Sustainable transport for North-West Europe’s periphery

Sintropher is a five-year €23m transnational cooperation project with the aim of enhancing local and regional transport provision to, from and within five peripheral regions in North-West Europe.

INTERREG IVB

INTERREG IVB North-West Europe is a financial instrument of the European Union’s Cohesion Policy. It funds projects which support transnational cooperation.
Working in association with the POLIS European transport network, who are kindly hosting these briefing papers on their website.

Report produced by University College London

Lead Partner of Sintropher project

Authors: Charles King, Giacomo Vecia, Imogen Thompson, Bartlett School of Planning, University College London. The paper reflects the views of the authors and should not be taken to be the formal view of UCL or Sintropher project.
## Table of Contents

Background .................................................................................................................................................. 6  
Innovative financing for transport schemes - increasingly important ....................................................... 6  
Transportation Levies .................................................................................................................................. 7  
  Financial Mechanism ................................................................................................................................. 7  
  Attractiveness ........................................................................................................................................ 7  
  Risks ....................................................................................................................................................... 8  
Transportation Levies Case Study: Seattle, USA .......................................................................................... 8  
  Financial Specifications ............................................................................................................................... 8  
Why the mechanism was chosen in Manchester ............................................................................................ 9  
Financial Specifications of Case Study ......................................................................................................... 9  
Benefits ..................................................................................................................................................... 10  
Drawbacks ................................................................................................................................................. 10  
Assessment ............................................................................................................................................... 11  
  Future Prospects and Transnational Relevance ....................................................................................... 11  
Transnational relevance: Europe-wide .......................................................................................................... 12  
Further information .................................................................................................................................... 12
Background

This briefing paper is one of a series that together comprise a European reference resource for innovative approaches to financing transport schemes (capital costs) with particular reference to light rail and tram-based schemes in cities and regions. The approaches are also relevant to capital financing of transport schemes generally.

The resource is one of the Investments undertaken for the Sintropher project funded under the INTERREG IVB North West Europe Programme for transnational co-operation. The overall aim of Sintropher project is to develop sustainable, cost-effective solutions to improve connectivity to, from and within poorly connected regions in North-West Europe - to use innovative transport links to connect peripheral regions of NWE with the core European transport network of high-speed trains, via effective interchange hubs.

There has been a particular focus on tram-train systems which allow local trams to run on to national rail networks, pioneered in Germany, firstly in Karlsruhe and developed in Kassel, which allow urban tram systems to extend over national rail tracks to serve extensive city regions. The project has also looked at other innovative forms of tram systems such as single-track tramways, as well as high-quality transport interchanges that link such systems to major national or transnational rail or air hubs.

The project began in late 2009, with fourteen partner agencies in five EU Member States, and lead partner University College London (UCL): Valenciennes (France); the Fylde Coast (UK); West Flanders (Belgium); North Hesse (Germany); and Arnhem-Nijmegen (Netherlands). Participants included public transport operators, local authorities, regional transport agencies, and universities.

They have worked together on a series of feasibility evaluations, pilot investments and demonstration projects, as well as comparative analyses of EU best practice. The total budget is more than €23m, with funding part-financed by the EU’s INTERREG IVB Programme.

A €1.5m project extension in 2014, covers follow-on work to capitalise on results from the initial project, and added a fifth objective: to test technologies for low cost transport links in different territorial contexts, plus integrated territorial corridor plans that help these links unlock wider economic and regeneration benefits; and better recognise these in business cases. This included two new partners (total now 16) and two extra demonstration regions (total now 7) in West Flanders Brugge-Zeebrugge (Belgium) and Saar-Moselle (a cross-border region France-Germany).

Innovative financing for transport schemes - increasingly important

Results in the European demonstration regions, plus topics at Sintropher Conferences and Workshops indicate that new tram-based or tram-train proposals are usually technically feasible and can often offer a reasonably positive investment case - especially if the case goes wider than conventional cost-benefit analysis (CBA) to include realisation of territorial objectives and benefits, such as economic growth and social opportunities.

But implementation can be impeded by lack of available funding due to cuts in public expenditure following the European economic crisis of 2008 and subsequent recovery efforts by national governments. Regions that are weaker in population or economic terms have even more difficulty in justifying an investment case in terms of public expenditure, so innovative financing is of growing importance - and much can be learned from approaches in different European countries.
Transportation Levies

A levy is an administrative action by a governmental body under statutory authority, without going to court, to collect a sum of money in order to satisfy a household or individual contribution to a set funding initiative. Based on governmental power and decision, the local authority can levy upon a variety of possible sources, including wages, bank accounts, social security payments, accounts receivables, insurance proceeds, and property/households. These funds provide a large pool of public capital, which is then used for the pre-ordained plan or scheme that has been presented by government in order for the levy to be approved.

