available provided the proposed scheme had a strong economic case and was technically feasible. There is now a clear expectation that a large proportion of funding for major transport investment should be secured from local sources, whereby the funding strategy seeks to capture part of the value from the investment that accrues to a range of local beneficiaries.
- 1.2 A robust funding strategy for large-scale transport infrastructure schemes should therefore consider finding ways of capturing the uplift in benefits enabled by the scheme as this can reduce reliance on the public purse. Capturing these benefits to generate funding for transport infrastructure can be achieved by developing an appropriate funding package that utilises the powers available to local authorities and combined authorities.

Funding vs. Financing

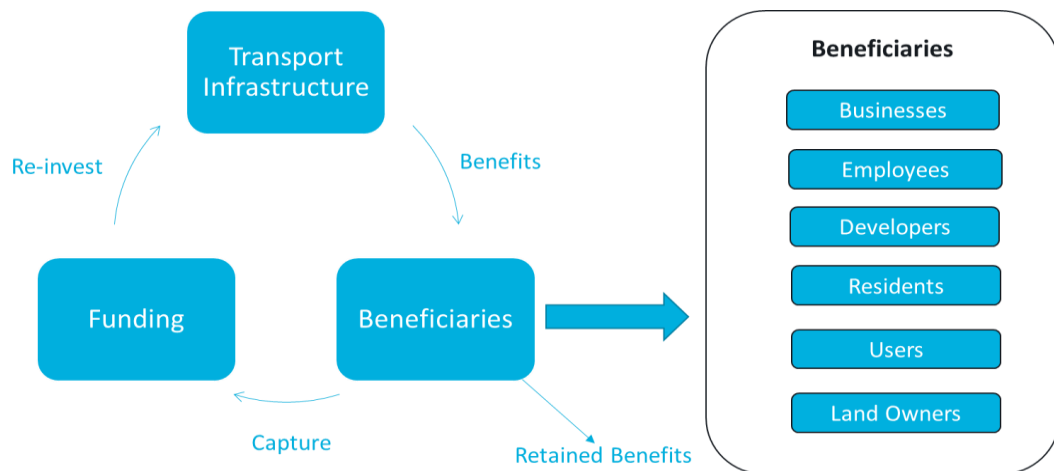
- 1.3 It is important to distinguish the difference between funding and financing. Funding refers to what capital ultimately pays for the up-front costs of the scheme i.e. it does not need to be directly repaid while financing refers to how the capital requirements of the scheme are met through sources that are repaid over time. Financing is generally required for a project if funding is insufficient to cover the project full costs during the construction period. For instance, a loan (financing) may be used to meet the upfront capital costs of the project which is then repaid over time through surplus passenger revenue (funding). Financing costs (e.g. interest payments) will be payable on financing sources which increases the costs to deliver the project and therefore additional funding, over and above the capital costs, are required to complete the project.
- 1.4 Given the early stage of development of the Transport for the South East's strategy, this report focuses on potential funding and financing mechanisms that could be used for a range of transport infrastructure investment. Once, specific infrastructure investment projects and the associated capital and operating costs have been identified, a funding and financing package that targets the beneficiaries of the specific scheme can be developed.

Beneficiary Pays

- 1.5 A key concept in the assessment of funding sources is the concept of 'beneficiary pays'. This concept is based on the principle that those who benefit from the improvement in transport should contribute to its cost where beneficiaries include direct users of the development such as passengers and economic beneficiaries i.e. those who obtain increased economic benefit either in capital or revenue terms from the improved transport provision.

- 1.6 This approach creates an investment cycle where transport infrastructure generates benefits to a series of beneficiaries and funding mechanisms then capture a proportion of these benefits to invest into transport. Figure 1.1 outlines this process.

Figure 1.1: Beneficiary Pays Cycle



- 1.7 It is easier to capture the benefits from certain beneficiaries than others, for example, user benefits from public transport schemes (e.g. rail and metro) can be captured through premium fares that users may be willing to pay in exchange for an improved service, whereas for road users there is generally no direct revenue generated making it harder to capture the benefit road users gain from an improved road network.

Policy Context

- 1.8 Public investment in the United Kingdom is more dependent than ever on finding sufficient funding and increasingly the ability to raise income locally is determining whether any scheme is taken forward or not. As central government funding has become increasingly constrained, the days when a public investment would be centrally funded largely on the economic, social or environmental benefits it generates have gone. In addition, devolution has focused decision making on seeking to find local sources for any particular investment.
- 1.9 Crossrail can be seen as setting the benchmark for establishing the case for public investment in transformative transport infrastructure and, in particular, identifying and securing an appropriate funding package. These include the following broad principles:
- A significant proportion of funding required to deliver a transport infrastructure project is from local sources;
 - That the project should be able to cover its longer run operating, maintenance and ideally renewal costs;
 - That a mix of local funding can be secured, supported by local businesses, developers and users; and
 - That the wider economic benefits of the project are significant and that increased taxes can help recover any central government outlay (particularly through increased productivity, generating additional and higher paying jobs).

Chapter Structure

- 1.10 We explore the range of funding and financing options that might be available to Transport for the South East within this context, with the rest of the report structured as follows:

- Chapter 2 outlines potential alternative funding sources;
- Chapter 3 outlines potential financing sources; and,
- Chapter 4 covers four different case studies to illustrate how funding and finance can be deployed.

2 Funding Mechanisms

- 2.1 A number of funding options with the potential to support infrastructure investment in the South East are presented below. These focus on funding that can be generated locally and is informed by the case studies (in Chapter 4) alongside the potential additionality driven by investment and the concept of beneficiary pays. Further consideration of each source is recommended as part of future work when a more developed investment programme has been developed for the Transport for the South East area.
- 2.2 Transport for the South East do not currently have the powers to raise funding, however many of the options described below are available to local councils and authorities that are partners to Transport for the South East and they could work with such bodies to raise funding for transport infrastructure schemes. Gaining statutory powers would not guarantee that Transport for the South East would gain the powers to raise funding. Transport for the North were not granted such powers when they gained their statutory powers in April 2018¹, however Transport for London do have these powers so it will depend on the level of devolution that is ultimately agreed with central government.
- 2.3 Of the funding mechanisms described below, some are easier to implement than others. For example, the Community Infrastructure Levy and the Business Rate and Council Tax Increment Retention, can be easily implemented as the mechanisms already exist and would just require ring-fencing the money to fund transport infrastructure. A Workplace Parking Levy, road user charging and Council Tax Precept would take longer to implement as they require additional approval, potential legislation and are likely to face opposition from the public.
- 2.4 It should be noted that the rest of this chapter focuses on the current potential of the funding mechanisms, however there will be political, economic, social and environmental changes in the future which will change the potential of these funding mechanisms and also open up the possibility of new funding mechanisms that are not currently available. For example, there is currently a move away from fossil fuel powered vehicles as there is growing pressure to reduce carbon emissions, this may lead to a fall in petrol duty and vehicle excise duty which has previously been an important funding source for government. However, mobility as a service (e.g. Uber, Zipcar, Enterprise Car Club) is a growing sector and there are new digital infrastructure ideas, such as 5G highways and mobile connectivity on trains, that could lead to the hypothecation of future funding sources.

Central Government Funding

- 2.5 The government is currently devolving decision-making powers to Sub-national Transport Bodies. Transport for the South East is an emerging Sub-national Transport Body and they

¹'Northerners handed new powers over transport, but lack London's ability to raise capital', <https://inews.co.uk/news/uk/northerners-handed-new-powers-over-transport-but-lack-londons-ability-to-raise-capital/>, Dean Kirby, Accessed August 2019

have recently completed a public consultation on the draft proposal to government which sets out the types of powers and responsibilities that may be sought. There may be an opportunity to gain the powers to raise funds through the process of becoming a statutory body. The additionality that Transport for the South East could deliver in terms of housing, jobs and Gross Value Added provide a strong rationale for attempting to secure such powers. The combined Gross Value Added for the Transport for the South East area was £208 billion in 2016².

- 2.6 The local authorities in the Transport for the South East area could apply and receive other alternative funds from UK central government, such as the Housing Infrastructure Fund. The Housing Infrastructure Fund is a £2.3bn infrastructure fund which the combined authorities are eligible to bid for, provided that the infrastructure development they are proposing is going to unlock housing potential. The first investment round of the Housing Infrastructure Fund (2017/18) allocated a total of £759 million to help deliver a total of 200,000 homes which represents an average funding amount of £4,330 per home though there is significant variation across successful bids. While the bid period for the Housing Infrastructure Fund has now been closed, a similar scheme would be expected to arise in the future.
- 2.7 Transport for the South East may not be able to bid themselves for funds similar to the Housing Infrastructure Fund, even if they achieve statutory status, but they will be able to work with the relevant local authorities to access this funding.

