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"Shiny steel rails which tie communities together": The Cross River Tram and barriers to sustainable transport in U.K. spatial planning.

By MARTIN CONWAY COOK B.A., M.A.

Being a dissertation submitted to the Faculty of the Built Environment as part of the requirements for the award of the M.Sc. Spatial Planning at University College London.:

I declare that this dissertation is entirely my own work and that ideas, data and images, as well as direct quotations, drawn from elsewhere are identified and referenced.

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CONTENTS

ABSTRACT:

Soaring energy prices, congestion and climate change impel re-assessment of urban transport. Most large cities supplement bus services with metros and overground railways. Across Europe, many towns have modernized early C20 tram systems with reserved tracks, France and Spain reversed policies of removing trams and successfully created new systems. Yet in Britain, difficulties beset light rail despite inadequate buses and trains. Much literature suggests financial constraints and political priorities militate against sustainability: agendas of curbing long-run public investment in infrastructure and cheaper, market-led solutions (buses, congestion charging)..

Others contend schemes with sound cases fail, or suffer delay, due to convoluted British planning systems. Comparisons are made with quickly implemented tram projects abroad, as in France. If processes could speed up, costs should reduce, building political support.

Research focused on individuals with involvement in the Cross River Tram. This would be the first in modern history in inner London, the first wholly on-street rather than disused railway viaducts. Dense population and the absence of deregulated buses provide a robust 'business case'. Questionnaires were sent to about 25 individuals, with 18 returned. Questions covered matters including perceived barriers and delaying factors in planning and TWA (Transport and Works Act) procedures and broader political/ economic factors.

Respondents generally considered the main problems are government financial curbs and lack of will, not planning procedures. Few respondents had detailed suggestions on simplifying TWA/ planning regimes. Currently, it seems the new Mayor may cancel CRT on cost grounds, despite congestion and environmentally priorities. Nonetheless, its promoters seem to have done everything reasonable to avert hurdles from the planning process. While the TWA and related procedures are rarely the determining factor, they mean that UK LRT projects take longer than anywhere else in Europe, which adds substantially to overall costs.

Photo 1: Modern UK street running tram: Nottingham feb'08.

Photo 2: The last 'Cross River Tram' – north entrance to Kingsway tram Tunnel, August '08.

1. INTRODUCTION:

1.1 SUSTAINABLE URBAN TRANSPORT.

The 'energy crisis' challenges unsustainable lifestyles. Transport is the fastest growing source of greenhouse gases, mostly thanks to petrol vehicles, predominantly passenger transport. Pollution is widespread, congestion strangles the largest cities. There is an urgent need for environmentally benign transit, e.g. electric vehicles producing much less CO2 per passenger-mile than alternative modes (even for carbon-generated electricity). (Litman 2006, p.30). However, **t**he downside of tracked vehicles is expensive dedicated infrastructure (cars generally externalize costs). Construction of heavy-rail metros may attain £1bn per mile (Jubilee Line extension), such networks implylng cities of well over a million. Light rail technology compromises between metros and buses. Advantages include no local pollution, high capacity (up to 250 per vehicle) and smooth riding.

Many European 'legacy' tram systems were upgraded post-1945, Britain was one of several countries that scrapped classic tramways in the cheap energy era. While France and Spain reinstated light-rail networks after 1980, the U.K. lags behind among major European states, which requires investigation. Allegedly, continental countries have strong governments which force through essential infrastructure despite public objections , while in Britain so-called 'nimbies' have too much say. Is UK spatial planning too ineffectual for this challenging task?

1.2 LIGHT RAIL AS A SOLUTION IN BRITAIN.

There have been seven tram / Light Rail Transit systems in the UK built in the last 30 years, two fully segregated on heavy-rail alignments, the rest with some street running. Numerous schemes were floated, but no new ones are currently under construction in England. It seems anomalous that conurbations of over 500,000 (Leeds, Bristol) rely on suburban trains on Victorian alignments, or bus services suffering congestion. Cities like Zurich (pop. 375,000) have high car ownership yet much higher public transport use with extensive LRT systems. Many transit systems have been altered to serve new sources of traffic as cities develop. This

implies the ‘joined-up’ approach of spatial planning, not traditional UK land-use regulation.

This research concerns problems facing LRT in England under current legislation, given its success in France. Some attribute this to French administrative procedures allowing speedy decisions and construction (Egis Semaly & Faber Maunsell 2003, pp.11-16; Walmsley & Perrett, pp.20-48) . The working hypothesis however, is that barriers are political and financial – Cost-benefit analyses (COBAs) are skewed by long-term government policies. The Cross River Tram will be the first modern British system entirely street-running. It emulates the French model of routes along streets, with reserved track and junction priority. Though initial construction might be controversial, there is no chance of a poorly-used system given under-capacity of ‘tubes’ and buses in this corridor. Fears of wasting scarce funds should be irrelevant here. Is such a proposal held back by inflexible or restrictive planning regulations?

1.3 STRUCTURE OF THIS PAPER:

- This introductory section explains modern urban needs for mass transit systems like light rail and asks what prevents their wider take-up in Britain. This context explains the choice of the London Cross River Tram project, one with seemingly numerous advantages and few conceivable drawbacks.

- The second section outlines academic and specialist literature dealing with relationships between planning frameworks and public transport world-wide. It focuses on the recent history of UK government attitudes to transport investment , including cancelling or delaying numerous schemes in provincial cities at advanced stages (in Liverpool, even the rails were ordered). This situation, something unheard-of in most E.U. countries where metros or light rail (LRT) networks are normal, has been analysed by consultants working for transport operators, the National Audit Office and the House of Commons Transport Select Committee.

- The third section provides a brief factual survey on the origins and rationale of the Cross River Tram project to date;

- The fourth part draws conclusions from the secondary evidence, and outlines the methodology applied given the constraints (interviews with professionals involved in the CRT project).

- The fifth section contains detailed results of the survey carried out, covering planning related issues considered to place barriers in the way of LRT schemes.

- The sixth part summarizes the analysis of the survey and a short final stage of supplementary interviews with key senior contacts with knowledge of the project.

- The seventh and final part outlines final conclusions of the research carried out, including recommendations for future research.

- Apart from the bibliography, the appendices contain background data including the questionnaire, full responses, relevant planning policies, and issues raised in previous work on barriers to light rail.

1.4 SEQUENCE OF RESEARCH:

Early April to June 20th	• *background reading and preliminary scoping*
June 20th to July 5th	• *production of draft literature review and introductory methodology for checking by supervisor*
July 5th to 20th	• *composing questionnaire, writing up methodology etc*
July 20th to August 5th	• *sending questionnaire to selected contacts [deadline extended from Aug 1st to Aug 8th]*
August 3rd. to 8th.	• *entering returned forms into spreadsheet*
August 7th to 15th	• *writing up results*
August 12th to 18th	• *writing interim conclusions and approaching selected key contacts for follow-up interviews*
August 17th to 21st	• *writing concluding section and finalizing format of full draft version (minus appendices)*
August 22nd	• *submission of draft text including abstract & references*
August 22nd - 31st	• *final tidying up and checking of text including finishing appendices.*

1.5 RESEARCH EXCLUSIONS:

Given space limitations, the following will *not* be addressed:-

- *are increasingly motorized cities with high car ownership likely or sustainable?;*
- *Whether significant modal shift to public transport is feasible;*
- *Do light rail schemes have better overall results than other modes (e.g. guided buses);*
- *Whether compact cities are desirable, or can be created via better public transport;*
- *Technical aspects (platform height, energy consumption);*
- *Detailed cost-benefit analyses of projects;*
- *Comparison to implemented tram projects in Dublin and Edinburgh;*
- *Urban design and public realm in tram corridors*

2. LITERATURE REVIEW:

The aim of this review was firstly to consider work on 'planning' related barriers to LRT development, but secondly to compare analyses on broader issues that prevent the schemes from taking off. In fact, much of the literature turned out to be involve the latter issues – finance, politics, cultural/ lifestyle concerns.

2.1. GLOBAL PERSPECTIVES:

2.1.1 TRANSPORT AND SUSTAINABILITY.

Modern civilization outgrows Earth's 'carrying capacity' (Lovelock 2006). Burning hydrocarbons for transport boosts greenhouse emissions, and resource depletion. By 2050, two-thirds of a population of nine to 10 billions will be in cities. Electric mass transit will be increasingly used in large cities, but even in the biggest, heavy-rail or metro networks cannot go everywhere: other modes must serve less-used corridors.

David Banister (2005, ch.4), discusses options for sustainable transport, plus barriers to their implementation. He quotes six components for achieving sustainable urban transport from the ECMT (2001): supportive national frameworks, institutional co-operation, decentralized resources, effective public participation, positive regulatory framework and comprehensive pricing structures. Four of these imply involve spatial planning regimes. However Breheny

(1997), is sceptical of the feasibility of hard-line compact city approaches despite ecological benefits – given public preferences for low-densities and motorized mobility. Like most authors, he suggests key issues are political not technical or administrative (e.g. planning). These issues relate to all mass-transit modes.

2.1.2 URBAN MASS TRANSIT:

There is extensive literature about urban transport, much relating to North America where some cities encourage densification with modern transit (e.g. Portland, Oregon; see Seltzer & Cotugno, 2005). The most comprehensive survey is Babalik (2000, pp.297-304, see also Babalik-Sutcliffe 2002). She breaks down factors for success of urban rail systems into four categories:

- 'external' (socio-economic) factors;
- system planning (location, PR, design);
- operation (marketing, integration);
- 'supporting policies' – transport and urban planning (p.2).

The last category is most relevant – e.g. integration into urban projects, stations at trip generators, Transit Oriented Development, and pedestrianization. She notes that fragmented local government makes co-ordination problematic.

Walmsley and Perrett (1992, pp.118 & 125-26), comparing global LRT , considered political leadership and traditions of rail-oriented planning were needed for successful light rail. Cervero (1984) analysed LRT schemes in North America preferred to heavy rail for cheaper construction while less polluting than buses. Adopting under-used railway alignments created sub-optimal routeing along industrial zones, minimizing regeneration and creation of denser neighbourhoods. Some literature suggests LRT can be a 'soft option' to increase overall accessibility while not offending road-users, perhaps freeing up streets for extra traffic if some commuters switch modes.

The 'planning' issues raised are less formal administrative procedures, more compact city type agendas. It seems surprising that the USA could re-introduce tram systems in around 20 cities since the 1970s, with varying success, including many sprawling sun-belt conurbations not the more 'European' north–east (Dallas, Sacramento, Los Angeles). Clearly, urban

spatial structure is not the sole issue here.

2.2 RECENT EUROPEAN BACKGROUND:

There has been extensive debate relating transport, spatial planning and sustainability, especially from Dutch scholars. Nijkamp and Rienstra (1996) see clear links between compact cities, collective transport and sustainability - their respondents indicate metro/ light rail construction would assist this (p.196). However, European Union transport policy since the 1950s rarely impinges on urban transit (Stevens 2003). The European Spatial Development Perspective hardly mentions light rail.

The comparator for UK light rail is the successful French revival (20 reborn networks since 1985). Egis Semaly & Faber Maunsell (2003), studying eight French systems, state this "…is not possible in Britain under current public transport policy." They attribute French success to hypothecated funding (*versement transport)*], political leadership (Mayors) and integration with land-use planning/ other modes. Moreover, French planners have a broader concept of 'success' than cost-minimization or 'farebox recovery' of costs (ridership is assured by removing competing buses). Routes serve busy corridors with easy pedestrian access and close-spaced stops. (p.34), again a spatial planning issue. One highly successful system is Montpellier (Mills 2001), opened in 2000; the third line is already under way and original vehicles were lengthened to enlarge capacity. The mayor and authority planned over years to ensure major new commercial and educational developments were placed in the proposed tram corridor, hard to imagine with British planning systems.