Multiple variations of transportation levy enforcement exist. Methods of imposing the levy include property tax, development and zoning permit fees, vehicle purchase prices, etcetera, allowing for a creative implementation of the levy in a way that best suits the needs of the region. Generally, the levy is imposed on households, in order to target all residents of the area.

Financial Mechanism

How it Works

The transportation levy is collected from all households within a region, in order to provide a blanket funding mechanism that is contributed to by all who will benefit from the transportation improvements. In order to implement a transportation levy, approval will be needed by local authorities (Councils) and/or the public (a referendum). Depending on the political situation in the particular region, a referendum may or may not be needed.

Although the levy type depends on the local authority that implements it, a common means of collecting the levy is in the form of a property tax amount, levied on all properties within the districts. The levy is collected on a yearly basis, for the set duration of the levy term.

Deposit of Levy Proceeds

All levy proceeds are placed in and segregated within the transportation fund that they are financing. The levy proceeds may be temporarily deposited or invested in such manner as may be lawful for the investment of a city’s money, and all consequent investment earnings will also be deposited in the transportation fund. The local authority responsible for the levy is able to create other sub-funds or accounts as may be needed to implement the purposes of the transportation fund, depending on the complexity of the transportation plan/scheme that is being funded.

Use of Funds

Funds gathered from the levy can be used differently year by year, in order to best reach the goals of the transportation plan connected with the levy. Local authorities are encouraged to seek to maximize the potential of levy proceeds by obtaining complementary grant funds, by engaging in partnerships with other agencies, and by identifying improvements in efficiencies and effectiveness so as to make levy funding go further.

Attractiveness

- Offers blanket coverage of a region, targeting all households and gaining universal contribution to the transport improvements
- The levy is designed to fun transit and improvements to the transportation environment, which benefits households that utilize public transit and/or cannot use a car; funding for this comes from everyone
- A shift of payment for transit from transit users (specific) to road users (everyone)
• Modal shift can be encouraged through a prioritization of transit and walking/cycling improvements through the levy, leaving road improvements for drivers to come from existing public funds (thus limiting their scope)
• Given the political will (and enough pressure), the government could off-set any negative impact through rebates etc. for lower-income households
• General horizontal equality in payment method

Risks

• Higher impact on lower-income households due to levy; if not addressed by government rebates or other methods of tax equality, lower-income salaries would be more affected
• General vertical inequality between salary levels; higher-income households are note
• Difficult to justify to car lobby why a blanket tax mechanism should be used, versus targeting users of public transit
• Without a political champion or strong political will, a referendum could take place to poll the public about whether to implement the tax; the public will react poorly to applying a levy for the benefit of a service that they will not necessarily use

Transportation Levies Case Study: Seattle, USA

TRANSPORTATION LEVY TO MOVE SEATTLE

Financial Specifications

**Amount(s)**
£365 million

**Targeted Groups**
All households of Seattle

**Timeline**
Implemented in 2006 for a 9 year term, completing in 2015

**NB** – a further transportation levy has been proposed, continuing from 2015 for up to a further 9 years, providing £900 million in public capital
### Innovative Financing for Transport Schemes

<table>
<thead>
<tr>
<th>Project/Initiative</th>
<th>Status</th>
<th>Costs</th>
<th>Alternative Finances Used In Tandem</th>
<th>Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bridging the Gap</td>
<td>Completed</td>
<td>$365 million</td>
<td>Commerical Parking Tax</td>
<td>2006, for up to 9 years</td>
</tr>
<tr>
<td>Move Seattle</td>
<td>Ongoing</td>
<td>$900 million</td>
<td>Federal Transit Administration Grant</td>
<td>2015, for up to 9 years</td>
</tr>
<tr>
<td>- To help fund Bicycle Master Plan (2014), Transit Master Plan (2012), and the Pedestrian Master Plan (2009)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Why the mechanism was chosen in Manchester
- Recognition of a backlog of transportation needs and repairs within the city; tax implemented to provide the yearly collection of capital to fund these necessary public infrastructure investments

#### Financial Specifications of Case Study

**Background**

In 2006, Seattle voters passed a nine-year, $365 million levy for transportation maintenance and improvements known as Bridging the Gap. The levy is complemented by a commercial parking tax. For the last eight years, this levy has provided close to 25% of SDOT’s funding. It has been critical to addressing our maintenance backlog, improving transit service, rehabilitating bridges, and making our sidewalks, streets, and other structures safer.