Network Rail Enhancement/Renewals Funding

- 2.8 There are two main funding options available from Network Rail. Control period funding occurs in five-year cycles and is proposed by Network Rail and verified by the Office of Rail and Road (the rail regulator). The second is Market-Led Proposals which allows private companies, local authorities and Local Enterprise Partnerships to apply for funding for rail infrastructure projects that are not identified or prioritised for control period funding. A full five case business case would need to be developed to showcase the benefits of the projects. Market-Led Proposals which include alternative sources of funding will be more attractive to Network Rail and the Department for Transport as they help reduce the burden on the general taxpayer and these schemes will be more likely to receive additional funding from Network Rail.
- 2.9 The Control Period Fund is used to support the Long-Term Planning Process in developing an evidence base for an industry submission for infrastructure investment in a Control Period. Additionally, the fund is targeted at further developing schemes that are likely to be required for delivery during a Control Period. The use of the fund is closely linked to schemes/projects that have Department for Transport support and ultimately for those included within the Initial Industry Plan and Department for Transport's High-Level Output Specification. Generally funding should only cover early stage development costs and separate funding would generally be required for detailed design work and other significant costs such as Planning Consents processes. Control Period 6 has now begun, the next control period will begin in 2024 and the planning process will begin a few years before that.
- 2.10 Transport for the South East may not be able to receive funding directly from Network Rail, even if they achieve statutory status, but they will be able to work with local authorities to

² 'Regional gross value added (balanced) by local authority in the UK', <https://www.ons.gov.uk/economy/grossvalueaddedgva/datasets/regionalgrossvalueaddedbalancedbylocalauthorityintheuk>, Office of National Statistics, Accessed July 2019.

develop business cases for Market-Led Proposals and help them to access Control Period funding during the next review cycle.

Highways England

- 2.11 Highways England is a government-owned company responsible for operation, maintenance and improvement of major A roads and motorways (so-called trunk roads) in England. The government has designated a series of ring-fenced funds to be managed by Highways England, with an intention that the company will address issues which are out of scope of traditional road investment strategy. Between 2015 and 2021, the five designated funds (which are designated to support causes such as environmental sustainability, innovation, and growth and housing), amounted to £900m.
- 2.12 An example of how these funds are distributed is the competition held by Highways England in February 2019. They have allocated £20m to invest in projects which will help to develop digital roads – connected vehicles and infrastructure, design and construction that reduces cost and improves safety, better and more predictable journey times, and to improve air quality. The examples of projects which Highways England were interested in included robotic construction methods, improved connectivity between transport modes and self-repairing roads.³
- 2.13 The digital roads fund was open to bids from entrepreneurs, collaborative partnerships, and organisations of any size, which means Transport for the South East would be able to access this type of funding themselves, or they could work with other local partners to access the funding.

National Roads Fund

- 2.14 The government has guaranteed that from year 2020/21 all revenues collected from Vehicle Excise Duty in England will be invested directly into the road network via the National Roads Fund. The £28.8 billion fund was announced in the 2018 Budget, with £25.3 billion allocated to Highways England to deliver the Roads Investment Strategy 2, and £3.5 billion for local authorities to improve the Major Road Network⁴. This will assure a stable pipeline of roads projects due to the legislation which will confirm Government's commitment to the funding strategy, which in turn will provide the supply chain with confidence.
- 2.15 The Major Road Network and Strategic Road Networks are directly covered by the scheme, but the local road networks could also receive support from the National Roads Fund provided that they are closely connected to the strategic road network and that the authority asking for the funds can provide evidence that the planned works will benefit the strategic work network.⁵

³ 'Highways England launches £20m competitions to revolutionise roads', <https://www.gov.uk/government/news/highways-england-launches-20m-competitions-to-revolutionise-roads>, Gov.uk, Accessed August 2019

⁴ 'Roads Funding: Information Pack', https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/757950/roads-funding-information-pack.pdf, Department for Transport, Accessed August 2019

⁵ 'Road Investment Strategy post 2020: planning ahead. Informing individuals and organisations interested in the future of England's Strategic Road Network' https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file

- 2.16 The National Roads Fund will be managed by the government, but it is not currently clear how the funds will be allocated, Transport for the South East or local councils and authorities within the South East may be able to access funding through the National Roads Fund. Transport for the North have recently submitted bids worth £700 million to the National Roads Fund in collaborations with its 20 local transport authority members and 50 highway authorities⁶.

Direct Contribution from Stakeholders

- 2.17 Stakeholders that will benefit directly from a scheme could make contributions towards its funding, this may include other transport companies whose operations are made more efficient or businesses and academic institutions that will benefit from new or improved infrastructure provision. The stakeholders who contribute will depend on the transport infrastructure schemes, but transport providers such as Gatwick Airport or strategically important infrastructure operators such as Southampton Port may be willing to make contributions if the transport infrastructure improvements benefit them.
- 2.18 There are several examples where major beneficiaries of a transport improvement have contributed directly to the implementation costs. For instance, the Crossrail funding package included direct contributions from several private companies; Canary Wharf Group contributed £150m to develop the Isle of Dogs station as Crossrail will increase the transport capacity to Canary Wharf supporting expansion of the area. Similarly, another developer, Berkeley Homes, has agreed to support the construction of the Crossrail station in Woolwich, which will increase the land value around the station and effectively improving property sales in the area nearby.

Workplace Parking Levy

- 2.19 A workplace parking levy consists of a charge on businesses within a defined administrative boundary based on the number of workplace parking places they provide. The Transport Act 2000 gave the local authorities the power to introduce a workplace parking levy in their district, but any new scheme must be confirmed by the Secretary of State.
- 2.20 A workplace parking levy scheme is currently in operation in Nottingham where businesses which supply more than 10 parking spaces to employees⁷ are charged for each space, with the charge being increased in line with the Retail Prices Index on an annual basis. In year 2018/19, the charge was levied at £417 per space per year⁸. Since the introduction of the scheme in 2012, it has raised around £9m of funding each year, which allowed Nottingham City Council

[/508505/road-investment-strategy-post-2020-planning-ahead.pdf](#), Department for Transport, Accessed August 2019

⁶ 'TfN submits £700m proposals for National Roads Fund', <https://www.transport-network.co.uk/TfN-submits-%C2%A3700m-proposals-for-National-Roads-Fund/16101>, Dom Brown, Accessed August 2019

⁷ 'Funding and financing inclusive growth in cities', <https://www.centreforcities.org/reader/funding-financing-inclusive-growth-cities/reviewing-funding-finance-options-available-city-combined-authorities/1-nottingham-workplace-parking-levy/>, N.Clayton, S.Jeffrey and A.Breach, 13 December 2017

⁸ 'Workplace parking tax considered by councils', <https://www.bbc.co.uk/news/uk-england-london-47177240>, T. Edwards, 8 February 2019

to support the creation of the first fully electric park and ride scheme in the country, tram network expansion and the redevelopment of the railway station⁹.

- 2.21 However, other areas in the UK have struggled to implement a workplace parking levy with proposals being rejected in Manchester in 2018 due to the fact it would have to be implemented across the entirety of Greater Manchester¹⁰. The Scottish Government is currently trying to amend the Transport Bill to give councils the power to levy a charge on parking spaces, however this has been met with opposition who claim there is not a good enough public transport system to support those that will not be able to afford to park¹¹.
- 2.22 Alongside creating a revenue stream to support mass transit projects, a workplace parking levy incentivises modal shift, effectively increasing the demand for public transport and therefore ridership and farebox of mass transit systems. A workplace parking levy can also shift land uses away from off-street parking and into additional development which is likely to have further beneficial economic and financial benefits to local authorities, offsetting any loss of car parking revenue.
- 2.23 A key driver of the potential funding from a workplace parking levy is the number of eligible car parking spaces. Higher rates could be introduced in the city centres which are accessible via public transport network. Only a proportion of the total non-residential spaces will be eligible for the workplace parking levy as the levy targets spaces provided by employers to employees.
- 2.24 Transport for the South East will not be able to implement a workplace parking levy themselves even if they achieve statutory status, but they will be able to work with local authorities to develop a workplace parking levy scheme. Any workplace parking levy will need to be approved by the Secretary of State so it will not be an immediate funding solution.

Intelligent Charging/Congestion Charging

- 2.25 Road pricing consists of a charge to all road users within a defined zone. Alongside creating a funding stream to support mass transit systems to be developed and introduced in the Transport for the South East area, it would support travel demand management by encouraging modal shift from private car and support the introduction of clean air zones in the cities with the resulting environmental benefits. However, the implementation of road pricing schemes have historically met opposition from the public, notably in Manchester in 2008 where a referendum on the issue was lost. Furthermore, the scheme poses significant costs for its implementation and operation.
- 2.26 Vehicles travelling in/out of the boundary would be charged a daily rate under the road pricing scheme and therefore traffic flows within this boundary are key to estimate potential funding. However, the intelligent charging can also be based on criteria other than exclusively entry/exit into the specific zone; in April 2019, London has introduced the Ultra-Low Emission

⁹ 'Workplace parking levy wins praise from independent bodies' <https://www.transportnottingham.com/workplace-parking-levy-wins-praise-independent-bodies/>, Transport for Nottingham, Accessed August 2019

¹⁰ 'Greater Manchester workplace parking levy rejected', <https://www.bbc.co.uk/news/uk-england-manchester-42978241>, BBC, Accessed August 2019

¹¹ 'Workplace parking tax move 'not easy', MSPs told', <https://www.bbc.co.uk/news/uk-scotland-scotland-politics-48365574>, BBC, Accessed August 2019

Zone in the area currently covered by congestion charge, with planned expansion to the inner London area in 2021. The main aim of this scheme is to improve the air quality since it is levied on vehicles which do not meet Ultra-Low Emission Zone emissions standards¹². The scheme is expected to yield a net operating income of £127m in the first year of operation. However, since the aim is to reduce the number of vehicles which breach the emission standards, the profit is expected to decrease in the future¹³. The implementation of a road user charging scheme must not negatively impact businesses as it may encourage them to relocate.