2.3 BRITISH CONTEXT :

2.3.1 TRANSPORT PLANNING POLICY SINCE 1979.

There was a period of integrated transport and land use planning around 1965-75, reflected in Passenger Transport Authorities (1968 Act) for conurbations (Simpson 1993, xx). Glaister *et al* 2006 note the retreat from joined-up planning under neo-liberal hegemony in the 1980s; environmental pressures forced revival of integrated planning and transport, post-1990 . Governments instructed councils to implement 'sustainable' transport while retaining central

control. Councils and PTAs neither control buses nor implement rail infrastructure independently (Simpson 1993). No public body (outwith London) actually plans transport – due to bus deregulation. Vigar *et al* (2000, ch.6) analyse a shift from engineering-led 'predict and provide' to demand management for traffic; this trend is slowed by 'silo mentality' both between professions (planners v engineers) and local authorities. The above is an unpromising context for new LRT projects since a conurbation-level holistic approach is crucial for establishing robust business cases.

The Transport and Works Act 1992 aimed to curb the complex process of special parliamentary bills for projects. However, procedures remain cumbersome (Glaister *et al* p.155) . Parliament debates general features of schemes, which face public inquiries to resolve detailed objections; if parliament approves, final decisions are by the Secretary of State. Projects are seen as 'one-off': not local implementation of a national strategy for sustainable transport or environmental change.

Governments no longer disparage integrated transport planning as interference with markets and the 'great car economy' (M.Thatcher). It is seen as essential to sustainability along with spatial planning. The government's Transport PPG13 (ODPM 2001 paras 7 & 20) stresses integration in transport priorities and development plan allocations. Para 74 (*ibid*) encourages new or extended rail systems given "value for money". Vigar and Stead (2003) review recent policy where they detect inconsistencies between demand management and infrastructure expansion. New Labour moved towards integrating transport and planning and multi-modal approaches, without giving councils means to pursue such agendas (*ibid* pp.61-69).

The paradox for light rail is that while governments abandoned the 'predict and provide' ethos of endlessly building roads, they failed to shift investment to sustainable modes, from concern on public finances or fear of alienating motoring interests. It is hard to reconcile sustainability with this approach. It appears decision-makers have not regarded serious modal shift from cars as feasible, and consider the higher (initial) costs of electric transport rule it out. Government spokespersons do not concede electric vehicles are intrinsically more ecological than petrol/ diesel ones, though the evidence is established. For many years, road investments could be justified by (notional) time savings to drivers, yet rail schemes had to 'stack up' financially.

2.3.2 RECENT U.K. GOVERNMENTS AND LIGHT RAIL:

The above constrains any transport infrastructure investment, but LRT is an obvious option given limited budgets for ambitious metros. Much transport research says little specifically about street-running light rail. An exception is Barry Simpson's *Urban Public Transport Today* (Simpson 1993, pp.36-68) assessing the numerous LRT schemes of the early 1990s. He argues financing regimes (need to bid for grant under s.56 of the Transport Act, *ibid p.*51) impels promoters to make exaggerated claims re: system usage, regeneration and traffic congestion. Abroad, improving convenience of public transport is an end in itself (pp.37, 49). He suggests poor route choice reflects a desire for 'no losers' – previous schemes failed due to hostility to demolition, perhaps with inadequate compensation. Some 1980s/90s LRT schemes were built on railway alignments to minimize costs and local 'nimby' [1] opposition. This meant they might avoid desired trip generators (shopping centres, colleges…), as in Birmingham where trams stop 10 minutes walk from the shops (*ibid*., p43).

Simpson argues street-running (cf. tunnels / viaducts) scores on cost, accessibility and visual impact (*Ibid* ch.9). This discussion implies the absence of adequate spatial planning frameworks to pro-actively prioritize for new transport projects in conurbations, and ensure major developments relate to existing or proposed transit corridors. Planners cannot tell developers "put your scheme *here* because of the new LRT line", if they have no powers to ensure the line is ever built.

Local authority fragmentation inhibits sustainability – if one city restricts car access in favour of LRT, motorists may choose out-of-town centres (*ibid.* p46). Equally, UK centralization of power contrasts with continental subsidiarity (p48). Councils produce transport plans ('LIPs') without controlling service provision (see above). Outside London, suburbanization created low densities unsuited to rail modes. Simpson concludes success or failure depends on land use and traffic management policies (integrated planning gives investors certainty). However, this concerns success of *existing* schemes; this is important for new projects since 'poor performance' of these systems may count against them, but does not exhaust potential barriers.

The 1997 *New Deal for Transport* White Paper downplayed light rail as slow and expensive

to construct. In 2000, a House of Commons Select Committee supported more LRT networks plus car restraint, and planning guidance emphasizing TOD. Later, the DTp *Ten Year plan for Transport* proposed building 25 schemes by 2010, a target rapidly abandoned. Knowles and White (2003, p.146) concluded "Light rail's future in the UK looks bright" , but this proved premature; shortly afterwards several schemes were cancelled on cost grounds. The consensus is that failure of business cases to attract government subsidy was the main issue, not delays or lack of joined -up regional planning (see Knowles 2007)

2.3.4 THE N.A.O. REPORT:

A National Audit Office report (NAO 2004) scrutinized barriers to growing light rail, from a survey of local authorities considering LRT is feasible. These were:-

1. Costs of construction/ equipment;
2. 'Poor financial performance' of some systems;
3. No local funding sources;
4. Lengthy processes and uncertainty re: funding
5. Lack of in-house expertise and steer from DfT.

Of these (4) is most relevant here, but NAO saw cost issues as the main barriers. The modern seven systems took an average of 8.5 years from seeking legal powers to commencing service (excluding initial feasibility studies), nearly as long as massive schemes like the Jubilee Line. NAO noted the TWA aimed to save parliamentary time; previous bills took 2.5 years on average. All the schemes received enough objections to merit public inquiries. While the DfT had targets of three to six months for Ministerial decision post-inquiry, this was only met in four of 20 applications (p.35). For Leeds, inquiry plus decision processes totalled 53 months. In 2002, consultants recommended speeding up post-inquiry processes by scrutinizing applications earlier, updating model clauses and improving guidance for promoters. The delay fell to seven months.

The NAO report was quoted for its conclusion that some schemes had underperformed, cf. optimistic travel forecasts. [Yet operators lack vehicles for extra passengers, and ridership increases even on less successful systems.] It stimulated investigation by the Commons Transport Select Committee (House of Commons 2005a). They received extensive evidence

on barriers to new LRT projects from authorities and operators (House of Commons 2005b).

Several studies were commissioned by light rail interests comparing existing LRT schemes: e.g. Steer Davies Gleave (2005)'s report riposting to the NAO. It analysed five hypotheses on impacts of light rail (transport efficiency, congestion relief, regeneration, social inclusion and environmental/ safety). They concluded the seven UK schemes were effective in all spheres, and modal integration plus junction priority were key to success (pp.40-43),

2.4 LONDON LIGHT RAIL ANALYSIS:

Mass transit in London is dominated by London Underground. This carries almost as any passengers as the whole national rail network itself. Nonetheless expansion has been slow, with only one line built since 1970s (Jubilee Line which took 25 years to complete). The cost of such projects means 'tube' extensions are strictly limited. Other alternatives involve linking heavy-rail overground services across central London similar to Paris's RER lines (Thameslink, Crossrail); again, costs are hard to fund and Crossrail was discussed for 20 years before approval. Bus services are saturated at certain times as leisure and business travel increases to serve a population that has grown by nearly a million in 25 years. Light rail could provide feeder services to LUL's 'metro' network, in inner and outer London, with better quality riding/ vehicles, higher capacity, and lower pollution (than buses).

Wood 1994 outlined a plan for street-running trams across central London, using existing bus priority routes. He argued this benefits accessibility to local services similar to buses, unlike modes in hard-to-access tunnels (cf. German LRT networks). While highlighting costs imposed by privatization, he sees the 1992 TWA as 'streamlining' the parliamentary bill procedure (*ibid* pp172-73).

In the past 25 years, two light rail networks have been built in London: the Docklands Light Railway (all on segregated track) and Croydon Tramlink, including limited street running. Both were predominantly conversions of old heavy-rail routes. The CRT project is entirely new for London as a street running scheme, since the old trams disappeared in 1952, making it a touchstone for LRT feasibility in Britain, hence this piece of research

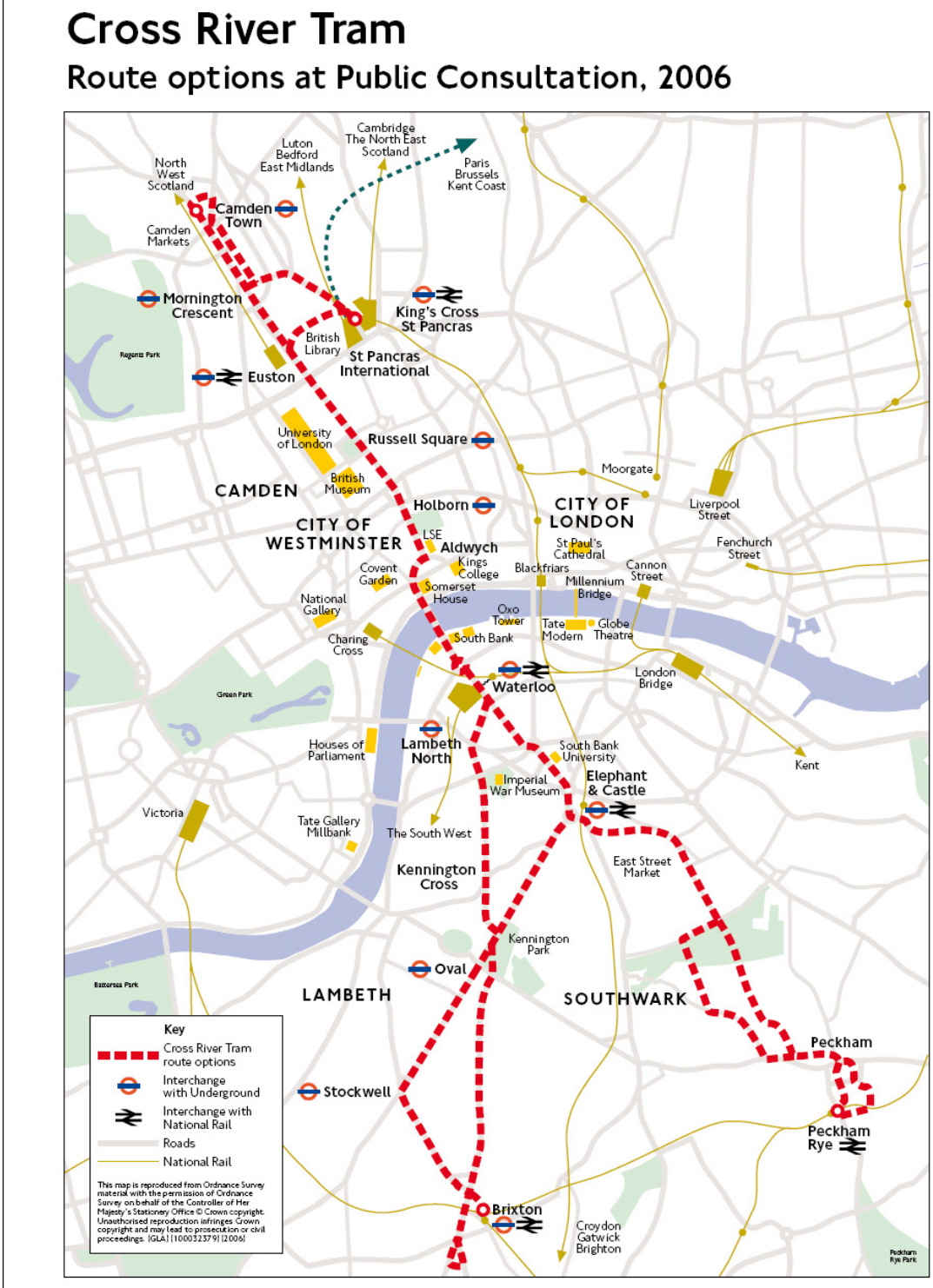
3. THE CROSS RIVER TRAM PROJECT:

