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Implementation of a workplace parking levy: lessons from the UK

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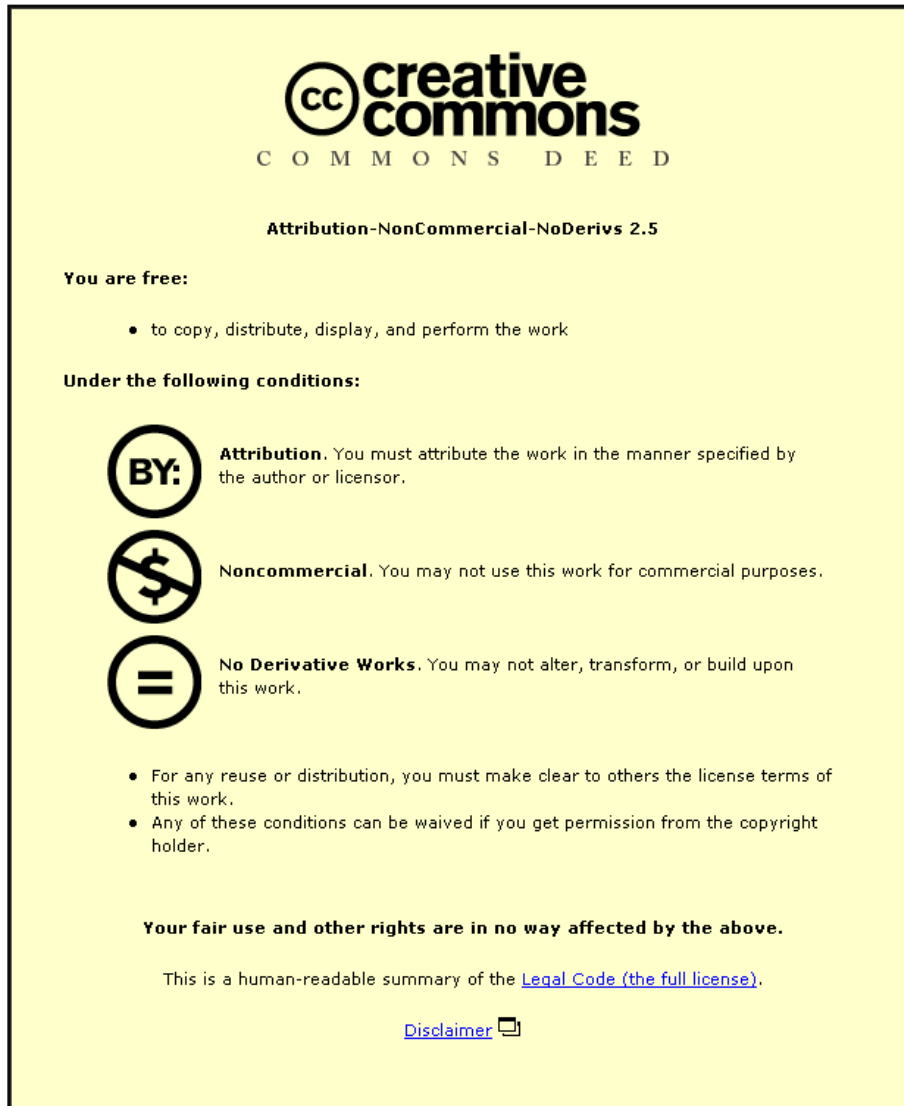
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IMPLEMENTATION OF A WORKPLACE PARKING LEVY, LESSONS FROM THE UK

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ABSTRACT (250 word)

The UK government has made its funding contribution towards major local transport investment conditional on introducing some form of complementary innovative Transport Demand Management measures such as road user charging (RUC). It is intended that this will help constrain traffic and generate local funding contributions towards schemes. Nottingham a major UK City has consequently chosen to implement a workplace parking levy (WPL). This paper presents a case study of the project, outlining its development and explaining the public consultation process used and its findings. It presents a summary of the perceptions of the WPL scheme from the consultations undertaken. From this lessons can be learned which will aid other Cities contemplating such schemes.

The findings reveal that a communication strategy is vital, that WPL is not perceived as the most equitable of systems by many stakeholders but can be considered as an easy and quick policy to implement where the transport funding needs outweigh the negative aspects. WPL could perhaps be considered as a precursor to full RUC as the costs and technological barriers to RUC are reduced.

It is also shown that promoters need to produce complementary strategies in order to assist implementation of WPL at an early stage in scheme development. This includes measures for assistance with employer travel planning and parking restraint. Promoters must have a clear strategy as to where the funding created by WPL will be hypothecated and what the benefits will be both to WPL payers and the general population as a whole.