- 2.27 In England, road user charging can be introduced by county councils, metropolitan district councils and transport bodies. This means that Transport for the South East (subject to relevant powers) or local councils could introduce road user charging. According to the Transport Act 2000 and Local Transport Act 2008 there is no requirement to hold a local referendum or obtain approval from the Secretary of State and the authorities introducing the charge can do so as they see fit¹⁴.

Local Community Infrastructure Levy

- 2.28 The Community Infrastructure Levy is a locally set and collected levy on developments. The Community Infrastructure Levy was introduced as a more predictable and transparent alternative to the Section 106 obligations which are negotiated on a site-by-site basis. The Community Infrastructure Levy is allocated by the Local Authorities to developments on a published list (Regulations 123) which can include non-transport developments such as schools. In 2016/17, over 50% of the councils in the South East had adopted Community Infrastructure Levies as a funding mechanism¹⁵.
- 2.29 Community Infrastructure Levy rates are set by a local authority in a charging schedule where the rate charged can vary according to use, location and scale of development. The rate varies between authorities which is a key factor in ensuring the rate is set with regard to local levels of viability. However, it should be noted that borrowing against future Community Infrastructure Levy receipts is not permitted which may prevent the ability to fund transport infrastructure when developments sites are conditional on said transport infrastructure investment. Furthermore, Community Infrastructure Levy receipts are much more variable than, for instance, business rates as they are primarily driven by the amount of development which can fluctuate significantly. As Community Infrastructure Levies are set and collected by local authorities, Transport for the South East will not be able to raise funding themselves through this mechanism. However, Transport for the South East could work with local

¹² 'Ultra Low Emission Zone', <https://tfl.gov.uk/modes/driving/ultra-low-emission-zone>, Transport for London, Accessed August 2019

¹³ 'ULEZ (2)', <https://www.london.gov.uk/questions/2018/3170>, London Assembly, Accessed August 2019

¹⁴ 'Local road charges', <http://researchbriefings.files.parliament.uk/documents/SN01171/SN01171.pdf>, House of Commons, Accessed August 2019

¹⁵ 'The Incidence, Value and Delivery of Planning Obligations and Community Infrastructure Levy in England in 2016-17', https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/685301/Section_106_and_CIL_research_report.pdf, Ministry of Housing, Communities & Local Government, March 2018, Accessed August 2019

authorities to ring-fence Community Infrastructure Levy receipts for transport infrastructure investment.

- 2.30 The area is expecting significant growth; between 2018 and 2050, the number of dwellings is expected to increase by nearly 500,000, which is equal to a 14.4% increase compared to 2018. Assuming that an average house is around 68sqm, a £100/sqm Community Infrastructure Levy charge, and that 10% of the new development would be subject to a Community Infrastructure Levy schedule, the residential developments could yield over £320m in additional funding by year 2050.
- 2.31 Community Infrastructure Levies can also be levied on commercial units. The employment floorspace is also expecting significant growth over the next 30 years – the estimated additional area added in this time period is estimated at around 29 million sqm. Based on the same assumptions as the calculation for potential Community Infrastructure Levy income from the added residential space, this could lead to additional £295m in funding by 2050. It should be noted however, that while the Community Infrastructure Levy works well in London, the lower populations and business density in the South East may make it harder to raise significant funding using this mechanism. This is because there may be a lower proportion of development in areas that will benefit from transport infrastructure improvements.

Strategic Infrastructure Tariff

- 2.32 Using the Community Infrastructure Levy as a means to capture land value uplift to fund public transport is demonstrated by the city-wide Mayoral Community Infrastructure Levy which was introduced in London and ring-fenced for the construction of Crossrail. By the end of year 2017/18, the levy has generated over £490m towards the project¹⁶.
- 2.33 The Strategic Infrastructure Tariff proposed by government for Combined Authorities would be similar to a Mayoral Community Infrastructure Levy across the Combined Authority, where the charge could be introduced on residential developments, commercial developments or both. This would be payable by new developments only (i.e. existing properties are not charged) and it would seek to capture a proportion of the land uplift driven by the transport improvements with the remainder being retained by local developers. Strategic Infrastructure Tariffs can be implemented by Combined Authorities and joint committees given that they possess strategic planning powers¹⁷. Currently there are no Combined Authorities with the Transport for the South East area. However, if any councils in the area did form a Combined Authority, then Transport for the South East could work with them to implement a Strategic Infrastructure Tariff.

Business Rate Increment Retention

- 2.34 The new developments which will be able to proceed due to the improvements to the transport network will be subject to local taxes, such as the Business Rates paid by the

¹⁶ 'CIL Annual Return Overview', https://www.london.gov.uk/sites/default/files/mcil_annual_receipt_update_2012-2018.pdf, London Assembly, Accessed August 2019

¹⁷ 'Supporting housing delivery through developer contributions', https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/691182/Developer_Contributions_Consultation.pdf Ministry of Housing, Communities and Local Government, March 2018

businesses, or council tax paid by the households. A proportion of those charges, collected by the local council could be allocated to fund the transport improvements and developments on the rationale that these developments would not come forward, nor the increased level of economic activity and resulting increase in rateable values without such a funding mechanism.

- 2.35 This retention would seek to ‘top slice’ or retain a proportion of these taxes within a defined area which could provide a significant additional funding stream. There are examples in the United Kingdom of such mechanisms being used to support transport infrastructure improvements, most notably the developments in Vauxhall, Nine Elms, and Battersea that were enabled by the Northern Line Extension.
- 2.36 Under this model, this mechanism would not result in additional charges to land owners/developers in the area but would instead ring-fence a proportion of tax receipts. Since these developments rely on the improvements to the transport network, and as such would not come-forward (nor would the tax receipts) without them, the contribution towards transport infrastructure would be justifiable. An agreement of this funding source would be dependent on central government approval and potentially a consultation with local businesses to ascertain whether there is appetite for such a mechanism. As Business Rates are collected by local authorities, Transport for the South East need to work with local authorities to ring-fence these receipts for transport infrastructure investment.
- 2.37 The area is expecting a significant growth in employment space (over 29 million sqm are forecasted to be added by 2050), which suggests that many new businesses will open in the area. This would lead to growth in the business rates collected each year, which could be retained and used to fund the transport developments.

Business Rate Supplement

- 2.38 The Business Rate Supplement Act 2009 allows unitary district councils, county councils and the Greater London Authority to levy a supplement on the existing business rates to collect funds which will be used to promote local economic development.¹⁸
- 2.39 A “2p in the pound”, Business Rate Supplement was introduced across Greater London to support Crossrail, generating over a quarter of the funding for the project. The county, unitary and district councils in the Transport for the South East area could also introduce the Business Rate Supplement, which would be payable by businesses above a certain size to ensure smaller businesses would not be impacted. Transport for the South East could work with the relevant councils to secure this funding for transport infrastructure improvements. A key consideration when calibrating the supplement would be to ensure the benefit to businesses from the area is greater than their contribution through a Business Rate Supplement.

Council Tax Increment Retention

- 2.40 Similar to Business Rate Increment Retention, a proportion of council tax generated at developments enabled by transport infrastructure schemes could be set aside for transport improvements. This retention would seek to ‘top slice’ these taxes which could provide a significant additional funding stream for the transport development. Under this model, this mechanism would not result in additional charges to land owners/developers in the area but would instead ring-fence a proportion of the tax receipts which are already being collected.

¹⁸ ‘Business rates supplements: guidance’ <https://www.gov.uk/government/publications/business-rates-supplements-guidance>, Gov.uk, Accessed August 2019

The tax receipts will be collected by local councils so Transport for the South East will need to work with local councils to ring-fence these receipts to fund transport infrastructure improvements.

- 2.41 Growth on council tax is limited to 3% per annum (plus 2% growth to adult social care precept), with the general understanding that growth in council tax receipts is needed to meet the cost of additional services resulting from additional housing/population. If a council wants to increase the rate further, it must hold a referendum¹⁹.
- 2.42 Considering the forecast growth in the residential and commercial space expected in the area, a strong road network is necessary, especially considering there are some areas in which residents cannot access the public transport modes easily.

Council Tax Precept

- 2.43 Although council tax is traditionally paid to support the provision of services within the local areas, there are examples of the introduction of a council tax precept to support infrastructure developments including in Greater Manchester to support Metrolink extensions and Greater London to support the London Olympics. Furthermore, an Adult Social Care Precept, which supports adult social care services has been introduced across England in recent years.
- 2.44 There is likely to be significant challenge in obtaining support of increasing council tax since it affects the majority of residents within the area. Many residents may feel that they will not be able to benefit from transport network improvements if they do not regularly use it. Council taxes are typically regressive in nature and tend to disproportionately impact the most vulnerable in the community the hardest, those on fixed or low incomes. However, considering the vast size of the Transport for the South East area, even a relatively small precept levied on the council tax could lead to generation of considerable amount of funding. However, since the council tax constitutes of several charges, paid to authorities at different levels, implementing a precept across a wider area which spans across many local authorities might be challenging and complex. Transport for the South East would have to work with these local authorities to implement a council tax precept in the area.

Farebox Surplus/Premium Fare

- 2.45 Improvements to the transport infrastructure tend to attract new users since the comfort of the journey increases, and the current users might be more inclined to pay a higher price for a better quality of service.
- 2.46 Part of the additional funds collected via fares (e.g. from bus network) or toll charges could be used to partially fund new transport schemes or improvements to the existing ones. Transport for the South East would not collect these additional funds themselves so they would be required to work with local transport providers to understand if this is a viable funding mechanism for transport infrastructure improvements. However, without knowing the specifics of the improvement/new development, it is difficult to estimate the size of the funding pot which could be generated.