3.1 CROSS RIVER TRAM SCHEME ANALYSIS:

There is currently no published literature on CRT, but a range of studies have been commissioned by Cross River Partnership [see also Mole 2006, Pasquale 2008]. The CRP, which developed the idea, combines central London boroughs aiming to divert economic activity (e.g. tourism) from the crowded West End to the unfashionable South Bank. Originally, CRT was conceived as a short route from Covent Garden to Waterloo, possibly a bus link. The original TfL report (TfL 2000) analyses options by various criteria (p20). It prioritizes regeneration and environmental benefits, and concludes the highest COBA would derive from high-capacity trams on 90-second headways per direction (i.e. 40 vehicles per hour) (p.48) Parallel bus and tube routes to Holborn from Lambeth / Southwark are grossly overcrowded at peaks, with further growth in jobs forecast.

The most comprehensive analysis is the business case on the CRP web site. This links the CRT into urban deprivation/ bad air quality in areas of high density and population growth in. It recommends higher density 'transit oriented development' (TOD) following the 2004 London Plan, as CRT serves three 'Opportunity Areas' (for extensive development). CRT would complement other major infrastructure (Thameslink 2000, Crossrail, East London Line Extension) (p67). The analysis stresses the effect of CRT in regenerating the corridor it serves (cf. Nottingham). (pp.69-74). Following sustainability agendas, it foresees CRT benefits to economic growth, social inclusion and environmental protection (pp75-80). This is reinforced by benchmarking CRT's benefits against criteria outlined by the National Audit Office (NAO 2004) and Steer Davies Gleave (2004).

Colin Buchanan's report on 'Complementary Measures' (Siraut 2005) focusses on 'adding value' to CRT from business investment, increasing densification and servicing current and future local enterprises (potentially amending UDP/LDF polices) (p.42). They suggest TfL's previous public consultation was seen as failing to engage communities and high–handed (ref:



Map 1: Proposed CRT route options for TfL public consultation

GLA scrutiny report April 2003). This could explain political barriers among decision makers.

Mole (2006) compares CRT with systems elsewhere, re: positive impact on economic regeneration. He considers it has learned from this experience and can emulate their success despite government fragmentation in London. Hass-Klau (2005) underlines advantages of the scheme in pure transport terms (density, interchange, trip attractors). She is sceptical whether linking deprived areas to jobs counters social exclusion, and concerning the scope for densification on the U.S. model (pp.2-5).

CRT is thus a well-designed scheme that 'ticks the boxes' for transport and sustainability goals. It avoids mistakes of previous projects on route choice, has support of local councils, and benefits from a conurbation authority (the Mayor). There are no deregulated buses or dispersed suburbs. This LRT scheme should have no problems being endorsed and constructed as similar ones in France. This is the basis for the research approach below.

3.2 RECENT PROGRESS OF THE SCHEME:

Initiated by CRP, the CRT proposal was adopted by Transport for London (TfL) and supported by Mayor Ken Livingstone. Unlike the abortive West London scheme, it had borough council backing despite localized concerns – traffic diversion at Camden Town, crossing Burgess Park and Peckham town centre. Livingstone even suggested the line could happen in two phases (south of Thames first) if Camden was unco-operative. Broad decisions to serve Euston/ Kings Cross in the north and Brixton/ Peckham in the south were taken early on, but detailed route options were kept open. (e.g. whether the Brixton route would run via Stockwell, or Kennington). Under pressure from anti tram campaigners, new Mayor Boris Johnson is 'reviewing' the scheme (London SE1 2008a). This provoked a cross party call to progress the scheme from leaders of all parties in Southwark (London SE1 2008b). The GLA will debate the scheme on September 9th. (London SE1 2008c).

4. THE OVERALL PROBLEMATIC:

4.1 IMPLICATIONS OF ACADEMIC RESEARCH:

The previous analysis of academic studies and consultants show the difficulties for Britain in emulating the successes of light rail in France. The absence of political lead and financial backing is seen as crucial. The cumbersome procedures in the Transport & Works Act are contributory - Egis Semaly/ Faber Maunsell (2004) say the time taken to approve and build light rail schemes through all stages is 5 years 6 months (most take closer to 10 years from inception and some are unbuilt after even longer, e.g. Leeds, Bristol). However, if the transport planning system included a 'pot' of money for public transport improvements and the government actively promoted sustainable electric transport, such procedures would hardly prevent progress even if slowing it. The aim of this research is to confirm from practitioners whether this analysis is correct – are difficulties faced by LRT projects mainly political-financial, or linked to quirks of UK spatial planning and infrastructure procedures? The hypothesis was that evidence points strongly to the former. One goal of the research was to investigate if regional/local spatial planning can be amended to fit transport-planning procedures, including the TWA.

4.2 METHODOLOGY.

Many problems for light-rail in provincial conurbations (lack of support, low density suburbia, routes away from traffic nodes, deregulated buses) do not apply here in inner London. This study should make it clearer whether the legal and administrative environment (planning frameworks and TWA) is a major factor in delay/ cost escalation, beyond the political/ financial matters noted above. The approach was firstly to compare local and national documents on spatial / transport planning to confirm if they are supportive to sustainable transport. Secondly, a detailed questionnaire was sent out to a range of contacts in TFL, GLA, relevant boroughs, business sector and community groups. The purpose was to see if individuals involved in the project over several years endorsed the hypothesis. Finally, key contacts were approached for in-depth investigation of issues arising, to confirm any need

to which may mean revise or reject the initial hypothesis.

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4.3 QUESTIONNAIRE AND RESPONDENTS

The questionnaire was restricted to 14 main questions (some in two parts). To speed analysis, most were Yes/No, multiple choice or required ratings from one to five on issues [see appendix A]. Three questions allowed further elaboration, to guide the second stage and identify any issues omitted from initial questions. Respondents were asked for their status, professional qualification, and years of experience (to check if responses reflected organizational affiliation or professional background).

While face-to-face interviews would have been better, shortage of time meant the questionnaire was circulated by e-mail (option for interview in person or by phone, none taken up). E-mail problems caused delays, restricting the time for follow-up interviews. It was hoped for complete coverage of the boroughs involved [2], Cross River Partnership and of course the GLA and TFL themselves. In practice, the borough officers were most forthcoming in responses (10 out of 18), but none were received from Lambeth. Ideally, for each organization a spatial planner, transport planner and regeneration specialist were approached. Considerations of time made it impractical to get wider coverage of business and community groups. The latter were confined to Southwark, and the former do most of their input via London Chamber of Commerce. Lack of time also meant not questioning local politicians; however, it seems likely party politics is not crucial to debate over transit in Britain. [3]

Questions were limited to 14 from knowledge of pressures on busy planners, while providing enough scope for a broad range of issues. The first few questions dealt with general issues about CRT, the next few covered spatial planning and the TWA; one question concerned media and community outreach; the final questions, the most significant, investigated barriers and opposition to CRT and similar projects. It was expected non-planners might find some technical questions hard to answer. There was a balance between forcing respondents to choose one alternative, producing more clarity, or allowing a wider range of responses to express complexities. Most of the questions on difficulties with LRT projects allowed a choice of two from six to 10 options, with an ’other’ option to capture unexpected issues.

5. RESPONSES TO THE SURVEY:

5.1 OVERALL BALANCE.

organization type	*number*		*Qualification type*	*Number*
Local government	11		Planners	9
Partnership	2		Transport	2
Regional (TFL/ GLA)	2		Architect	1
Community	3		Civil engineer	1
Business	0		Econ regeneration	4
			Unrelated/ not stated	
TOTAL	18		TOTAL	18

TABLE 1: Respondent Background
Question = JOB TITLE / ORGANIZATION; PROFESSIONAL QUALIFICATION [if any]:

Despite time limits (deadline extended due to e-mail problems), the response was good. Of 25 questionnaires sent out, 18 were returned (all but 2 via e-mail). The balance was two thirds from local councils, most of the rest also public sector. This covered the key sectors involved in CRT. More responses from TfL staff would have been useful, but they appeared concerned about confidentiality especially during the Mayor's review. Of the respondents, half were planners, the rest mostly in related professions.

There were clear patterns. One or two questions produced near-unanimity, as expected (e.g. which area benefits most). Others had diverse responses, e.g., scepticism towards trams. This might reflect different backgrounds (e.g. different local objections) or genuinely conflicting opinions -- the more interesting possibility. Other questions had dominant patterns with minority views.

Category	*Number*
0 to 2 years	4
2.1 to 5 years	6
5.1 to 8years	5
>8 years	1
Not stated	1
Average	*4.8 years*

TABLE 2: YEARS OF EXPERIENCE
Question = NUMBER OF YEARS INVOLVEMENT WITH CRT SCHEME.

As the survey was sent to busy professionals, likely to take the task seriously if done at all, this was expected. However, the pattern implied robustness of data -- albeit maybe not a 'scientific' coverage of transport planning thought. It seemed likely such a range of viewpoints would understand most barriers to LRT. The average length of involvement was nearly five years: only four had under two years' knowledge. Apparently, some respondents answered questions hurriedly: e.g. 'other' options were chosen that clearly belonged in main categories; or, answers given to one question (e.g. spatial planning) belonged under another (e.g. barriers to light rail). Accordingly, answers were moved to the 'correct' categories.

5.2 BENEFITS OF LRT.

Question 1 gave seven options on benefits of the Cross River Tram. It would serve part of London with dense population and many jobs; most of its route (except the "north Peckham" area) has excellent public transport by provincial standards. Many answers of 'F' (removing pressure on existing services) and 'G' (sustainability, replacing buses with electric traction) were anticipated from transport experts: in fact these amounted to 18 answers supplied.

a' - local environmental improvement	0
'b' - social inclusion	*3*
'C' - economic regeneration	12
'D' - improving mobility	9
'E' - leisure options	0
'F' - relieving pressure on existing tubes / buses	9
'g' - re: sustainability/ climate change?	1
TOTAL	18

TABLE 3. Benefits expected
Question = 1. Would the <u>main</u> benefits of the Cross River Tram be:

However, almost as many (15) responses named economic regeneration and social inclusion as the biggest advantages. This may reflect the 'business case' put forward to government that such projects are worth funding. Perhaps environmental benefits are less politically 'sexy' than regeneration. However, it is unclear how far better transport helps the long-term unemployed in Peckham by cutting their journey times to the West End; one of the highest unemployment areas in Britain is Spitalfields, five minutes walk from the City. (see Hass-Klau 2005) This may reflect some respondents being regenerators rather than transport

planners. Conversely, evidence from Croydon showed poor jobless rates in New Addington pre-tram were improved by its speed. (Colin Buchanan report, quoted House of Commons 2005b, p.Ev59).