INTRODUCTION

In the UK only one City, Nottingham, has to date proposed a Workplace Parking Levy (WPL) in order to constrain congestion and provide funding to improve public transport provision, mainly by improved bus provision and the extension and expansion of the City's light rail network namely the Nottingham Express Transit (NET). This case study paper describes the background to the concept of the WPL in the UK and the experiences in Nottingham of taking forward a WPL scheme through consultation. It details the current transport situation in Nottingham, the congestion problems it faces and why it has opted for the WPL. It explains the consultation process that has been undertaken and the main concerns and findings expressed about the proposals by stakeholders from that consultation. It concludes by explaining the final proposals submitted to government for approval which is still under consideration. Although a number of issues remain about appropriate legislation, charge implementation and enforcement, the case study concludes with a summary of the key lessons from the early stages of this scheme for other conurbations looking at taking forward WPL as a possible alternative to RUC.

BACKGROUND TO ROAD USER CHARGING AND THE WORKPLACE PARKING LEVY IN THE UK

That transport has moved centre stage in terms of environmental concern is amply illustrated by a plethora of reports on transport, congestion and the environment. The concern was recognized by the UK Government in a White Paper on the future of transport in 1998 (1). Clearly transport involves large costs, some of which are incurred directly by users, whilst others are borne by the community. Much of this is arguably the result of misleading price signals. For example, the Royal Commission on Environmental Pollution's in the Report on Transport and the Environment (1997) states that: "It is an accepted tenet of economics that for efficient resource allocation all externalities should be internalized: that each user should by some means face the full cost of the effects of his or her individual decisions. This can be achieved through charges and other economic instruments. . . if misleading price signals are corrected, the result should be a more efficient use of resources" (2).

Whilst economic instruments, via price mechanisms, are not a complete alternative to command-and-control regulations, they can be more efficient, however there is generally a lack of public acceptance of the market-based approach to dealing with the growth in vehicle-use. Studies have demonstrated this view, most notably in terms of RUC (3). The lack of public support for RUC could be argued on the grounds that 'Traffic containment or reduction is needed, but it could be better or more appropriately achieved in other ways. Either by simply improving alternatives for example 'better public transport' or through the use of other restraint measures such as the ban on road traffic in major shopping streets, or restrictions on access to certain parts of the road network (3).

Whilst this may be the case, the UK Government's White Paper in 1998 (1) placed renewed emphasis on RUC and workplace parking charges in the UK. These were seen as key ingredients in a package of measures designed to tackle the problems of congestion and pollution, promoting transport choice and reducing car dependency. Local Authorities were hence given power, in the Transport Bill, 2000 (4) to charge for use of congested roads or introduce workplace parking charges, with the proviso that the revenue stream from such charges be ring-fenced and ploughed back into local transport improvements.

The government also decided that any major local transport scheme promoted by a local authority (which traditionally have been 100% funded by the government either directly or via PFI credits) should have a contribution from local sources of 25% of the cost. This had the aim of ensuring adequate planning and risk sharing with the local promoters. In 2004 the Government subsequently set up new funding mechanisms and funding streams for major urban schemes via the Transport Innovation Fund (TIF) (5). TIF schemes only get funding if some form of innovative component is included in the bid. This invariably means traffic constraint via some form of Road User Charging.

The UK Government viewed that such direct charges can be seen as directly tackling the problems of congestion and traffic related pollution on the demand side, and indirectly providing solutions on the supply-side in terms of improvements in transport via the use of hypothecated revenue streams (*1 and 5*).

Local authorities are thus now able to apply for powers to levy a mandatory charge on workplace parking across all or part of their area in the form of a license fee, with owners or occupiers of premises applying to the traffic authority for a license stating the maximum number of vehicles that will be parked on their premises at any one time. The associated revenue stream is derived from the workplace parking charge per vehicle multiplied by this maximum number. The term 'workplace' applies to categories of property used predominantly as a working environment (both public and privately owned), namely offices, factories, educational establishments and warehouses. The idea is the charge also applies to workers parking at categories of property where workplace parking is a minority of the total on-site parking such as retail outlets and leisure centres. Such an approach using WPL arguably provides an incentive for occupiers of a property to reduce the total number of parking spaces, restricting the maximum number of vehicles for which a license is sought.

Although little academic literature has been published to date in terms of WPL research, investigation of the views of key decision makers at local authority level suggests that the WPL is perceived as being fairly effective as a demand management tool, although, like most other price based instruments, potentially not that publicly acceptable (6). Consequently to date Nottingham is the only city in the UK to seriously consider the adoption of a WPL as a way of supporting public transport expansion. This is due in part to its particular traffic problems, governing structure and time constraints on separate but complementary proposals discussed below.

THE NOTTINGHAM CONURBATION

Nottingham is one of the eight English core cities and is the largest conurbation in the East Midlands region of the UK (7). It is located approximately 110 miles (2 hours) north of London, and has excellent transport trunk route links to the rest of the UK, being close to both the strategic trunk motorway network (the M1, M40 and A1) and located close to main railway corridors and two major regional airports. Two other important although smaller East Midland Cities of Derby and Leicester are both approximately 20 miles away.