¹⁹'Council tax bills in England to rise an average of 4.5%', <https://www.bbc.co.uk/news/uk-england-47442652>, Accessed August 2019

Asset Utilisation

Property Assets

- 2.47 It is often the case that transport organisations or authorities have extensive land or property holdings. Network Rail, for instance, has 40,000 hectares of land assets. These land holdings can be exploited in many ways, such as developing the land for the purposes of residential, business or commercial use, or a combination of the three.
- 2.48 In order to exploit land for development purposes, the public owner can enter into a public private partnership through which a public sector body can use its assets to attract long-term investment from the private sector. This is called a Local Asset Backed Vehicle (LABV).
- 2.49 Alternatively, the land owner could internalise the property development. This has the benefit of not sacrificing any of the returns. However, the initial costs of diversifying the authority's operations in this way can be very significant.
- 2.50 Transport for the South East could use their own assets to raise funding through this mechanism or they could work with other relevant local authorities to understand if this could be a viable mechanism to raise funding for transport infrastructure improvements.

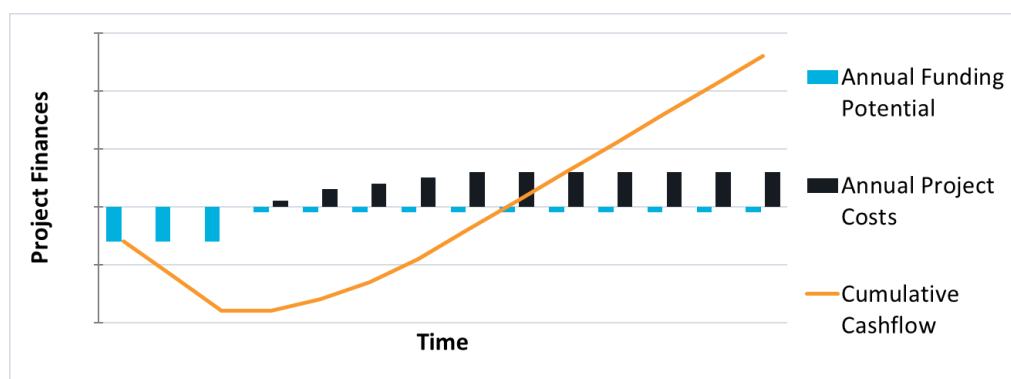
Road and Car Park Assets

- 2.51 Transport organisations or authorities may be able to generate additional revenue through regulation of roads and car parks. For instance, this could involve charging for the use of roads through a Congestion Charge, imposing a levy for off-street parking through a Workplace Parking Levy, which are both described in more detail above, or varying fees for car parks owned by the public body.
- 2.52 Use of asset exploitation assumes that assets have not been efficiently used in the past. For instance, it is not an appropriate funding mechanism when land value growth potential may not be particularly high, the actual size of the land holding is relatively small, or the available space is already being used lucratively for retail units.
- 2.53 Furthermore, the more economic activity or denser the population around an asset, the greater the benefits that will accrue from the exploitation of that asset. For example, an under developed railway station in central London provides far more significant potential revenue than an out of town railway station in a less prosperous area. Similarly, the introduction of a Congestion Charge or Workplace Parking Levy is best suited to areas where there is a high volume of road vehicles as there is an aspiration to reduce road congestion.

3 Financing

- 3.1 Infrastructure investments typically require upfront capital investment, however many of the funding options outlined above will generate funding over a longer period e.g. 30 years. This disparity between the capital cost and the funding during the initial years of the project can be met by financing where, for instance, debt is secured against future funding receipts in the same way that a mortgage is secured to finance the purchase of a home. An illustration of this is provided in Figure 3.1 which highlights a negative cashflow in the initial years.

Figure 3.1: Illustrative Example of Project Finances



- 3.2 Interest payments would be payable on finance where the interest rate for finance that the Transport for the South East could achieve depends on the arrangement and source. For instance, potential sources include public finance from the Public Works Loan Board (PWLb) which provides debt financing options to public bodies from the central government National Loans Fund. Alternative private finance could be sourced such as commercial debt or bonds. For example, the Greater London Authority raised £200m through a bond to support the Northern Line Extension which was effectively backed by the UK Guarantee scheme, lowering borrowing costs. Servicing finance through interest costs ultimately reduces the capital costs that funding mechanisms could support. Based on a loan term of 30 years and at PWLB rates around one third of the funding would be required to meet debt service charges.
- 3.3 Transport infrastructure is typically a popular sector for investors however they are currently reluctant to invest. Infrastructure investment pipelines are currently not credible and have stagnated with an absence of projects being delivered. This is leading to a lack of confidence in the investment environment and causing project finance knowledge to leave the industry as firms are reluctant to invest in teams who cannot be provided with a credible pipeline of work. The treasury is currently not in favour of off-balance sheet investment, with the government ending the use of Private Finance 2, which was the United Kingdom's model of Private Finance Initiative²⁰. There is currently a need for a new investment structure in the United Kingdom to

²⁰ 'Public Private Partnerships', <https://www.gov.uk/government/collections/public-private-partnerships>, Government, Accessed August 2019

help encourage the high supply of financing available to invest in transport infrastructure improvements.

Financing Options

3.4 There are several different lenders who are able to finance transport infrastructure improvements against a different forms of security (i.e. the collateral against which a loan is provided by the borrower to the lender). Figure 3.2 shows what financing options are available and outlines whether these are public finance, corporate finance, or limited-recourse finance. Financing options that are secured against one or multiple councils balance sheets are considered to be on-balance sheet. Finance that is secured against a corporate balance sheet or asset backed security is considered to be off-balance sheet.

Figure 3.2: Financing Options

Lender					
Institutional Investors		UK Municipal Bond Agency	Corporate Bonds	Project Bonds	
Commercial	Public Finance Commercial Banks		Corporate Finance Developer Lending	Limited-Recourse Finance Project Finance Asset-Backed Vehicles	
Policy Bank/ Multilateral	Policy Bank / Multilateral			Policy Bank / Multilateral Project Finance	
HM Treasury	Public Works Loan Board				
		Council Balance Sheet (floating charge over revenues)	Multiple Balance Sheets – joint and several liability	Corporate Balance Sheet	Asset Backed Security
					Security

Public Works Loan Board

3.5 The Public Works Loan Board is an example of on-balance sheet financing. It is part of the UK Debt Management Office, which is an Executive Agency of HM Treasury and it currently provides 75% of lending to local authorities. It is the principal financing source for statutory entities under the Local Government Act 2003. The loans that the Public Works Loan Board issues are very flexible. Tenors range from 1 to 50 years for fixed interest rates, and 1 to 10 years for variable interest rates.

3.6 The credit process is light as it is underpinned by the Prudential Borrowing Code, which means it is relatively easy to access financing through the Public Works Loan Board. The major disadvantage of the Public Works Loan Board is that any borrowing is on-balance sheet, so it is constrained by the authority’s borrowing capacity. Transport for the South East do not currently have the powers to access this type of financing and it is unknown whether they will be once they gain statutory powers, but local authorities within the South East will be able to borrow from the Public Works Loan Board.

Policy Bank Lending

- 3.7 Typically, policy bank lending would come through the European Investment Bank, and as a member of the European Union all statutory bodies have access to the European Investment Bank. The European Investment Bank has loaned €22.5 billion for transport schemes in the United Kingdom over the last 55 years. Withdrawal from the European Union means that statutory bodies within the UK will no longer be able to borrow through the European Investment Bank. There is a possibility that this will be replaced by a National Infrastructure Bank, but it is currently unknown what this will be.
- 3.8 Policy bank lending is typically used for major projects by larger authorities, for example Transport for London used European Investment Bank financing for the Northern Line Extension. It is considered to be a low-cost source of financing with concessional rates and long-tenor financing terms. However, policy bank lending has more stringent credit requirement than the Public Works Loan Board and is on-balance sheet, so it is constrained by borrowing capacity. If Transport for the South East is granted statutory status it may be able to borrow from policy banks, otherwise local authorities with the South East will be able to access policy bank lending.

Commercial Lending

- 3.9 Commercial lending can be used to finance projects when other forms of financing such as the Public Works Loan Board is unavailable. It generally offers shorter tenor variable rate lending, with a higher level of due diligence required before the loan is approved. There is a risk of high cost of negative carry (whereby loans are often committed and fixed but drawdown of the loan may not be until much further in the future), although there are examples of innovation through forward-starting interest rate loans, for example the £20 million loan arranged by pbb Deutsche Pfandbriefbank for Midlothian Council. pbb Deutsche Pfandbriefbank is a leading European specialist bank for real estate financing and public investment finance. Midlothian Council will use the loan to repay existing debt used to finance investment in services including new schools, social housing, utilities, health and care. Commercial lending can also be used as a useful treasury management tool for refinancing projects that they have funded with cash expenditure.
- 3.10 Again, commercial lending is on-balance sheet borrowing, which is constrained by borrowing capacity. If Transport for the South East is granted statutory status it may be able to access commercial lending, though the size of the loan they could get will depend on their borrowing capacity. Local authorities in the South East will also be able to access commercial lending for transport infrastructure improvements.