5.3 AREAS TO BENEFIT AND ROUTES:

Respondents to this question (2) almost all chose Peckham/ Walworth as the area to gain. As this is the only area not already served by LUL's 'tube' network, this is hardly surprising. Only one person thought Elephant /Waterloo would benefit more.

TYPE	*AVE SCORE*
1	0
2	0
3	0
4	6
5	6
Not stated	0
AVERAGE	18

TABLE 4. Route Choice:
Question 3= 3. On a scale of 1 to 5, are the main routes chosen the most useful way to serve the CRT corridors? *[1 being the least and 5 the most useful]*

The route-choice question (3, Table 4) was unsuccessful, several respondents finding it confusing. Nonetheless, all respondents gave at least '4' out of 5, indicating little concern about poor route choice (to reduce costs or avert opposition). This was important, due evidence in literature scanned that poor performance by some LRT schemes reflects bad route choice motivated by cost-cutting, as noted above re Sheffield and Birmingham.

5.4 PLANNING FRAMEWORK:

5.4.1 LOCAL PLANNING:

Question 5 hoped to test the proposition that spatial planning, *per se*, is supportive to light rail. Respondents could grade the planning frameworks from borough to E.U. levels, on a scale of 1 to 5. Since most current UDP (Unitary Development Plan) documents contain positive references to the CRT, a score of 3.5 was predictable. Similarly, the London Plan scored nearly as high, at 3.4 overall. Both national and E.U. planning policies were rated as less helpful, with scores of two or less. These mention sustainable transport generally, without positive steer for electric rail modes.

Only two cogent suggestions were made for enhancing local plans:

- local plans (Core Strategies post-2004 Act) should encourage regeneration along tram corridors at high densities, with less parking; this would generate s.106 monies (planning obligations) to help trams and improve public realm/ cycling provision (Camden transport planner);
- Route corridors should be protected for a set time, serving CPOs (Compulsory Purchase Orders) if necessary; potential development sites should be mapped, and land assembly undertaken if needed (Southwark regeneration officer).

This implies light rail promotes 'compact cities', perhaps not possible everywhere (e.g. conurbations with declining economies).

TYPE	*AVE SCORE*
Local UDPs	3.5
London plan	3.4
National PPS/ PPG	2.0
European Union (ESPD)	1.9
AVERAGE	18

TABLE 5. Planning frameworks:
Question 4= On a scale of 1 to 5, how do the following assist development of the CRT project?: A -- LOCAL UDPs; B -- THE LONDON PLAN; C -- NATIONAL PPG / PPS; D -- E.U. TRANSPORT POLICIES?. *[please rate each level: 1 being the least and 5 the most useful]*

5.4.2 REGIONAL PLANNING:

Only one respondent, a planning consultant, proposed changing regional planning. Her suggestion related to PTALs (Public Transport Accessibility Levels), which determine housing densities in the London Plan. She contended this is flawed, failing to incorporate service frequency rather than closeness to transit stops, hence underplaying light rail in the Plan. This technical discussion has major practical implications in her work on the Aylesbury Estate (Walworth, SE17). Under its Area Action Plan it is proposed to nearly double dwellings, declaring a PTAZ (Public Transport Accessibility Zone) where densities of >700 habitable rooms per hectare are acceptable under the Southwark UDP (Southwark 2007, p64). The existence of CRT would greatly strengthen the case for this, the only alternative being greatly enhanced bus services [4]

5.4.3 NATIONAL PLANNING:

Though lack of support for light rail in national policy was noted, he only proposals made were:

- PPS guidance should stress public transport in promoting efficient land use [planning consultant];
- A PPS should promote public transport and its benefits for regeneration and social inclusion, helpful to schemes like CRT (TfL planner).

Other comments involved cost benefit analysis (re sustainability generally) of light rail beyond pure 'mobility' gains, and removing Government delays – particularly the need for parliamentary approval. [The latter relates more to national politics than spatial planning.] One respondent saw the current Planning White Paper promoting regeneration as a 'subset' of economic development, allowing trams to be promoted for economic benefits not just transport ones, as in France.

5.4.4. DENSITY ISSUES.

Globally, light rail figures in discourses on 'compact cities'. Increasing densities are both precondition (by traffic generation) and result of high-capacity mass transit. As the CRT route traverses densely built-up inner London including high-rise housing, universities and office blocks, this seems superfluous — unlike in provincial projects. Still, 15 of 18 respondents considered CRT would encourage densification (Q.6, Table 6). Only one Westminster planner disagreed, stating the (Kingsway) corridor locally was already dense. Two respondents gave 'mixed' answers that it depended what section of route, and on property markets during construction.

Answer	*Greater density?*	*Density desirable?*
Yes	*15*	*14*
No	1	2
Mixed	2	2
Not stated	0	0
TOTAL	18	18

TABLE 6. Density increases on the route:
Question 6= (a) Will the existence of CRT lead to higher density developments around stops?[Y/ N]; (b) If so, is this desirable in sustainability/ urban design terms? [Y/ N]

Almost as many (14) considered densification positive on sustainability/ urban design grounds. While this is plausible, many residents consider Inner London is too densely built-up and resist over-intensive developments; even two of the three 'community' representatives thought density positive ('at some locations'). Again, one Westminster respondent considered densification undesirable, another felt it only applicable in certain areas and should respect urban design.

If transport projects in dense centres with high traffic potential must justify themselves thus, it shows the uphill struggle to establish LRT. The situation at Aylesbury Estate is a special case of demolition due to building faults, extra density being required to leverage necessary private sector funding. As a Southwark respondent said, redevelopment promoted by trams could enhance the environment though higher densities might not be welcomed by all residents.

5.5 THE TRANSPORT & WORKS ACT.

One finding of this research is that the TWA is an abstruse process, lacking secondary literature. Significantly, even those involved professionally in light rail had few views on its pros and cons. Eight respondents considered it a major delaying factor, but five disputed this and three were unsure. Of those considering it a problem, six quoted its convoluted nature, two each the idea it is too easy to object and poor COBAs (cost benefit analysis). Only one blamed a lack of inspectors and nobody thought project management expertise (among promoters) lacking.

answer	*Delaying factor?*	*-would you propose changes?*
Yes	*8*	*6*
No	5	5
Don't know	3	3
Not stated	3	3
TOTAL	18	18

TABLE 7. The Transport and Works Act 1992:
Questions 7a and 8a= Are the Transport & Works Act procedures a major delaying factor to CRT? [Y /N / DK]

Positive suggestions for improvement (some such process is inevitable in a democratic society) were few. The consensus was that TWA should be 'streamlined' and less costly for promoters (cost escalation over lengthy inquiries is blamed for failure of some projects). Two or three compared the French system favourably to the UK. One Westminster respondent

summarized this pithily: “The TWA is an unnecessary and bureaucratic impediment to implementation of LRT; it causes delay and significant cost increases; we should follow European practices which cut the development period.” A consultant noted the political set-up (e.g. party control in boroughs) changes faster than major projects are approved. [n.b. Unlike in France where a Mayor can be elected on the pledge of a light rail project, and have it built in her first term.]

‘A’ Bureaucratic Procedures	6
‘B’ Too Many Chances To Object	*2*
‘C’ Faulty Cost Benefit Assumptions Being Made	2
‘D’ Lack Of Trained Inspectors For Inquiries	1
‘E’ Lack Of Project Management Expertise Among Promoters	0
‘F’ Other - Please Specify?	1
Don’t know	2
TOTAL [potential =16]	12

TABLE 8 T.W.A. Problems: Question 7b= <u>If ‘yes’ [to qn 7a], is this mainly due to:</u>
<u>[choose up to 2 only]</u>

The ‘minority’ view came from a Southwark regeneration officer who felt:

“The TWA Inquiry is not the main problem. The problem is securing political and funding certainty [….] without which it will be difficult to win an inquiry. The inquiry procedures have been modified and rationalized and indeed the recent DLR extension took around 18 months to secure a TWA.” A second Southwark officer suggested that while governments could ‘fast- track’ schemes with known local backing and economic benefits, there may still be ‘too many’ projects coming forward simultaneously. [Thus, CRT competes for funding with the approved Crossrail and Thameslink projects, plus the East London Line.]

5.6 DECISION POWERS:

DECISION LEVEL	
‘A’ central government	*0*
‘B’ regional government - e.g. GLA	7
‘C’ joint bodies of local councils	4
‘D’ new special purpose regional bodies	4
‘E’ national infrastructure expert commission	2
‘F’ debate in parliament?	0
Not stated	1
AVERAGE	18

TABLE 9. Decision powers:
Question 9= Would it be better if urban transport projects were approved by:

Nearly half (seven) of respondents preferred regional bodies (e.g. the Mayor/ GLA) to determine major transport projects (Q9, table9). Four chose new 'special purpose' bodies (like Passenger Transport Authorities outside London), and four wanted joint committees of boroughs. (How the latter works if (say) one of four boroughs opposes a scheme is unclear.) Only two opted for a national infrastructure commission (as currently proposed) as the solution. Nobody wanted decisions made by central government or parliamentary debate. Since it is perceived that lack of backing from central government is the main difficulty, this again is unsurprising. Significantly perhaps, those from GLA / TFL / Cross River Partnership all opted for GLA control, yet only two of 11 council officers backed committees of their boroughs.

5.7 COMMUNICATIONS.

In Britain, with sceptical central government and resources spread thinly, public support for such projects is crucial. The West London tram supported by mayor Livingstone was opposed by campaigners worried about diverted traffic. When the Tory Party adopted this position, winning local elections of 2006, the scheme was abandoned. Central government would not endorse a project spurned by local residents. Consultants working for CRT referred to a GLA Scrutiny report on consultation re light rail in 2003, criticizing TfL's failure to engage with affected communities. (Siraut 2005, p.60)

Score	*Media work*	*Community engagement*
1	0	
2	0	2
3	7	5
4	8	8
5	3	3
Not stated	0	0
AVERAGE	3.6	3.4

TABLE 10. Outreach:
Question 10= 10 (a) Has the TFL / CRP media approach been effective in promoting the scheme to the general public? - *[Respond on a scale of 1 to 5 with 5 being most effective.];* (b) Have TFL/ CRP officers successfully engaged with communities along the likely routes? *[Respond on a scale of 1 to 5 with 5 being most effective.].*

The CRP and TfL hope to avoid omissions of previous projects. All but one respondent gave them at least three out of five for media promotion and engaging communities. The averages were 3.6 and 3.4 respectively (Q10, Table 10). One referred to the mock-up of a tram

displayed on the South Bank and Aylesbury Estate, considering continuing engagement from community groups would be essential to progress the project. He felt locals are more aware of CRT generally than its precise routeing. Conversely, a consultant reported high levels of non-awareness among Aylesbury residents from her work there; in places with much deprivation and social housing, this may be no reflection on the officers' work [5]

5.8 BARRIERS TO LIGHT RAIL.

This question (11) was the nub of the exercise. It aimed to confirm previous information whether it is planning or political/ financial matters that delay light rail. Some background was gleaned from the Parliamentary Committee report on this topic, including detailed submissions by operators, consultants and campaign groups on barriers to LRT. (House Of Commons 2005b). Respondents could select two out of 10 possibilities (one being 'other'). Only one selected three options, two were coded as half each (Q11, Table 11).