**How It Works**

The transportation levies have been paid for by targeting property taxes, thus including all households in the charge. The Bridging the Gap levy cost the median Seattle household approximately $130 per year for 9 years. The levy would be paid for through a property tax that would cost the median Seattle household (valued at $450,000) about $275 per year, also for a period of nine years.

Funds will be collected on an annual basis, through the same collections as property taxes. These funds will be channelled into separate holdings that will be used specifically to meet the targets laid out within strategic Plans, and by the levy proposals and reports.

**What the Levy Contributes To**

The levy funds programs to address the maintenance backlog for paving; pavement improvement and repairs; bridge repair, rehabilitation and seismic upgrades; tree pruning and planting; transit enhancements; and other much needed maintenance work. Funding also supports projects that implement the Bicycle and Pedestrian Master plans, create a Safe Routes to School Program, improve
Innovative Financing for Transport Schemes

transit connections and help neighbourhoods get larger projects built through the Neighbourhood Street Fund large project program.

Bridging the Gap achievements to date have been less transit-oriented and more focused on general transportation maintenance and improvements (see below).

Bridging the Gap achievements:

- Building 107 new blocks of pavement
- Striped 150 miles of new bike lanes
- Replacing over 90,230 small, faded street and regulatory signs
- Re-marking over 5,200 pedestrian crossings
- Installing 255 pedestrian countdown signals
- Rehabilitating, repairs, or seismically retrofitting 13 bridges
- Completing 48 Safe Routes to School projects
- Funding major capital improvement projects including Spokane Street Viaduct and King Street Station

However, the new Move Seattle transportation levy will build upon the previous improvements, and focus on addressing the transportation infrastructure plans, as laid out in the Bicycle Master Plan (2014), Transit Master Plan (2012), and the Pedestrian Master Plan (2009). These schemes all focus on:

- Taking care of road repairs and improving road safety
- Investing in the Seattle transportation system and provide public transport for the growing population base
- Improving safety and mobility for all travelers and modes
- Contributing to an integrated and well-connected system that is easy-to-use, affordable, and convenient

Benefits

- Guaranteed large quantity of capital amount over a set period of time; this means a transparent amount
- Government interventions can offset property tax effects for lower-income individuals, making the levy less of a strain for low-income households
- Can set exact amount to collect from the tax, rather than be dependent on an uncertain influx of capital from predicted outcomes
- Public (government) control allows for public delivery of projects, and public control over the master planning of regional development and infrastructure provision

Drawbacks

- Lacks specification of funding distribution; instead, targets are set but no specific monetary values are attributed to the projects
- Thus, becomes more difficult to judge success and delivery of schemes, in particular to measure success and quality
- Includes vehicle and road infrastructure upgrades, which could be prioritized
- Due to lack of specific capital allocations per project
- Association with transport and political agendas can have positive or negative effect on public opinion, depending on social and political atmosphere within the region
- Requires a referendum (generally) in order to pass; if public transport is prioritized, strong political will may be needed to ensure implementation of levy
Assessment

Success of Financial Mechanism

The circumstances of Seattle have provided for a successful transportation levy, and an approved continuation of the levy-style financing method. The public within the city recognise that Seattle’s geography has run out of space for cars, and that congestion and traffic is out of control; as such, there is a general acceptance for schemes to improve mobility for other modes, at the expense of the private car.

The Bridging the Gap levy was able to achieve all the targets that it laid out in its master plan (as seen in the list above). However, no mega infrastructure projects or projects of extremely large scale were implemented during this time, nor were they mentioned as major targets. As such, the transportation levy has not had to hold up to large-scale financing needs yet. The current levy, Move Seattle, has been recognised as insufficient to meet the needs of all large and some medium-sized transit schemes, and will require additional sources of funding.

Public Perception

Public perception of transportation levies can be difficult, as it targets all households, including those who do not believe they should pay for transit upgrades (such as vehicle owners). In locations such as Seattle, which is built on a North American transportation model that focuses on the car, a transportation levy for public transport would not be as popular as regions in more transit-oriented parts of the world. Furthermore, increased taxation tends to be a sore topic, where households feel that they are having to ‘foot the bill’ for others’ gain. As such, Seattle has noticed high political pressure, encouraging a hyperlocal allocation of the levy for small schemes such as pavement improvements; meanwhile, large-scale projects such as transit infrastructure has been targeted by nay-sayers. This has not, however, stopped the levy from being approved by the Council.