UK Municipal Bonds Agency

- 3.11 The UK Municipal Bonds Agency was created in 2014 to provide access for local authorities to capital markets and try to diversify beyond the Public Works Loan Board. The aim of the agency was to offer long-term, low-cost bond financing against the prudential borrowing framework and it has been rated investment grade (Aa3) by Moody's. It is owned wholly by local authorities and the Local Government Association. However, the UK Municipal Bonds Agency has yet to issue a bond, this is due to the nervousness of local authorities around the joint-and-several liability, which means if one local authority defaults all the other authorities in the pool is responsible for the liability.

- 3.12 Recently the UK Municipal Bonds Agency has launched a tender for the provision of management services, including marketing services, execution and management of debt issuance activities, execution and management of local authority lending activities and support the agency's governance activities²¹ which indicates that the agency is mobilizing for potential issuances in the near future. The UK Municipal Bonds Agency may provide a source of financing for Transport for the South East or local authorities in the South East but first the agency needs to solve its current problems.

Corporate Finance

- 3.13 Corporate finance is typically used in developer-led infrastructure improvements, for example the Liverpool 1 shopping centre (which included significant contributions to transport infrastructure) was mostly financed by corporate finance. In comparison to financing from the Public Works Loan Board it is typically expensive with short-term tenors. Transport infrastructure improvements typically have payback periods that are too long to justify corporate financing as the asset does not match the liability. Corporate finance is an option of off-balance sheet financing. Transport for the South East can use corporate financing for transport infrastructure investment if there is heavy developer involvement and the offer is attractive for the investors.

Non-Recourse Finance (Project Finance)

- 3.14 Non-recourse finance is typically used for large infrastructure projects with robust future project cashflows, and they tend to be contractualized as Public-Private Partnerships. The lenders will finance against the value of the asset or protections in the contract (e.g. compensation on termination or step-in rights) as security. The types of projects typically financed with non-recourse financing are highly leveraged and are financed with mostly debt and some equity. The financing is relatively expensive (compared to on-balance sheet borrowing) with relatively short tenors (10-15 years).
- 3.15 The treasury is currently not in favour of project financing unless it is supported by a future stream of user payments (e.g. tolls) that can service most or all of the financing. Project finance is available to Transport for the South East and local authorities in the South East if they have the right types of transport infrastructure projects that can produce future user cashflows attractive to private investors.

Asset Backed Vehicles

- 3.16 Asset backed vehicles are a joint venture type of arrangement in which an arm's length company is created. A local authority can capitalise the company with land under its ownership and a private partner matches the land contribution with cash. The cash can be used or further leveraged to develop the site and supporting infrastructure. The developed site is then sold, and the proceeds can be recycled back into other projects. Asset backed vehicles are most commonly applied in urban regeneration and housing projects. This allows local authorities to use land that is otherwise difficult to monetise while keeping the risk and reward of the site. However, asset backed vehicles come with complex governance structures and the developed equity can be expensive. Asset backed vehicles are available for local authorities provided that they have land they can grant to developers.

²¹'Provision of management services, which will include operational and marketing services', <https://www.delta-esourcing.com/respond/CBVA233364>, Delta eSourcing, Accessed August 2019

4 Case Studies

- 4.1 The following case studies demonstrate different funding packages that have been used to develop transport infrastructure in the United Kingdom and worldwide. Nottingham Trams, Manchester Metrolink and several projects in London have been funded with innovative funding packages. Road user charging is used around the world for a variety of different reasons including the funding of transport infrastructure improvements.

Nottingham Trams

- 4.2 Nottingham City Council introduced a Workplace Parking Levy in 2012. It is used as a demand management tool to reduce the levels of commuter parking, as commuters make up around 70% of the peak traffic congestion which costs the city £160m per year. The majority of this cost falls on the businesses, and therefore they are a direct beneficiary of any congestion reductions.
- 4.3 From April 2012, employers which provide 11 or more parking spaces to the employees are liable to pay the Workplace Parking Levy. They can however choose to reclaim part of the cost from the employees who use the parking spaces provided. In 2018/19 the charge was £417 per year per parking space provided.
- 4.4 The Workplace Parking Levy has raised £44m in the first five years of operation. This has allowed the council to contribute towards the financing of the new £580m city tram lines and contribute towards the £60m redevelopment of Nottingham Station.
- 4.5 The revenue collected from the scheme is also used as local match funding. It puts the City Council in a stronger position when bidding for external funds, such as funding from Department for Transport.

Manchester Metrolink

- 4.6 Greater Manchester currently leads the way in the UK Government's devolution agenda with a significant package of transport improvements in place being funded through a combination of conventional and innovative funding mechanisms. This approach to funding public transport was adopted by Greater Manchester following the failed bid to implement the proposed introduction of congestion charging which was rejected in a public referendum.
- 4.7 After this set back, Greater Manchester set about generating almost half of the funding from a UK Transport Innovation Fund bid through a series of innovative mechanisms. A series of city region-wide funding mechanisms were implemented and a prioritisation of schemes agreed to fund based on the Gross Value Added (a measure of the value of services and goods produced in an industry, an area or in a sector of an economy which is comparable to a local Gross Domestic Product) and employment growth potential and overall cost across the authority. With the schemes prioritised and funding identified, the ten councils which make up the Greater Manchester Combined Authority could see which schemes could and should be delivered with the funds available.

- 4.8 The Metrolink network is a light rail system which serves the Greater Manchester city region. An extensive Metrolink expansion (dubbed Big-Bang) was successfully completed in February 2017 when the Second City Crossing through the heart of Manchester city centre opened as part of package of works which nearly doubled the length of the system to 92kms. The new line offers new links and more frequent trams through Manchester city centre, as well as improved service reliability and greater operational flexibility.
- 4.9 Greater Manchester Combined Authority with Transport for Greater Manchester developed a strategy to develop and deliver the Metrolink expansion and other infrastructure works such as a Bus Rapid Transit line, new rail stations and cycling enhancements, including the creation of a Greater Manchester Transport Fund, securing funding of £1.5bn. The final funding package was agreed due in part to the demonstrated benefits to the regional economy and included:
- Regional Funding Allocation of £450m, negotiated by Greater Manchester Combined Authority and Transport for Greater Manchester with the European Investment Bank, with a further £50m facility from the European Investment Bank conditional upon the granting of powers and approvals for the Metrolink Second City Crossing;
 - An annual increase in the council tax precept dedicated for transport infrastructure capital works of 3% for 6 years which was expected to contribute £300m;
 - Pooling 40% of the UK national government grant for local transport schemes provided to each Greater Manchester local authority, which was expected to contribute £150m;
 - Surplus farebox revenue from Chorlton to East Didsbury Metrolink line which was expected to contribute £50m;
 - Bringing forward UK Government transport funding which would have been allocated over several years due to the wider benefits to the economy amounting to £225m;
 - Borrowings from the UK Public Works Loan Board for £277.5m negotiated with fixed rates;
 - £15m from the UK Government Integrated Transport Block (ITB) Local Transport was committed to the Fund; and
 - Contributions to be made by Manchester Airport for a total of £50m. The new transport link is favourable for the airport since the project is going to improve the airport's accessibility. Businesses are inclined to contribute towards infrastructure funding as funding their own transport link would not be viable.
- 4.10 Some key lessons learnt from Greater Manchester are:
- Close collaboration between local authorities and national government and an understanding that transport improvements benefit the wider geography can lead to focused transport investment; and
 - Pooling local funds can allow regions to generate significant funding for larger public transport schemes that are mutually beneficial; and
 - Incentivising transport investments based on retention of Gross Value Added/economic growth allows greater funds to be re-invested in future transport infrastructure.

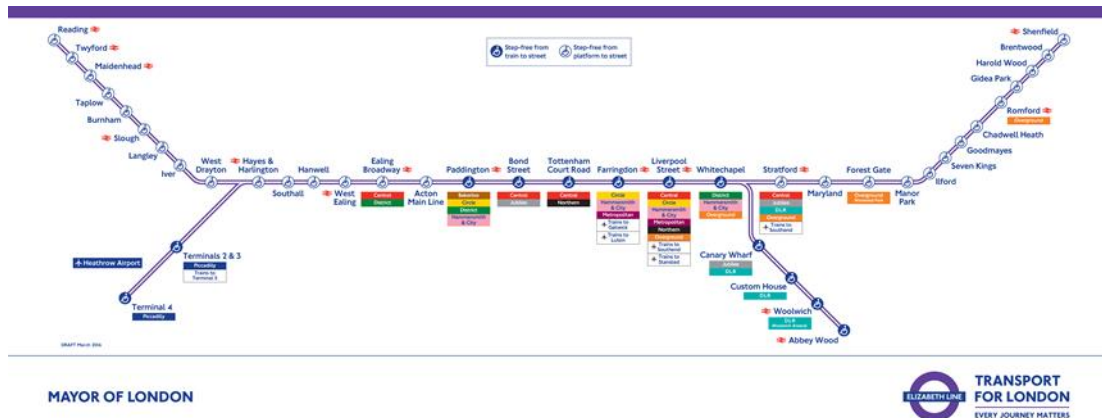
Alternative Funding Sources in London

Crossrail 1

- 4.11 Crossrail 1 is Europe's largest transport project, delivering a new 21km underground urban railway and connections to the existing UK national rail network, increasing capacity of London's transport network by 10% along with transforming the city-region's connectivity.