The most common response (12.5 cases) was 'financial' (cost benefit/ risk allocation). On these grounds the DfT has withdrawn funding from several well-advanced light rail projects, despite sound business cases and local backing (Leeds, Liverpool, Portsmouth). This begs the question whether light rail is *intrinsically* expensive, if so why this is not a barrier abroad. The second top option was 'C' – lack of national support – with eight responses. Unexpectedly, option 'H' (lack of priority in TfL) was the third commonest, with six responses.

Barrier cited	*Score*
A - local political opposition / lack of support	*2.5*
B - Community / voluntary sector opposition	*0*
C - lack of national political backing.	8
D - financial issues e.g. cost benefit analysis / risk allocation	12.5
E - legal & procedural problems	2
F - fragmentation of local government	1
G - lack of support from business community	0
H - lack of priority within TfL	6
I - lack of media backing	0
J - other matters – *please specify*?	1
TOTAL [possible = 36]	33

TABLE 11.barriers:
Question 11= Like other LRT projects, CRT has been promoted for some 10 years without approval yet. Assuming the scheme is viable and could have happened earlier, is delay mainly due to *[select up to 2 only]:-*

The other seven possibilities, including procedural, community, business, and media hostility only gained 6.5 'votes' altogether. This buttressed the initial hypothesis. The literature review showed all these factors can be problematic. They may delay projects, make them unpopular, or increase costs – but are not crucial for British tram promoters. Financial and political issues are interwoven, since transport authorities lack independent financing like the *versement transport* (a hypothecated business tax) in French conurbations. Alternatives like guided buses that seem cheaper are attractive to Treasury officials or ministers who are, anyway, sceptical on wholesale modal shift from private cars. Conversely, much cost escalation is due to government policy– utility diversion, allocation of PPP risk in operating franchises, and deregulated buses (outwith London).

5.9 LOCAL SCEPTICS.

Thus, central government will not 'railroad' a scheme against local opposition, or without robust community support. Cross River Tram supporters must convince local activists concerned about congestion and harm to businesses (e.g. Peckham) and sceptics like Conservative GLA member Brian Coleman. A street-running tram scheme, despite benefits in accessibility and regeneration, always courts such opposition.

Barrier cited	*Score*
'A' impact on local environment [noise/ visual]	9
'B' relative cost	8
'C' feared damage to local businesses	4
'D' technical doubts - e.g. cf . bus systems	1
'E' effects on traffic congestion	7
'F' safety/ security issues	0
'G' lack of public transport benefit	3
'H' other - please specify?	0
TOTAL [POSS = 36]	32

TABLE 12.SCEPTICS:
Question 12= Are any sceptics of the CRT mainly concerned about:?:- *[choose up to 2 only]*

There was a wider spread of answers to this (Q12, Table 12). Unsurprisingly, the commonest answer was 'impact on the local environment' – e.g. noise and visual (though trams replace numerous cars and buses). A Southwark officer highlighted Burgess Park (Walworth) and Kingsway (Holborn) on this. Nearly as many selected 'B', relative costs; some contend the large capital sums spent on light rail could buy thousands of buses, despite the latter's shorter lifespan and higher operating costs. The third highest response was traffic congestion ('E'), reflecting LRT's need for dedicated rights-of way ('reserved track') plus traffic light priority.

Critics assume existing levels of motoring continuing, diverting down residential side-roads to avoid the trams; this is an issue around Camden Town where CRT route options remain undetermined.

There were four answers of 'C' (damage to businesses) and three of scepticism on transport benefits. Only one respondent raised 'technical' issues e.g. comparison to buses, a view with support in government. No one mentioned safety/ security issues, though unstaffed stops and 'too quiet' vehicles are concerns in other cities.

5.10 CROSS RIVER PARTNERSHIP.

The Cross River Partnership conceived the project and has developed the media/ outreach side. Much detailed information is on their web site. They convened a Friends of the Cross River Tram group embracing a wide range of stakeholders and businesses along the route. Out of 14 who replied to the question (Q13) on CRP's role in negotiating among stakeholders, 12 were positive. One suggested they were constrained by funding. A third noted benefits of 'easy-win' projects, like public-realm and business health-check work along the route funded by the E.U.'s Interreg programme recently.

5.11 OVERALL PERSPECTIVES:

The final question (14) solicited views on aspects beyond the questions. Some such responses were given to 'technical' questions, e.g. on planning, and moved here for clarity. These 'qualitative' thoughts, reinforcing the picture given by more directed questions, are summarized below:-

- the issue is lack of overall support from government, of recognizing the role LRT can play in regeneration and environmental improvement;
- The need to understand the 'greater good' represented by such schemes;
- Problems re: difficulty of demonstrating clear financial benefits in COBA of the UK type;
- Delays, convoluted inquires, uncertainty re planning and funding;
- The CRT scheme has as much public support as is practical, remaining concerns are understandable ones on detailed routeing, not the overall principle (community activists);
- Need for a local tax as in France; the main barrier is lack of access to government and E.U. funding;

- Need for ‘joined up thinking’; fragmentation of government a problem before the London Mayor;

One notable point was from a consultant who suggested CRT falls between stools – not a high profile scheme like Crossrail or Thameslink grabbing the attention of decision-makers, nor ‘low-hanging fruit’ like piecemeal bus improvements to be advanced day-to-day. This colleague chose ‘lack of priority in TfL’ as the main reason for delay in schemes like CRT. A Southwark regeneration officer made salient points about the ‘first push’: i.e., LRT can drive through significant benefits like lower car ownership (Portland, Oregon) or better housing (Montpellier); conversely it can have negative effects as on small businesses in Sheffield damaged by improved access to Meadowhall retail park. He concluded: “Planning is essential to enable schemes to link deprived areas with those of opportunity, but can only work when allied to community support, economic focus and political drive.”

6. PROVISIONAL FINDINGS AND REVIEW.

6.1 SUMMARY OF FINDINGS: CONSENSUS.

The answers from the respondents were fruitful, if providing few surprises on the main issues. There was consensus generally about the value of transit proposals like the Cross River Tram, and what the barriers to progress were. Inevitably, the current review of CRT by Mayor Johnson, which could postpone CRT to the indefinite future, overshadowed responses. It was unfortunate that input from TfL was so limited, their approach being that much information had to be kept under wraps. However, those working on the project might be less impartial than those at a distance. The absence of responses from the business sector was more unfortunate, given political stress on private sector support for major infrastructure projects. It would have worth checking if business had reservations about the ‘business case’ for CRT.

Respondents agreed on the following:

- The key benefits would be better transport access/ less pressure on existing services, followed by regeneration/ social inclusion; environmental benefits were less salient;
- The north Peckham/ Walworth corridor would gain most; routes chosen were largely

sensible ways to serve the corridors;

- Spatial planning frameworks are positive, though lacking direct advocacy of public transport infrastructure; local planning frameworks are more useful than national/ European ones,;
- However, suggestions for better planning policies were minimal, i.e. beefing up existing pro-public transport policies and protecting development corridors/ sites;
- Relating to 'compact cities', there was near-unanimity that the CRT would promote 'densification', though some noted this would be less in Central London (Aldwych to Euston); surprisingly, there was consensus this would be desirable, albeit unpopular with some residents;
- On political decision-making, most opted for a regional body (the GLA or a special-purpose transport body) to take decisions on big projects; this may well reflect a period when a strong Mayor (Livingstone) promoted schemes against opposition from boroughs and lukewarm attitudes in Whitehall. Were the situation reversed under a new Mayor, preference for regional-level powers might be less;
- The uphill struggle facing light rail proposals requires broad coalitions of support to win arguments for funding; this involves local actors (business, community groups,) and the communities affected; the consensus was that Cross River Partnership and Transport for London have done well securing support, despite concerns about impacts locally;
- Most respondents felt key issues among opponents and sceptics were environmental on particular streets or green spaces as well as on local businesses; there are also concerns about the cost of trams, perhaps at the expense of desirable goals;

The dominant perception among respondents involved in the CRT was that costs and national support are the main difficulties; central government decides if schemes go ahead, and several have been cancelled , usually on grounds of cost after negative recommendations from DfT; the salience of local issues mentioned above is that objections have to be overcome befure making the case to government - broad local support is a necessary, not a sufficient condition for success.

6.2 SUMMARY FINDINGS – OTHER VIEWS:

Respondents considering CRT has a low profile in TfL thinking have important arguments: London's population and job count have grown rapidly since 1980, with only incremental increments in transport provision overall; there are numerous possible improvements from

strategic to micro levels; whereas in provincial cities, it might be ‘light rail or nothing‘; in inner London potential ridership is such that heavy rail or metro construction is possible and may be prioritized among officials and politicians (Thameslink, Crossrail).

While most agree the Transport & Works Act is cumbersome and adds costs to LRT; a significant number considered it not the main problem. They saw TWA as an irritating hurdle making a difficult task harder, though some such process is inevitable. Numerous contrasts were made with the French system. There, after an initial decision is made that a project is worthwhile (*Declaration d’Utilite Publique*), it remains to sort out route choice and compensate interests affected: without endlessly rehearsing arguments whether such schemes are a good use of funds. .

6.3 CHECKING THE RESULTS.

With the definitive conclusions, and time constraints, it was only possible to do six telephone interviews (varying length) with key contacts, all but one not approached in the first round. This checked that the main issues had all been raised. The extra respondents included a community activist from the sole grass roots pro-tram campaign group, a business-based person from the friends of CRT, and various key professionals. Most asked to be quoted anonymously.

Salient responses include the following:-

- There is a real lack of tram expertise, intensified by the failure of several projects (there may be only ‘20’ or so light rail experts in Britain). However some councils have more experienced staff and think ‘regionally’;
- Similarly, the Planning Inspectorate (PINS) lacks expertise to conduct inquiries: “if the West London tram had gone ahead, it would have set CRT back two or three years…”;
- When substantial amounts of money (up to £40M for some schemes) can be spent on consultancy fees, for abortive projects, governments may suspect consultancy professionals’ motives;
- The business-based contact confirmed overwhelming support for Cross River Tram from large concerns including hotels, visitor attractions and Eurostar. Two or three mentioned Holborn’s growth being hindered by lack of north-south transport links; the Holborn Partnership (BID) is particularly supportive;
- Recent government transport policy sees social and economic regeneration not just

narrow mobility benefits (Eddington report), which remains 'political'; [6]

- The French model was further emphasized -- e.g. one overall plan combines infrastructure investment and public building locations with land-use regulations;
- Communications and media strategy followed the failure of the West London scheme -- one noted wryly, "the more they know, the more they object …";
- Transport for London 's ethos is seen as not focused on new projects. One even detected a 'pro-bus' lobby reluctant to see bus routes diverted away;
- Environmental objections include 'poles and wires' in historic streets plus the issue of crossing Burgess Park. The Peckham tram depot site (UDP proposals site) houses often unauthorized uses like meat factories and churches for whom relocation is hard as land values rise; could spatial planning favour marginal, less profitable uses in land use terms? Congestion objectors may not realise one tram carries as many as four or five buses, better using scarce road-space;
- While most agreed planning frameworks are neutral or blandly positive, one interviewee stressed this role was essential. The UDP process (in Southwark) flushed out problems, forcing officers and community groups to address matters early; the council's role as sponsor plus UDP endorsement is crucial up till the Inquiry. Many schemes are engineering-led, lacking 'soft skills' like consultation ('process good, administration bad'). Though UDPs haven't influenced the tram, CRT has influenced some borough plans. Another said "get all the powers early";
- One issue re: plan priorities is potential conflict of short, quicker routes versus desire to serve more destinations (re: regeneration).