In order to overcome negative public opinion, several steps can be taken. In particular, strong and supportive local authorities can get involved and run a strong campaign to properly inform the public on the issues surrounding public transport and the overall benefits the city will experience.

Future Prospects and Transnational Relevance

- Must acknowledge the difference between countries in regards to property taxes (both regulations and collections), which impacts how the scheme is implemented
- By collecting the transport levy through property taxes, it means that more people will ‘take a stand’ if they do not approve of the levy (e.g. if a vehicle driver who is opposed to public transit)
- This can be overcome through extensive public consultation campaigns and a stronger political will backing the push for increased public transport schemes
- Currently more effective in larger metropolises, with a greater property tax pool
- Tends to have a greater economic and demographic range within the municipality, thus taxing a greater diversity of individuals rather than a particular demographic from a smaller region

Transportation levies are applicable in most places, as they are an independent fee that is associated with funding a particular plan and/or scheme. The levy can be created specifically for a region, which allows bespoke funding options for each scheme. Options of funding are varied and unique, meaning that transportation levies can fit any region’s specific funding needs.

A large reason why transportation levies are seen as successful funding options in North America is due to the lack of transport-specific taxes or high tax rates that allow for greater arbitrary public expenditure. In a European situation, taxes or public expenditures may already be used for extensive transport initiatives, thus not necessitating a transportation levy. It is very case-specific, and should undergo extensive public consultation before implementing the funding mechanism.
Transnational relevance: Europe-wide

Funding of major transport schemes is an issue faced by many cities and regions across the North West Europe Programme area and indeed more widely across Europe. Traditionally, in most countries tram-based links have been financed by public funding from national or regional government authorities, sourced from either taxation or borrowing or a combination. (In regimes where there is a national or regional transport infrastructure authority, operating profits may also assist).

But as with Sintropher partners, implementation of such schemes is facing a lack of available funding due to cuts in public expenditure following the European economic crisis of 2008 and subsequent efforts by national (or regional/city) governments, to recover. So innovative financing is of growing importance, and much can be learned from approaches in different European countries.

The financing approaches and city/region case examples on the reference resource are context-specific and reflect:

• the geographical context: the physical scale of the scheme and scale of capital cost. Obviously a major scheme with high capital cost of, say, €50m + may be beyond the resources of a single city or regional authority, and require a national contribution in a “cocktail” approach. The investment case will usually be stronger in a major dense metropolitan area than smaller regions with lower population and (possibly) lower or weaker economic activity.

• the organisational context: which level of government and/or relevant transport authority or agency is the primary initiator of the scheme - national, regional, or city - will influence the financing opportunities and options available.

• the legal context: the nature and extent of the powers and responsibilities of the initiating authority, and the processes/procedures, to actually pursue any of the financing approaches.

But even though the various approaches and case examples are context-specific, their transnational relevance is strong:

• the approaches offer a stimulus and possibilities for wider thinking by cities and regions in other European countries, about how to assemble capital financing for transport schemes,

• in all countries, the reality of capital finance for transport infrastructure means that a “cocktail” approach is often the most practical way forward - and the approach of mixed public-private sector finance is an increasingly pragmatic basis

• some or all of the various approaches might be potentially adaptable within the particular organisational and governance regime of another country, using similar powers or processes

• the approaches offer possibilities for lobbying by city and regional authorities, in order to secure from national government the powers and competences to utilise new approaches (as has happened in the UK - for example local authorities have in recent years acquired powers to implement tax increment financing (TIF) although subject to safeguards over risk and borrowing; similarly, powers to enact a community infrastructure levy (CIL) on developments in their area, subject to local consultations and examination of viability and fairness for private developers.

The reference resource should be seen from this perspective, as a means to promote knowledge transfer and learning across different NWE countries and regions.

Further information

This paper was produced by UCL Bartlett School of Planning (Sintropher team members Charles King, Giacomo Vecia, Imogen Thompson) using desk research and expert comment. The paper reflects the views of the authors and should not be taken to be the formal view of UCL or Sintropher project.
Partners

Sintropher is coordinated by

In partnership with

Co-funded by the INTERREG IVB programme for North-West Europe