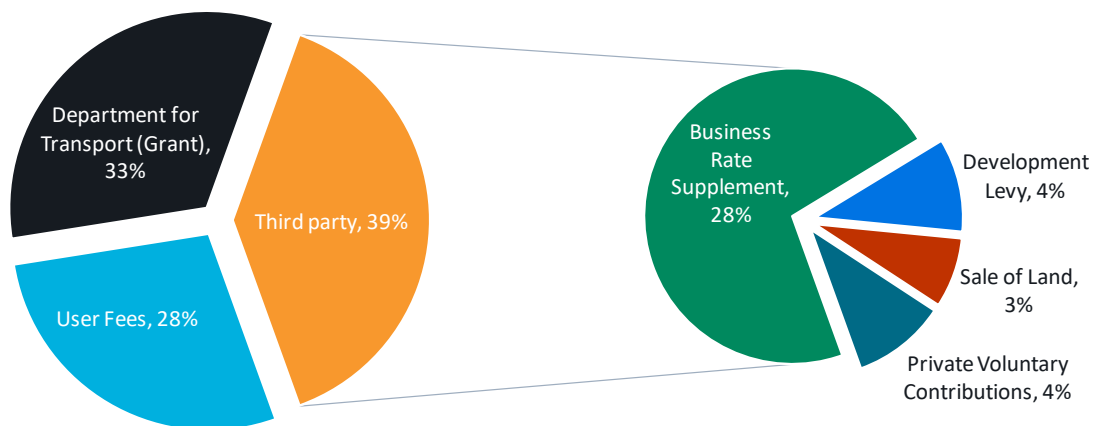
- 4.12 One of the defining characteristics of the project is that it cuts through the centre of London, linking the four main business districts (West End, City of London, Canary Wharf and the emerging business district of Stratford) with Heathrow Airport and a number of residential locations across London and the wider Southeast of England. This alignment implies considerable benefits to a wide range of business sectors and populations in the city by linking the key employment centres and other key destinations with the wider city region.

Figure 4.1: Crossrail 1 Route



- 4.13 As the project was estimated to cost £14.8bn, officials, particularly Transport for London, were put under pressure to find attractive and creative funding alternatives to make the project possible. This ultimately led to an innovative funding framework being put in place in 2008 that enabled two thirds of the funding requirement to be met by user fees and third-party funding. This is illustrated in Figure 4.2 below:

Figure 4.2: Overview of forecast funding contribution for Crossrail 1



- 4.14 The project is funded by a range of income streams, many of which hadn't been used before in the UK, including:

- Business Rate Supplement
 - Businesses that benefited from the improved transport provision brought about by Crossrail were targeted to contribute to the cost of the infrastructure through the Business Rate Supplement which is forecast to generate £4.1bn.
 - In the case of Crossrail the payments were collected by local governments and ringfenced for its specific use for the project.

- The introduction of a constant tax rate of 2p in the pound across the entire city (effectively a 4% increase in the existing tax rate) to prevent any perverse incentive for businesses to relocate to areas where the levy was not charged. Applying a London wide rate was validated by demonstrating that each London Borough was forecast to have a net positive gain between the financial contribution through Business Rate Supplement and the benefits received from the project. This process of illustrating a net gain from Crossrail helped to mitigate (although did not eliminate) opposition from businesses to the additional charge.
- Mayoral Community Infrastructure Levy and Crossrail Levy
 - Two developer levy mechanisms were introduced in London to capture the benefit to developers called the Mayoral Community Infrastructure Levy and the Crossrail Levy. These levies are forecast to raise £600m to support the Crossrail 1 project. Both levies are charged on a per m2 of new space.
 - The Mayoral Community Infrastructure Levy is a levy charged on new developments in the entire city (given that TfL demonstrated that benefits were generated across London).
 - The Crossrail Levy was based on existing development charges implemented in areas that were going to heavily benefit from the project, such as developments with certain characteristics that were within a certain distance to Crossrail stations. The setting of the Crossrail Levy rate was based on: the extent developments of particular types, sizes and locations contribute or exacerbate crowding; the forecast development estimated to occur within Crossrail Levy areas; and the total developer funding specified in the Crossrail funding agreement. A rate was defined on a per metre squared (m2) basis and paid on the net increase in floor space at a development.
- Private Sector Voluntary Contributions
 - Businesses are beneficiaries because the new transport link is going to improve their accessibility, and with better accessibility it is easier for their employees and customers to reach them.
 - £500m was raised from contributions linked to specific businesses benefiting from the introduction of Crossrail (for example Heathrow Airport).
- Sale of surplus land
 - Earnings from the selling of publicly-owned land, used to accomplish all the construction works necessary (i.e station works, tunnel work sites, among others) at a higher price due to appreciation of land value from the project.
- Surplus Farebox Revenues
 - £4.2bn of the capital requirements of Crossrail 1 are being met by financing secured against future user fees where the ability to ring-fence future farebox is facilitated by Transport for London's control over the fares charged across public transport in London. It is forecast that the cost of operating, maintaining and renewing Crossrail 1 will be less than the net additional revenues generated by operating services.

4.15 Crossrail can seem an enormous project with few useful pointers for smaller cities in other jurisdictions. But it has brought a number of important innovations in the UK which are valuable principles to be considered and adopted elsewhere. These include:

- A legal agreement between different tiers of government (city, state, national/federal) based on a private sector joint venture, which sets out the allocation of risks between the parties;

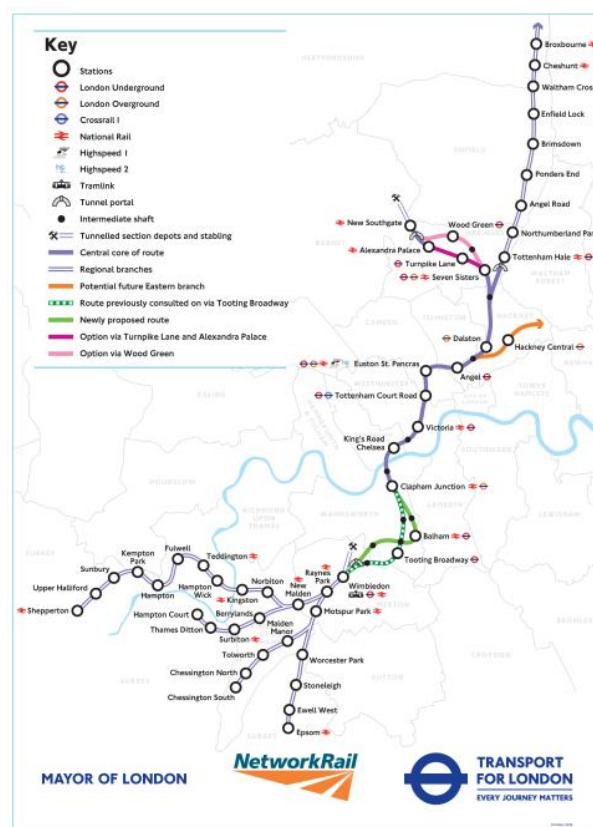
- A portfolio of funding, which reduces the risks of a single component failing to deliver as expected and generates a more stable revenue stream to facilitate borrowing;
- Extensive work with stakeholders, particularly business, to build the case for additional new hypothecated taxes and communicate the benefits to mitigate opposition approach on business cases, looking at wider economic benefits particularly from the agglomeration of the city centre to demonstrate value to the wider economy in terms of additional and higher income jobs.
- In the case of the Business Rate Supplement, the retention of Business Rate Supplement receipts also acts as an incentive to local governments to boost the economic activity in their authority as they will retain a proportion of the proceeds.
- A clear and transparent charging process and consistent tax rate to aid clarity and minimise any perverse incentives to avoid the taxation; and
- Incentivisation of local governments to boost tax base through the creation of new or supplementary charges where retention of a portion of the proceeds.

Crossrail 2

4.16 Crossrail 2, which is scheduled to open in the 2030s, is a proposed route that would serve stations throughout the South East, linking south west and north west London, as well as destinations across Surrey and Hertfordshire. It is estimated that Crossrail 2 will cost £30bn in 2014 prices, and this will include the cost of new trains and Network Rail works. The Government has been clear that London should fund more than half of the project, and funding options are still being analysed, with the need to agree a full funding package before a Hybrid Bill could be submitted.