7. CONCLUSIONS AND FURTHER RESEARCH.

7.1 RESEARCH PRIORITIES.

7.1.1 THE T.W.A.

Of issues dealt with, that most lacking in research is the Transport and Works Act. With the urgent need to upgrade ageing transport infrastructure, these procedures need investigation. Obvious questions are:

- How have TWA procedures compared to previous parliamentary procedures?
- Do they take into account climate change and energy costs?

- How do they compare with approaches abroad?
- How have project managers across the U.K. progressed schemes effectively?
- Should TWA procedures be more related to spatial planning frameworks as Development Control relates to LDFs?
-

7.1.2 PLANNING ISSUES:

- Can LDFs, RSSs or PPSs actively promote sustainable public transport -- e.g. a 'presumption in favour' of electric modes, against road or air schemes?
- How can mass transit develop in areas with little development or population growth?
- Is the success of tram schemes in continental Europe due to denser urban form?

7.1.3 OTHER LIGHT RAIL ISSUES.

There is extensive literature on LRT schemes globally, which does not need repeating. Relevant gaps include:

- Is lack of progress for LRT in the UK intrinsic to spatial layout or economic factors?

If not is it mainly related to:

- Urban design - lack of boulevards?
- Cost inflation from over-engineering to heavy-rail standards?
- Why do utilities have such privileges in using roads?
- Is there a fear of 'everyone will want one' - a status symbol for medium size cities, as in France (Le Mans, Amiens)?

7.2 OVERALL CONCLUSIONS.

One respondent to the House of commons Committee considered trams' 'shiny steel rails' knit communities together, and stimulate confidence in transit by their visibility and permanence. The conclusion of this research however, is that costs in particular stand against this type of transit at present. Spatial planning arguably links all the aspects of the location of homes, employment and services. Transport is no mere 'add-on' feature because so many aspects of strategic planning are meaningless without alternative forms of mobility (e.g. new 'eco-towns'). LRT concerns far more of planning than formal procedures – e.g. urban design, crime and safety, pollution and trip generators like sports stadia or hospitals. These aspects may not be caught in current UK cost benefit analysis.

This research has similar conclusions to the House of Commons Transport Committee (House of Commons 2005a), responding to the National Audit Office publication on UK light rail (NAO 2004). They made six recommendations for the Department for Transport (DfT), only one relating partly to spatial planning (co-operation between highway and planning authorities) (*ibid*, pp3, 31). Concerning the TWA, they concluded: "It is far too early to say definitively that the planning process itself is no longer a significant barrier to light rail schemes, but at the moment the Transport and Works Act itself does not seem to be the major problem" (*ibid*, p25).

The committee concluded previous lengthy delays had been reduced, including the time for DfT to make final decisions. It was the DfT's processes and COBA *outside* the TWA procedures that caused delay and cost escalation. This was underlined by Merseytravel's evidence (House of Commons 2005b), which noted "Far from being a barrier to [....] Merseytram Line 1, the TWA and related consents procedure took just 14 months [..] to the decision by the Secretary of State. This is twice as fast as any previous TWA orders for light rail projects.." (*ibid*, p.Ev 219) (nonetheless the scheme was quashed as over-expensive).

However, the views of both the respondents in this survey and those giving evidence to the Select Committee (House of Commons 2005b) overwhelmingly state the slowness of the TWA and the ways it places barriers in the way of projects is at least a substantial delaying factor, an the cist increase this fuels may sabotage some projects completely. This contrasts with the government emphasis on sped of decision and encouragement of development in other aspects of the planning system (Barker and Addington reviews). Sadly, it seems different rules may apply to sustainable transport projects.

Photo 3: Modern French tram : Nice May ’08.

Photo 4: Classic Romanian Tram: Timisoara Sept.05.

The Transport Committee's recommendations, building on its 2000 report, amounted to a scathing indictment of the Department for Transport -- re: delays, cost biases, and failure to pursue standardization experience. However, civil servants report to politicians; such problems may flow from HMG priorities. Spatial planning is very relevant; its support for sustainability should encourage environmentally benign projects. The difficulty is in limitations on planning to implement this agenda, requiring powers delegated to regional and local level (including funding) for 'joined-up thinking' (land use and transport) and integration of rail with buses. This implies re-regulation of public transport, reversing the 1980s ethos .

This implies a French situation, where the authority determining land-use plans also oversees transport infrastructure. In UK cities, responsibilities are split into different bodies. In London they are within the GLA 'family' including TfL, yet powers to implement this agenda are not assigned to city levels. The uphill struggle of a modest scheme like CRT for state backing after a decade illustrates this

FOOTNOTES:-

[1] The word 'nimby' should be deprecated as it used against opponents of proposals whether environmentally sustainable or not.

[2] Southwark, Lambeth, Westminster, Camden, City of London; CRT passes close to the City, but not through it.

[3] e.g. Croydon Tramlink was initiated by a Conservative council

[4] There are currently two routes, both unreliable, the 42 and 343.

[5] Personal experience as a LB Southwark officer

[6] One observed that the original Docklands Light Railway had scant business case when built, as its route lay through largely derelict areas, but regenerating the area was a government priority in the 1980s.

BIBLIOGRAPHY:-

Babalik (2000): Ela Babalik, *Urban Rail Systems: A Planning Framework to Increase Their Success* – Unpublished PhD Thesis, Centre for Transport Studies, University College London.

Babalik-Sutcliffe 2002: Ela Babalik-Sutcliffe, *'Urban rail systems: analysis of the factors behind success'*, in *Transport Reviews* 22 (4), 415-447.

Baker 2005: Chris Baker, *Barriers foil tram progress*, in *Planning*, 7-10-05, p.19.

Banister 2005: David Banister, *Unsustainable Transport*, London: Routledge.

Bolden & Harman (2003): Tony Bolden & Reg Harman, *Spatial planning and Transport in London and the South east – can Policy Co-ordination and Delivery be Achieved?*, in *Public Money & Management* [CIPFA], Oct 2003, pp.263-69.

Breheny 1997: Michael Breheny, *Urban Compaction: feasible and Acceptable?*, in *Cities* 14(4), pp. 209-17.

Camden 2006: *Camden UDP*, downloaded from www.camden.gov.uk/ccm/navigation/environment/planning-and-built-environment/our-plans-and-policies/camden-s-unitary-development-plan--udp-/, 29-5-08.

Cervero 1984: Robert Cervero, *Light Rail Transit & Urban Development, in Journal of the American Planning Association*, 50, pp.133-47.

Docherty & Shaw 2003: Iain Docherty & Jon Shaw, *A New Deal for Transport?*, Oxford: Blackwell.

DfT 2004: Department for Transport, *A Guide to Transport and Works Act Procedures - 2004*, downloaded from: www.dft.gov.uk/pgr/twa/guidance/aguidetotwaporcedures2004? ,11-7-08.

GLA 2008: Mayor of London, *The London Plan* [consolidated with alterations since 2004], London: GLA.

Glaister *et al* 2006: Stephen Glaister, June Burnham, Handley Stevens & Tony Travers, *Transport Policy in Britain* [2nd Ed.], London: Palgrave.

Hall and Hass-Klau 1985: Peter Hall & Carmen Hass-Klau Ca*n Rail save the City?*, Aldershot: Gower.

Hass-Klau 2005: Carmen Hass-Klau, *Overview of the Cross-River Tram Corridor*, unpublished research for Cross River Partnership, Brighton: Environmental & Transport Planning.

Hass-Klau & Crampton 2002: Carmen Hass-Klau and Graham Crampton, *Future of Urban Transport – learning from Success and weakness: Light Rail*, Brighton: Environment & Transport Planning.

House of Commons 2005a: House of Commons Transport Committee, *Integrated Transport: The Future of Light rail and Modern Trams in the United Kingdom (10th Report of Session 2004-05), Volume I* , HC 378-I London: The Stationery Office

House of Commons 2005b: House of Commons Transport Committee, *Integrated Transport: The Future of Light rail and Modern Trams in the United Kingdom (10th Report of Session 2004-05), Volume II*, HC 378-II, London: The Stationery Office.

Jenks *et al* 1996: Mike Jenks, Elizabeth Burton & Katie Williams, *The Compact City - A Sustainable Urban Form?*, London: Spon.

Jonson & Tengstrom 2005: Gunilla Jonson & Emin Tengstrom, *Urban Transport Developmen*t, Berlin: Springer.

Knowles &White 2003: Richard Knowles & Peter White, *Light rail and the London Underground*, in Docherty & Shaw 2003, ch.6.

Knowles 2005: Richard Knowles, *What future for light rail in the UK after Ten year Transport Plan targets are scrapped?*, in *Transport Policy* 14 (2007).

Lambeth 2007: *Lambeth UDP*, downloaded from www.lambeth.gov.uk/Services/HousingPlanning/Planning/PlanningPolicy/UnitaryDevelopmentPlan.htm, 31-5-08.

Litman 2006: Todd Litman, *Rail transit in America - a Comprehensive Evaluation of Benefits*, downloaded from: www.vtpi.org/railbenefit.pdf, 28-8-08.

LondonSE1 2008a: *Cross River Tram under review says Boris Johnson*, downloaded from www.london-se1.co.uk/news/view/3327, on 21-7-08.

LondonSE1 2008b: *Cross River Tram is "vital" for Southwark say councillors*, downloaded from www.london-se1.co.uk/news/view/3408 on 21-7-08

LondonSE1 2008c: *Cross River Tram: "What has worked for Croydon can work for Southwark and Lambeth"* downloaded from www.london-se1.co.uk/news/view/3468 on 29-8-08

Marshall & Banister 2007: Stephen Marshall and David Banister, *Land use and Transport*, Amsterdam etc: Elsevier.

Mills 2001: Gordon Mills, *New Tramways in France: the case of Montpellier* in *Transport Reviews*, Vol.21 no.3, pp.337-52.

Mole 2006: Gordon Mole, *Joined up Transport/ Examining the Links between infrastructure*

implementation and economic development, using the Cross River Tram as a case study, unpublished M.Sc.[UED] dissertation, U.C.L. Sept. 2006.

NAO 2004: National Audit Office, *Improving Public transport in England through Light rail*

Neuman 2005: Michael Neuman, *The compact city fallacy*, in *Journal of Planning Education & Research*,

Nijkamp & Rienstra 1996: Peter Nijkamp & Sytze A. Rienstra, *Sustainable Transport in a Compact City*, in Jenks *et al* 1996 pp 190-99.

ODPM 2001: Office of the Deputy Prime Minister, *Planning Policy Guidance 13: Transport* [downloaded from www.communities.gov.uk , 23-3-07]

Pasquale 2008: Kate Pasqaule, unpublished dissertation for M.Sc. In Spatial Planning, U.C.L. [forthcoming].

Seltzer & Cotugno 2005: Ethan Seltzer and Andy Cotugno, *Portland and Smart Growth*, ch.14 in Jonson & Tengstrom 2005.

Semaly & Faber Maunsell 2003: Egis Semaly & Faber Maunsell, *Comparative Performance Data From French Tramway Systems - Final Report* [commissioned for South Yorkshire PTE], downloaded from http://www.pteg.net/NR/rdonlyres/B4142077-F4F3-4650-9012-A65DD91E3B1F/0/LRTfrenchcomparisonsreport.pdf, 1-6-08.

Simpson 1993: Barry J. Simpson, *Urban Public Transport Today*, London: Spon.

Siraut 2005: John Siraut (Colin Buchanan & Partners), *Cross River Tram Complementary Measures Study*, London: Cross River Partnership [unpublished research].