4.17 In 2014, Pricewaterhouse Coopers produced a report for Crossrail 2 that outlined a potential funding package²². A breakdown of the proposed funding package is shown in Figure 4.4. They estimate that 50% of the cost can be locally funded, however this will require new funding sources to be levied in addition to those used for Crossrail 1. The funding sources that are used for Crossrail 1 include user fees, Business Rate Supplement, Mayoral Community Infrastructure Levy and sale of land. It is proposed that a council tax

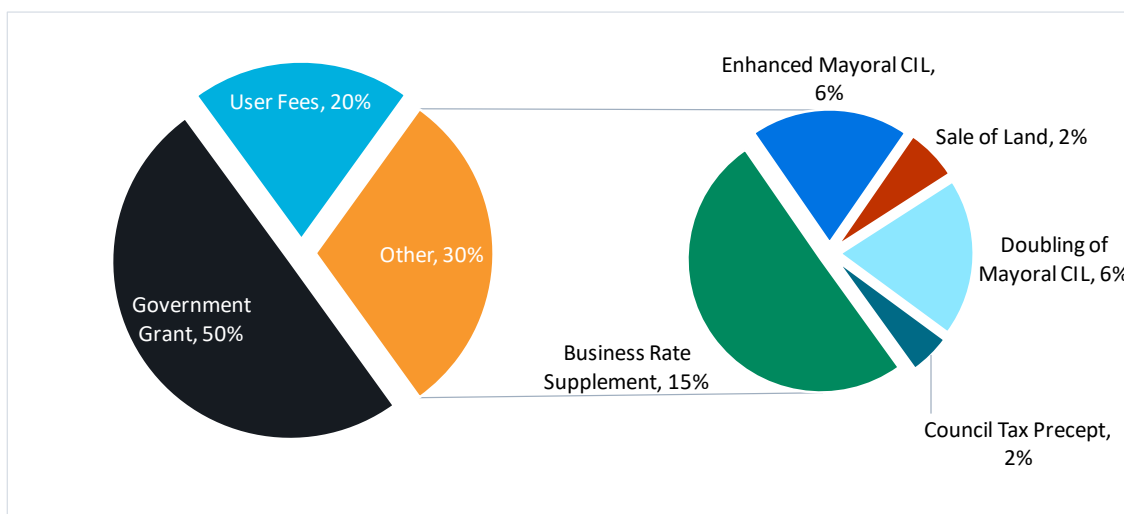
Figure 4.3: Crossrail 2 proposed route (2015)



²² 'Crossrail 2 Funding and financing study', <http://crossrail2.co.uk/wp-content/uploads/2016/10/crossrail-2-funding-and-financing-study.pdf>, PricewaterhouseCooper, accessed July 2019

precept (used for the 2012 Olympics) and an increase of the Mayoral Community Infrastructure Levy also be used.

Figure 4.4: Overview of forecast funding contribution for Crossrail 2



- **Surplus Farebox Revenues**
 - £8.1bn of the capital requirement of Crossrail 2 could be met by financing secured against future user fees where the ability to ring-fence future farebox is facilitated by Transport for London's control over the fares charged across public transport in London. It is forecast that the cost of operating, maintaining and renewing Crossrail 2 will be less than the net additional revenues generated by operating services.
- **Business Rate Supplement**
 - It is estimated the Business Rate Supplement could provide 15% of the total Crossrail 2 funding requirement.
 - However, the existing Business Rate Supplement is levied at the maximum rate of 2p in the pound, and when it was established all its revenue was earmarked for Crossrail 1. Without a change in legislation, a Business Rate Supplement for Crossrail 2 could not be put in place until after the current Business Rate Supplement has ended.
 - Due to the delay in Crossrail 1, the Business Rate Supplement will not currently be available for Crossrail 2 until 2038²³.
- **Mayoral Community Infrastructure Levy**
 - It is estimated that an Enhanced Mayoral Community Infrastructure Levy could provide 5.8% of the Crossrail 2 funding requirement. If the Community Infrastructure Levy rates were doubled it could contribute an additional 5.8% of the funding requirement.
 - The Mayoral Community Infrastructure Levy 2 (MCIL2) was implemented on 01 April 2019 to raise funds for Crossrail 2. It was implemented after the outlined £300m was raised for Crossrail 1 using the Mayoral Community Infrastructure Levy.
 - Mayoral Community Infrastructure Levy 2 did not double the rates of the original rates, the rates increased between 25% and 71% depending on the charging band, this means the additional 5.8% is unlikely to be realised.

²³ 'London's Crossrail 2 in doubt after financial woes grow', <https://www.ft.com/content/7b6e59de-fd5a-11e8-ac00-57a2a826423e>, Financial Times, Accessed August 2019

- As the Mayoral Community Infrastructure Levy is linked to new developments it is potentially volatile as the volume of development depends on the economic environment. This volatility makes it difficult to raise debt against this income stream.
- Resale of Land
 - It is estimated that the resale of land could provide 1.9% of the Crossrail 2 funding requirement.
 - The main challenge of this mechanism is the volatility of a highly cyclical property market. It will be important to allow flexibility in the timing of asset sales and potentially delay sales for a number of years to maximise proceeds.
- Council Tax Precept
 - It is estimated that a council tax precept could provide 1.5% of the Crossrail 2 funding requirement.
 - The existing Olympic precept could be continued and reallocated to Crossrail 2 provided it does not increase over the expected level of the Olympic precept (£8 per annum).
 - However, the introduction of a Council Tax precept is likely to be challenged by tax payers. The precept will be targeted at London residents, and many who will use Crossrail 2 services will reside outside the London boundary, so therefore their benefit would not be captured.

4.18 Crossrail 2 is facing tough challenges to create a robust funding package. Due to the high cost of Crossrail 2 in comparison to Crossrail 1, the funding options used for Crossrail 1 will not contribute as significant a proportion to Crossrail 2. The delay and additional cost of Crossrail 1 will also delay the availability of the Business Rate Supplement for Crossrail 2. The suggested additional funding options have either already been implemented but not at a high enough rate (doubling the Mayoral Community Infrastructure Levy rates) or will face significant public challenge (Council Tax precept) and this could leave the funding package short of the 50% of total costs that the Government requires.

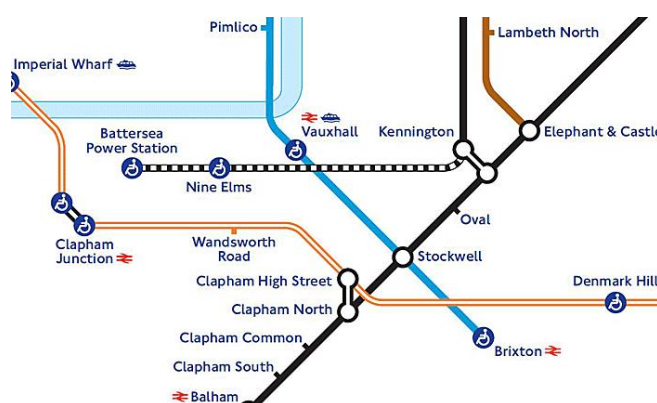
4.19 Crossrail 2 will also not be allowed to raise finance against the business rate supplement as Crossrail 1 was allowed to do. This means that the financing as well as the funding of the project is currently uncertain.

Northern Line Extension

4.20 The Northern Line is one of the London Underground lines which runs from south-west to the north part of the city through central London. A large industrial site in Battersea was identified as a prime area for redevelopment in the 1980's. However, the area had seen little progress, primarily due to the lack of high-quality rail access.

4.21 Working with developers and local authorities, Transport for London decided to extend the Northern line to help regenerate the areas of Vauxhall, Nine Elms and Battersea at a cost of £1bn. An estimated 25,000 jobs and 20,000 new homes could be created as a result of improved public transport accessibility. Upon project completion, the journey time from the new Nine Elms and Battersea Power Station stations to the City should not take more than 15 minutes²⁴, making the area an attractive location for commuters and employers such as the US, Chinese and Dutch Embassies and Apple who will re-locate its UK Headquarters.

Figure 4.5: Northern Line Extension plan



4.22 Tax increment financing is a method of funding that captures the gains of businesses and residents resulting from an uplift in property value. First employed in California in the 1950s, it is now in widespread use across the USA. Adoption of Tax Increment Financing is still in its early stages in the UK, though there are examples of Tax Increment Financing being used to part-finance significant transport, one of them being the Northern Line Extension.

4.23 The Chancellor's 2011 Autumn Statement confirmed that the Government would establish an Enterprise Zone at Battersea, enabling 100% of incremental business rates to an agreed baseline would be retained locally for a period of at least 25 years. The Enterprise Zone will encompass an area of over 227-hectares across two London boroughs: Wandsworth and Lambeth within 1km of the two new stations which would be constructed. Funding from the Enterprise Zone is forecast to total c.£700m.

4.24 Both councils have also agreed to dedicate proportion of the funds that they receive from local developers under Borough Community Infrastructure Levy and Section 106 regimes towards the funding of the extension. The Community Infrastructure Levy is a local authority development levy similar to the Mayoral Community Infrastructure Levy being used to fund Crossrail 1 which can be imposed on residential and commercial developments to help fund the delivery of local infrastructure projects. Section 106 agreements, which are also known as planning obligations, are private agreements between the developers and local authorities. They can be attached to the planning permission to make acceptable a development which was previously not acceptable in the planning terms. Collectively, the councils will provide an extra £270m (2012/13 prices).

4.25 With the addition of the funds collected from the Enterprise Zone, this will be sufficient to repay the debt required to pay for the up-front costs of building the Northern Line Extension. The extension is currently under construction and is planned to open in late 2021. Some key lessons learnt from the Northern Line Extension are:

- The ability of increased land values to be captured through Tax Increment Financing to fund significant new infrastructure projects which otherwise would not be funded;

²⁴ 'Northern line extension', <https://tfl.gov.uk/travel-information/improvements-and-projects/northern-line-extension>, Transport for London, accessed July 2019

- The creation of an Enterprise Zone as a mechanism to collect the necessary funding for the project;
- Re-directing funds received locally (e.g. Community Infrastructure Levy or section 106) to be used across a wider geography for a greater benefit; and
- Ability to attract new investment to a city-region through enhanced connectivity brought by new infrastructure.