Steer Davies Gleave 2004: *What Light rail can do for Cities*, PTEG.

Stevens (2003): Hadley Stevens, *Transport policy in the European Union*, Basingstoke: Palgrave Macmillan.

TfL 2000: Transport for London, *Cross River Transit [Summary report]*, London: TfL.

Vigar et *al* 2000: Geoff Vigar, Patsy Healey, Angela Hill & Simin Davoudi, *Planning, Governance and Spatial Strategy in Britain*, London: Macmillan.

Vigar & Stead 2003: *Local transport Planning under Labour*, in Docherty & Shaw 2003, ch.3.

Walmsley & Perrett 1992: D A Walmsley and K E Perrett, *The Effects of rapid transit on Public Transport and Urban development*, London: HMSO, for Transport Research laboratory.

USEFUL WEB SITES:-

Cross River Partnership: www.crossriverpartnership.org/

Light Rail Transit Association: www.lrta.org

Mayor of London/ G.L.A.: www.london.gov.uk

Transport for London: www.tfl.gov.uk

Victoria Transport Planning Institute [Canada]: www.vtpi.org

APPENDIX A - QUESTIONNAIRE.

QUESTIONNAIRE ON THE CROSS-RIVER TRAM PROJECT:

Dear respondent,

My name is Martin Cook and I am a final year MSc Spatial Planning student at U.C.L. in London - I also work for Southwark Council Planning Division. I am writing a dissertation on the Cross-River Tram proposal with which you have had been involved. I would be grateful if you could complete this brief and essential questionnaire - by e-mail, hard copy, telephone or interview in person. You can contact me on **020 7525 5388** (days) or **07946 860 018** (mobile). I only have a few weeks to finish this project so I need to have your responses back by ***FRIDAY AUGUST 8th.*** at the latest.

There are many aspects of light rail transit schemes that I am not able to address in the limited scope of this work. I am assuming that projects like CRT are desirable and merely asking about the constraints on their progress, e.g. it is impractical to address issues of modal choice, financing, urban design or technical specifications. I understand that these questions might be contentious re: your current role, or the Mayor's Review of transport projects. I can confirm my document will only be seen by my supervisor and academic referees for the foreseeable future. [There is an option of leaving some questions unanswered, if necessary.] I hope to find out your candid professional opinion.

Completed questionnaires can be sent to mcolvencook@waitrose.com or martin.cook@ucl.ac.uk.

My home address is:-

54 Leathermarket Court, Leathermarket Street, London SE1 3HS.

For your convenience I am attaching the questionnaire as a Word file as well as embedding it in the body of this e mail.

YOUR DETAILS:

To analyse the results I just need brief details of your position:-

NAME: TEL.:

JOB TITLE / ORGANIZATION:

NUMBER OF YEARS INVOLVEMENT WITH CRT SCHEME:

PROFESSIONAL QUALIFICATION [if any]:

Please mark multiple choice questions with a cross [X]; insert a number for '1 to 5' questions; delete as applicable for yes/know questions.

GENERAL BACKGROUND:

1. Would the main benefits of the Cross River Tram be:

- 'A' LOCAL ENVIRONMENTAL IMPROVEMENT
- 'B' SOCIAL INCLUSION
- 'C' ECONOMIC REGENERATION
- 'D' IMPROVING MOBILITY
- 'E' LEISURE OPTIONS
- 'F' RELIEVING PRESSURE ON EXISTING TUBES / BUSES
- 'G' RE: SUSTAINABILITY/ CLIMATE CHANGE?

[choose up to 2]

2. Will CRT be of greatest benefit to:

- 'A' PECKHAM/ WALWORTH
- 'B BRIXTON/ STOCKWELL
- 'C' ELEPHANT / WATERLOO
- 'D' EUSTON/ CAMDEN
- 'E' HOLBORN / ALDWYCH?

[choose one only]

3. On a scale of 1 to 5, are the main routes chosen the most useful way to serve the CRT corridors?

[1 being the least and 5 the most useful]

PLANNING & PROCEDURES:

4. On a scale of 1 to 5, how do the following assist development of the CRT project?

- A -- LOCAL UDPs
- B -- THE LONDON PLAN

- C -- NATIONAL PPG / PP
- D -- E.U. TRANSPORT POLICIES?

[please rate each level: 1 being the least and 5 the most useful]

5. Would you suggest any changes to spatial planning polices to promote such schemes?

- (A) LOCAL
- (B} REGIONAL
- (C) NATIONAL?

[please specify changes - up to 250 words total]

6. (a) Will the existence of CRT lead to higher density developments around stops? *[Y/ N/ DK]*

(b) If so, is this desirable in sustainability / urban design terms? *[Y/ N]*

7 (a) Are the Transport & Works Act procedures a major delaying factor to CRT?

[Y /N / DK]

(b) If 'yes', is this mainly due to:

- 'A' BUREAUCRATIC PROCEDURES
- 'B' TOO MANY CHANCES TO OBJECT
- 'C' FAULTY COST BENEFIT ASSUMPTIONS BEING MADE
- 'D' LACK OF TRAINED INSPECTORS FOR INQUIRIES
- 'E' LACK OF PROJECT MANAGEMENT EXPERTISE AMONG PROMOTERS
- 'F' OTHER - PLEASE SPECIFY?

[choose up to 2 only]

8 (a) Would you propose any improvements to the TWA to expedite schemes like CRT? *[Y/N]*

(b) If 'yes', please specify - *up to 250 words total*

9. Would it be better if urban transport projects were approved by:

- 'A' CENTRAL GOVERNMENT
- 'B' REGIONAL GOVERNMENT - E.G. GLA
- 'C' JOINT BODIES OF LOCAL COUNCILS
- 'D' NEW SPECIAL PURPOSE REGIONAL BODIES
- 'E' NATIONAL INFRASTRUCTURE EXPERT COMMISSION
- 'F' DEBATE IN PARLIAMENT?

[choose 1 only

COMMUNICATIONS/ OUTREACH:

10 (a) Has the TFL / CRP media approach been effective in promoting the scheme to the

general public?

[Respond on a scale of 1 to 5 with 5 being most effective.]

(b) Have TFL/ CRP officers successfully engaged with communities along the likely routes?

[Respond on a scale of 1 to 5 with 5 being most effective.]

‘POLITICAL’ SUPPORT AND OPPOSITION:

[N.B. this does not mean party political]

11 . Like other LRT projects, CRT has been promoted for some 10 years without approval yet. Assuming the scheme is viable and could have happened earlier, is delay mainly due to:-

- LOCAL POLITICAL OPPOSITION / LACK OF SUPPORT
- COMMUNITY / VOLUNTARY SECTOR OPPOSITION
- LACK OF NATIONAL POLITICAL BACKING.
- FINANCIAL ISSUES e.g. COST BENEFIT ANALYSIS / RISK ALLOCATION
- LEGAL & PROCEDURAL PROBLEMS
- FRAGMENTATION OF LOCAL GOVERNMENT
- LACK OF SUPPORT FROM BUSINESS COMMUNITY
- LACK OF PRIORITY WITHIN TFL
- LACK OF MEDIA BACKING
- OTHER MATTERS – *PLEASE SPECIFY*?

[select up to 2 only]

12. Are any sceptics of the CRT mainly concerned about:

- ‘A’ IMPACT ON LOCAL ENVIRONMENT [NOISE/ VISUAL]
- ‘B’ RELATIVE COST
- ‘C’ FEARED DAMAGE TO LOCAL BUSINESSES
- ‘D’ TECHNICAL DOUBTS - E.G. cf . BUS SYSTEMS
- ‘E’ EFFECTS ON TRAFFIC CONGESTION
- ‘F’ SAFETY/ SECURITY ISSUES
- ‘G’ LACK OF PUBLIC TRANSPORT BENEFIT
- ‘H’ OTHER - PLEASE SPECIFY?

[choose up to 2 only]

13. Has transport/ spatial planning cooperation encouraged by Cross River Partnership helped to resolve different agendas?

[Y/ N/ DK]

14. Do you have any further thoughts about the positive or negative planning / political factors in developing urban light rail projects like the CRT?

15. Could you be available for a more detailed follow-up interview in August? [Y/ N]

APPENDIX B - GLOSSARY.

BID	Business Improvement district
COBA	Cost Benefit analysis
CPO	Compulsory Purchase Order
CRP	Cross River Partnership
CRT	Cross River Tram
DfT	Department for Transport
DBOM	Design Build, Operate & Maintain
DLR	Docklands Light Railway
DPD	Development Plan Documents
DUP	Declaration d'Utilite Publique [France]
ESPD	European Spatial Development Perspective
E.U.	European Union
GLA	Greater London Authority
Heavy rail	Conventional, grade separated, heavily engineered railways
LDF	Local Development Framework
Light rail	Any less engineered rail mode allowing sharp curves, steep gradients; may be street- running.
LIP	Local Implementation Plan
LPA	Local Planning authority
LRT	Light Rail Transit
PFI	Private Finance Initiative
PINS	the Planning Inspectorate
PPG	Planning Policy Guidance
PPP	Public Private Partnership
PPS	Planning Policy Statement
PTAL	Public Transport Accessibility Level
PTAZ	Public Transport Accessibility Zone
S.106	S.106 of 1990 Planning Act - covers planning

	obligations
SoS	Secretary of State
TfL	Transport for London
Trams	Light rail vehicles, usually street running (‘at grade’).
TOD	Transit Oriented Development
TWA	Transport & Works Act
UDP	Unitary Development Plan

APPENDIX C -

TRANSPORT & WORKS ACT: Key Points.

- “It is very unlikely that parliament would now entertain a private bill for matters that could be authorized by way of a TWA order.” (DfT 2004, p.8);
- “The making of a TWA order does not itself confer planning permission for any development provide for in the order. However, when applying for an order, the applicant can request the secretary of sate to deem the grant of planning permission by way for a direction under section 90(2A) of the town and country planning act 1990. As matter of policy, the SoS would not make an order without issuing a planning direction where one has been sought, as consideration of the planning merits would be a part of the consideration of whether to authorize the scheme…” (*ibid*, p.9);
- Extensive pre-application consultation is recommended (p.11);
- Applicants are recommended to discuss proposed panning conditions with eh local planning authority (LPA). (p.12);
- Applicants are recommended to take full account of local and national planning policies as set out in the local development plan (p.15);
- Environmental statements must normally be included (p.18);
- Applicants should ensure the draft order will provide them with al the necessary powers to carry out heir proposals (p.26);
- The SoS would normally impose a requirement for development to be begun in five yeas in TWA cases (p.27);
- An inquiry must be held if a ‘statutory objector’ (Local authority orf likely recipient of a

CPO) demands one; the objections may dealt with by a hearing or written representations.(p.46);

- Hearings will be conducted in the sprit of the regulations on town planning inquiries (2000), by a member of PINS. (p.48);
- When giving his direction (and planning determination) the SoS may vary the terms of the order applied for (p.68);
- Lack of objections does not mean the order will necessarily be granted (p.69);
- The Inspector must submit a written Report to the SoS post-Inquiry (*loc cit*);
- Planning direction will be issued at the same time as determination fit eh TEWA order (p.73);
- Target times for the SoS to make a decisions vary from three to six months depending on the type of hearing and whether objections were made (p.74);
- TWA procedures do not include applications for listed building or coenservatuon area consents, which must be applied for separately to the LPA.(p.81);

APPENDIX D - SPATIAL PLANNING POLICIES.

1 NATIONAL GUIDANCE

On thro e hand, PPG13 encourages developments to be on sites accessible by public transport.