Road User Charging

- 4.26 Urban road user charging (also called congestion charging or road pricing) involves charging drivers for the use of roads they drive on. The charges are designed to reduce traffic congestion, so an 'ideal' charging scheme would vary charges according to location, time of day and type of vehicle. Road user charging also raises revenue, which can be invested into local transport infrastructure improvements. Urban road user charging typically takes one of the following forms:
1. Area licensing schemes: vehicles using the roads within a designated area and time are required to purchase a license to do so online, usually related to vehicle type. The congestion charging scheme in central London uses this method.
 2. Cordon pricing (or 'toll rings'): users are required to pay for entry into a given area at charging points which are located at all entries to the given area, usually with higher charges for large or polluting vehicles and at more congested times of day. Oslo has been operating a toll ring since 1990, and the Stockholm scheme also uses a cordon.
 3. Continuous charging systems: these charge vehicles for all travel within a defined area. The charge can be based on distance travelled or time spent travelling or can involve a charging point on every road link. The complexity means that fully automatic electronic charging ('electronic road pricing') must be used. Singapore is using an Electronic Road Pricing system.
- 4.27 Key issues with road charging are its acceptability to drivers and other users likely to be affected by it e.g. businesses, the type and complexity of the chosen technology and enforcement.

Singapore

- 4.28 Singapore first introduced an Area Licensing Scheme in 1975 with the primary aim of reducing congestion in the city centre. Drivers had to purchase a daily or monthly license to drive in the city during the morning peak. The scheme continued to develop with extensions to the time restrictions added for the evening peak and Saturdays, and different charges for different types of vehicles. In 1998 the Area Licensing Scheme was replaced with an Electronic Road Pricing Scheme. The Electronic Road Pricing scheme is fully automatic on specific routes, times of day and direction, with variable pricing designed to respond to congestion in real time.
- 4.29 The Electronic Road Pricing scheme has reduced traffic in the inner city by 24% and average speeds have increased from 30-35kph to 40-45kph. Singapore has coupled the Electronic Road Pricing scheme with increases in parking charges, taxes and fees related to car ownership, as well as the need to own a permit to own a car to keep car ownership and therefore congestion stable despite a growing population. The annual net revenue from the Electronic Road Pricing scheme is USD \$100m, which has been used to support transit-orientated development.

Singapore has expanded its bus and rail network, created a comprehensive bicycle and pedestrian network and built new intermodal transit hubs²⁵.

Norway

- 4.30 In 1986, Bergen, Norway's second largest city, introduced a toll ring charging system. The primary objective of the scheme was to raise the finances required to implement a wide-ranging program of transport investment. The scheme charged a flat fee for all vehicles except buses entering the city's central business district between 6am and 10pm on weekdays. Toll rings were subsequently introduced in Oslo and Trondheim. Norway is a leading example of how revenue from road user pricing can be used to fund infrastructure investment, with the toll schemes being adapted and extended to target different beneficiaries and fund continuous infrastructure improvements.
- 4.31 The Trondheim scheme operated between 1991 and 2005, when it was removed as the transport upgrades had been completed. The revenues collected from the scheme funded numerous infrastructure improvements including a new ring road around the city, two new motorways, a new bridge and road upgrades and improvements. Since 2010, tolls have been reintroduced in Trondheim to fund specific infrastructure projects. This included a road toll scheme with 3 toll stations to fund a new approach road to Trondheim. This opened in 2014, and the road toll has been removed. The other toll scheme started in 2010 has 21 toll stations and is a collaboration between the Municipality of Trondheim, the County of Sør-Trøndelag and the Government road administration. Between 2010 and 2025 NOK 7 billion in revenue will be invested to improve the transportation system in Trondheim. Trondheim leads the way in implementing road user pricing to directly target beneficiaries of infrastructure investment, and to fund specific infrastructure improvements.
- 4.32 Tolls were first introduced in Bergen in 1956 and have been used to fund infrastructure investment since. The toll scheme has evolved over time with new toll stations being added and removed as infrastructure projects are identified and completed, and charges have been increased and differentiated by time of day and vehicle type. Revenue collected from the scheme is currently being used to fund investment outlined in the Bergen City Growth Agreement which pledges to invest NOK 29 billion between 2017 and 2037.
- 4.33 Tolls were first introduced in Oslo in 1990 as part of Oslo Package 1 which was created to accelerate the investment in 31 road infrastructure projects in Oslo. It was estimated that this package of projects would take 30 years to finance without the revenue generated from the toll roads. In 2000, the government passed the Oslo Package 2, which was primarily aimed at public transport investment. The goal of this package was to raise sufficient funding for the projects so that they could be implemented within 10 years, which without the additional funding from the toll road would take 25 years to finance. Oslo Package 1 ended in 2008 and was replaced by Oslo Package 3, which involves another 20 years of investment in road, rail and bus infrastructure.

²⁵ 'Road pricing in London, Stockholm and Singapore', http://nyc.streetsblog.org/wp-content/uploads/2018/01/TSTC_A_Way_Forward_CPreport_1.4.18_medium.pdf, Tri-state Transportation Campaign, accessed July 2019.

London

- 4.34 London's cordon pricing scheme was launched in February 2003 with the objectives of the scheme to reduce congestion, improve bus services, improve journey times and make the distribution of goods and services more efficient. By law, all revenue raised by the congestion zone must be reinvested back into London's transport infrastructure. When the scheme was launched there was high public acceptance of the congestion zone, as 90% of London residents were concerned about travel time and air pollution. In 2008, a Low Emission Zone charge was implemented on top of the congestion charge, so that large, commercially operated vehicles have to pay an additional fee regardless of time or day type to drive in the congestion zone. It was extended in 2012 to cover vans, minibuses, pickup trucks and other large vehicles. In April 2019 the Ultra Low Emission Zone was implemented and this charge is payable by all vehicles that do not meet certain Euro Standards on top of the Low Emission Zone charge and congestion charge. In 2015 there was 9.9% less traffic volume in comparison with 2000, despite nearly 20% population growth.
- 4.35 In the first 10 years gross revenue totalled around £2.6bn, with £960m invested in improvements to the bus network, £102m on roads and bridges, £70m on road safety, £51m on local transport/borough plans and £36m on sustainable transport. The stability of this revenue has also allowed Transport for London to secure a £200m bond, with a plan to borrow a further £3.1bn to fund projects in London.

5 Conclusions

Conclusions

- 5.1 Public investment in the United Kingdom is more dependent than ever on finding sufficient funding and increasingly the ability to raise income locally is determining whether any scheme is taken forward or not. As central government funding has become increasingly constrained, the days when a public investment would be centrally funded largely on the economic, social or environmental benefits it generates have gone. For Transport for the South East to realise the outcomes detailed in the Transport Strategy for the South East, they will need to explore alternative funding and financing mechanisms.
- 5.2 Transport for the South East do not currently have devolved funding powers and gaining statutory powers would not guarantee that Transport for the South East would gain the powers to raise funding. Transport for the North were not granted such powers when they gained their statutory powers in April 2018. However, becoming a Sub-national Transport Body may allow Transport for the South East to communicate the transport priorities of the South East area as one united body. It may also allow them to work more closely with relevant local authorities to identify and ring-fence funding sources for transport investment.
- 5.3 Of the funding mechanisms described, some are easier to implement than others. For example, the Community Infrastructure Levy and the Business Rate and Council Tax Increment Retention, can be more easily implemented as the mechanisms already exist and would just require ring-fencing of the proceeds to fund transport infrastructure. A Workplace Parking Levy, road user charging and Council Tax Precept would take longer to implement as they require additional approval, potential legislation and are likely to require significant consultation with the public. For the majority of the funding mechanisms identified in this report, Transport for the South East would need to work with the relevant local councils and authorities to implement the mechanism and secure funding for transport investment.
- 5.4 Infrastructure investments typically require upfront capital investment, however many of the funding options outlined above will only generate funding over a longer period. This disparity between the capital cost and the funding during the initial years of the project creates a very typical funding gap for transport projects which can be met by financing. Most of the lending to local authorities comes from the Public Works Loan Board, however there are other options available to Transport for the South East including commercial lending and project finance. Policy bank lending and bonds from the UK Municipal Bond Agency are unlikely to be available in the short term. Withdrawal from the European Union will mean that statutory bodies in the UK will no longer be able to borrow through the European Investment Bank, so this is unlikely to be available to Transport for the South East if and until the role of the EIB is replaced by a new UK-only institution. The UK Municipal Bonds Agency has recently let a tender for management and issuance services, which indicates that they are preparing to issue their first bonds but will probably not be available to Transport for the South East in the short term.

Next Steps

5.5 Each of the funding options identified have challenges to implement and would be subject to support/agreement from several public or private bodies. It is therefore important to continue to consult with the various local public and private bodies to gauge views and work towards the most feasible and preferred funding strategy. Priority areas for investment have been identified in the Transport Strategy for the South East and these cover a wide range of transport schemes and interventions including highway schemes, railway schemes, interchanges and technology. The Transport for the South East Strategic Investment Plan will document the priority schemes and consider the potential funding and financing mechanisms required to deliver these schemes. The costs of implementing these schemes need to be fully evaluated, after which the next steps which should be considered include:

- Identify the beneficiaries of the schemes and the funding mechanisms that will best capture the gains they receive from an improved transport network;
- Consult with local stakeholders, local business groups and developers on the feasibility of the funding mechanisms;
- Continue the ongoing dialogue with UK Government to set out the additionality benefits that the Transport for the South East area could generate at the UK-level and discuss the potential for securing the ability and powers to leverage local funding sources and / or the ability to secure funding from Government.
- Further analysis and modelling of the practicality of introducing the funding and financing options identified and the scale of funding that could be raised; and
- Assess financing issues, outline options and discuss with financing experts on requirements to establish a robust financing package (for example to mitigate risk).

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