In terms of actively promoting sustainable mobility, it positively urges LPAs to draw up bus improvement policies. Howe, it merely invited them to consider possible new infrastructure whether tram, heavy rail or guided bus – with the implication that in many cases this might not be appropriate. There is no sense whatsoever that some modes may be more sustainable than others, or that there could be a national strategy for using LRT to solve environmental or congestion problems, (ODPM 2001, Para 74).

2 MAYOR/ G.L.A.

Policy 3c.3 of the London Plan (2008 version: GLA 2008) promotes improved public

transport including ‘where appropriate’ new tram schemes. This is placed in the context of serving Opportunity Areas (areas for major expansion), of which four are on the CRT route. (p131). Policy 3C.9 (ibid p136) further aims to increase public transport capacity up to 50% over the plan period. CRT is listed as a scheme ‘under development’ for the period 2012-17. Policy 3C.14 specifies tram and bus priority schemes which borough DPDs should aim to make successful and acknowledge their regeneration benefits, also by providing required land or road space. There is however, no specific recognition that rail modes are more intrinsically benign in general.

3. BOROUGHS.

Southwark:-

Policy 5.4 *Public Transport improvements* in the current Southwark Unitary Development plan (Southwark 2007, p.72) lists the Cross River Tram as first among eight major schemes affecting the borough. It states that planning permission will be granted for this, and that developments likely to prejudice it would be refused. The policy explains that the consultation zones in the borough as shown on the Key Diagram (reflecting areas where route choice remains unclear) and that extensive public consultation would occur as part of the TWA process. It further identifies a site in Copeland Road, Peckham as proposals site ‘71P’ where permission would be refused for any development conflicting with TFL’s preferred use for the site as a stabling/maintenance depot for tram vehicles (loc.cit.).

City of Westminster:-

No mention of CRT [UDP adopted in 2000].

Lambeth:-

Transport policy 13 lists the CRT along with several other rail projects (including ‘City Tram’ from City of London to Battersea). It provides that CRT would form the main regeneration corridor in ‘London South Central’ and any regeneration or traffic management work should take account of CRT’s arrival. Development along the routes would be required to safeguard land needed for the schemes and to promote and complement them. Where development takes place that would only be acceptable given the increased transport accessibility provided, developer contributions will be secured. (Lambeth 2007, pp.47-48).

Camden:-

As well as supporting the CRT in increasing capacity and taking into account for development control purposes, the Camden Plan specifically notes the need for storage and maintenance facilities for such schemes, seeking to resist loss of potential sites for these uses. (Camden 2006, pp.100-03).

APPENDIX E - BARRIERS TO LIGHT RAIL

1. National Audit Office Report 2004:-

1. COST: lack of standardization, heavy-rail standards, utility diversion, barriers to adopting cheaper technology;
2. FINANCIAL PERFORMANCE – need for better risk sharing, passenger forecasts, revenue collection;
3. LIMITED LOCAL FUNDING: high promotional costs, lack of revenue funding; congestion charging unused.
4. LENGTHY APPROVAL PROCESS: planning and funding approval need to be speeded up and made clearer.
5. IN HOUSE EXPERTISE: arms length relation of DfT to new schemes, lack of steer to local authorities on their chances; latter lack knowledge of what has worked best elsewhere. [source; NAO 2004, p.30]

2. Evidence to House of Commons Transport Committee 2004:-

(a) Rail Future:

- Legislative - TWA cf. for bus schemes; potential driver delays count against tram schemes;
- Cost issues - re design features, utility diversions, lack of economies of scale re expertise.

(b) Norman Kellett:

- Attitudes, costs re finance and operating; Utility diversion costs;
- Application process - time consuming and uncertain;
- Local opposition often ill-informed; Party politics;
- Over engineering to heavy-rail standards; regulatory demands re safety.

(c) Mowlem PLC:

- Slow gestation - 5 to 15 years;
- Utilities, poor forecasts, risk transfer, bidding costs;

(d) Tony Young:

- High capital costs despite lower operating costs; Lack of modal integration;
- Cost-cutting to save money early on, raises cost later; DBOM risk transfer;
- TWA process cumbersome and protracted, including SOS decision post-inquiry; average case takes nearly 10 years.

(e) Light Rail (UK) Ltd:

- Cumbersome legislative delays; Risk transfer; Unnecessary utility diversion.

(f) Scott McIntosh:

- Lack of political leadership, blowing hot and cold on light rail;
- Lack of engagement by DfT incl lack of expertise; appraisal system geared to rationing allocated finding, not optimizing proposals.
- TWA - supposed to be simple and comprehensible; instead has become long drawn-out with delays both during and after inquiries from inspectors and SOSs; adds cost, risk and uncertainty;
- Procurement - bidding costs, lack of standardization; Cost creep e.g. re utilities, lack of risk assessment;
- Lack of expertise - very few with necessary experience; ‘stop-go’ nature of industry makes it hard to keep teams together, harms career progression; schemes repeat previous mistakes.

(g) David Holt:

- Lack of support for the 'common good'; Europhobia, short-termist politics;
- Lengthy time lags may reduce route options.

(h) Institution of Highways and Transportation:

- Approval is geared to public consultation; TWA process has lengthened scheme development, esp. time taken for inquiries and DfT confirmation; length of post-inquiry wait for decision plus procurement process; utility diversions'

(i) Light Rail Transit Association:

- Long gestation times increase costs; Linking to road charging is unpopular;
- Regulators demand heavy-rails standards; utility diversions;
- Lack of modal integration re revenue projections; 'one-off; systems not standardization and learning from experience;
- Existing systems failing to meet forecasts e.g. due to lack of sufficient vehicles for traffic;
- Developers are not required to contribute to development uplift gains;
- Planning process not geared to ensuring traffic generators on LRT corridors.

(j) Ian Souter :

- Lack of understanding of LRT concept (just seen as an 'expensive bus' not a mode in it own right like a 'surface metro';
- Deregulated buses prevent seamless journeys; lack of timetabling and ticketing integration with other modes;
- Approval process is cumbersome and expensive, longest in the world at 9 to 12 years;
- Risk transfer via PFI; utility diversion; lack of standardization - each system has different vehicles - cost of spares; fragmentation of expertise;
- Private transport vested interests create 'perverse incentives.

(k) PTEG [Passenger Transport Executive Group]

- Slow process of approval cf. France; leads to cost escalation and uncertainty;
- PFI risk transfer, erroneous revenue forecasts; utility diversion; standardization;
- Bus deregulation and competition.

(l) Light Rail Transit forum:

- Length of gestation period raises costs; need to devolve powers and financing to local authorities; cutting delay limit's the problems due to changes in local political control;
- Need amendments to planning process and alignment of roles of highway authority with public sector procurer;
- Economic appraisal process needs to measure social and environmental benefits; Standardizing procurement, less time to award contracts; Bidding cists reduce competition; risk transfer.

(m) Docklands Light Railway:

- TWA process - not a major problem re Woolwich extension, but some requirements may be cumbersome and impediments to larger single schemes; also uncertainty and delay over timescales distorts procurement and makes it less efficient;
- Lack of integration with land use and other modes;
- Length and cost of expenditure on design, accumulation of powers and tendering -- cf. bus schemes; Past cancellations, credibility gap, lack of confidence.

(n) Transport for London:

- Lengthy timescale due to TWA; in London, LRT schemes took 2 to 2.5 years from deposit to royal assent; even longer outside London, over 3 years for Leeds -- but Liverpool quicker, streamlined version of TWA used for LUAS in Dublin;
- Funding difficulties, cost escalation, DfT procurement methods; lengthy studies and consideration of alternatives is necessary to satisfy the DfT;
- Need for extensive liaison with stakeholders and frontagers including community groups essential for street-running systems; problems of objections re green spaces and historic buildings, concerns re traffic diversion and access to properties; TfL aims to achieve this by extensive involvement of stakeholders at key stages of planning process;

(o) Merseytravel;

- Complexity of powers and consent procedures needs a lot of detailed legal work incl

a public inquiry; the Merseytram inspector and the DfT worked hard to ensure the SoS could make a rapid decision, despite the fact it was an entirely new project it took half the time of previous TWA orders;

- Procurement, transfer of risk, cost escalation; involvement of private sector at the earliest stage removed doubt and minimized risk.

(p) Metro (West Yorkshire Travel):

- Main factor is high initial costs, e.g. need to build depots; need for greater recognition of transport needs outside London, local decision making and funding powers;
- No set process means changes inevitable, each scheme procured in a different way; DfT constantly changes its evaluation methods, while the planning/ legal processes are rigid; delays e.g. re Leeds, may mean a need to repeat the whole process again;
- adaptation of scheme over years to meet changing development patterns and national policy requires further changes, hence more cost inflation;
- Lower density towns and narrower streets (than Europe) limit the locations where light rail might be applicable; utility diversions;

(q) South Hampshire rapid transit:

- Pre-procurement: the TWA process obliges promoters to undertake protective measures to assuage third arties, e.g. the utilities and Network Rail; better risk management needed;
- During procurement effective project management is needed - delivery is delegated to promoters, investment authority is not, leading to revocation of funding on three occasions;
- Lack of expertise at DfT to oversee these complex procurement processes; better supply chain management;
- DfT needs to take ownership of the light rail programme and engage with suppliers; more consistency of standards and specifications.

(r) Mott MacDonald:

- Lack of standardization re technicalities and safety at E.U. level;
- Prolonged/ expensive interface with Network Rail;
- Lack of a steady flow of work to the industry, undermines continuity of expertise;
- TWA processes are long, subject to unpredictable delay; promoters have no idea how

long it will take the SoS to grant a final order, also alienates private sector partners;

- Delays in investment devalue public sector contributions, risk allocation skewed;
- cf. in France the government decided to curb car use, identified light rail as a means, provided funding (*versement transport*), streamlined the approval systems and encouraged private-public joint companies.;
- Bus competition -- no problem in Nottingham as the bus company was part of the winning consortium!);
- procurement process expensive and high risk, many firms don't want to participate.

(s) Institution of Civil Engineers:

- lack of integration with buses, fragmentation and competition instead of co-ordination of services;
- Need for private sector finding skews schemes to those financially attractive not those with greater transport benefits;
- TWA 'an improvement on' the parliamentary bill procedure but has proved even more costly and time consuming, especially re the delays in the SOS reaching her decision;
- Technology well established, problem is failure to copy continental innovations, e.g. shared track with heavy rail:
- Complex administrative procedure and fragmentation block the adoption of cheaper 'ultra light rail', which could be applied in medium and small cities.

APPENDIX F – LIGHT RAIL PROCEDURES IN FRANCE:

[source: Egis Semaly & Faber Maunsell 2004, pp.11-16]

(i) POLITICS –

Local authority operates a *Plan de Deplacements Urbains* [PDU]

Strong role of Mayors

(ii) LEGAL -

The main procedures are:

- Initial consultation;
- Integration in to the PDU;
- Public inquiry (one to two months);
- Ministry of transport approval;
- Planning reemission for depot;
- Operating authorization – safety approvals.

(iii) PLANNING :

- Local authorities responsible for transport policy including new schemes (1982 Law);
- Time fame is short – 3.5 years from preliminary studies to opening of service in the case of Lyons. 18 months was the procedure and studies, 2 years for actual construction.
- Process tied in to PDU and PLU (plan local d'Urbanisme) and the Clean Air act (Loi sur l'Air).

APPENDIX G- TABLE OF SURVEY RESULTS.

[spreadsheet follows on pp. 59-63]