As the largest conurbation in the East Midlands Nottingham is a key economic driver to the regional and national economy forming the UK home to a number of major international and UK companies such as Boots Chemists, Experian, EON, Capital One, and British American Tobacco. It also hosts two major government offices for the Inland Revenue and the UK Driving Standards Agency. The city has two major UK universities, and one of the

largest, internationally recognized hospitals in Europe again all major employers. Nottingham is one of the countries top shopping areas. The economy of the greater Nottingham conurbation is valued annually at £10.7Bn (\$17.1Bn) with the retail economy valued at £1.3bn (\$2.1Bn) (7). (*Note, conversions based on £1=\$1.6 as at 10/27/08*)

The City and regional economy has traditionally been based on major heavy engineering industry and manufacturing, including coal mining, cycle manufacturing and the textiles industry, the region still has major engineering employers such as train builders Bombardier and jet engine manufacturer Rolls Royce. However over the last 20 years much of this heavy industry has closed and been replaced with a more knowledge and research based economy, much of it centered on Nottingham City centre, with 300,000 jobs being based in the City legislative area (7).

Population and Local Government Structure

The Nottingham conurbation (8) unlike many cities where the City boundary encompasses the entire conurbation the governing structure of the Greater Nottingham conurbation is split across a number of councils and legislative frameworks.

The City is governed by a unitary local authority, Nottingham City Council. The City is fully enclosed by separate but linked suburbs that are within the Nottinghamshire County Council zone with each suburban area broadly having its own local borough council that shares responsibility for services with the county council. This requires both political and legislative co-operation between councils which can present significant political difficulty. This as well as all the Councils being on different electoral cycles is an issue when considering the importance of measures such as the WPL or RUC boundaries. Political expediency and rivalries can therefore constrain the optimization of proposals that cover the whole conurbation.

Figure 1 (8) shows a plan of the Greater Nottingham conurbation, the City Council /City boundary is approximately sketched on the map and broadly covers the area to the North of the River Trent but includes the Clifton area to the south west of the river. The remaining areas of the conurbation surrounding and enclosing the city are within the Nottinghamshire County Council area.

The overall population of the conurbation is approximately 631,000 including 270,000 within the confined City area. The population of the outer suburban conurbation is formed by a further 274,000 in the Nottinghamshire County Council area and a further 83,000 living in the rural areas surrounding the suburbs. Over 55 % of the jobs in the city area are taken by people from the outer county area who have to travel to the City for work so any City charge would be largely born by those from outside (8).

As much of the regions and conurbations economy is centered on the city centre of Nottingham this obviously creates significant traffic both from within the conurbation and from the wider region. As with most major cities however the transport network, in particular the highway network, is severely congested with delays at most major junctions and slow speeds on main links (see Figure 1).

boulevard system and again in the 1970s when the main ring road at the city boundary was extended and other major traffic measures were introduced. However the majority of the areas main road network is radial from the city centre (Figure 1) crossing the ring roads at at grade junctions. The city unusually for the UK has no complete dual carriageway links to the main national trunk routes.

Public transport provision to the city over recent decades has suffered from a lack of investment and a number of urban rail routes within the conurbation were shut in the 1950s and the land subsequently developed, leaving only main inter region rail routes. Bus passenger numbers across the UK have been in long-term decline but in recent years Nottingham has seen a reduced level of decline, and limited growth. The City has an extensive bus network run by two rival bus companies and a single tram line (NET) which is planned to be the start of an extensive network. The car makes up the majority of travel to the city (61% against a UK wide transport norm of 85%), and this creates delays on all key routes and junctions, (Figure 1). These delays also affect the bus system, bus delays are costed at £30m pa (\$96m) (7). Additionally due to the piecemeal development over time of the road network and concurrent development along these route little land and /or scope for potential expansion of the road network exists, without major demolition or significant environmental impact. This would also have strong political opposition as frequently politicians in the outer County suburban area regards the county area as having to suffer for the benefit of the City.

To combat this increasing congestion the city and county councils in partnership with local transport operators have worked to develop where possible bus priority measures and invested in extensive traffic control and optimization measures. This and the already congested nature of the local transport system has helped constrain traffic growth in the last decade, but over the previous decade Greater Nottingham saw traffic growth at almost twice the national trend (9). With the expanding economy however, and further proposed housing development around the conurbation analysis has shown that without significant and extensive expansion of the public transport network a large transport gap will develop between the demand placed upon the network and the transport supply that can be provided (Figure 2) (9). This will obviously have significant constraints on the conurbation and its key economic role. Therefore it was recognized that major public transport improvements and constraint in traffic growth were required to help address the problem (9).

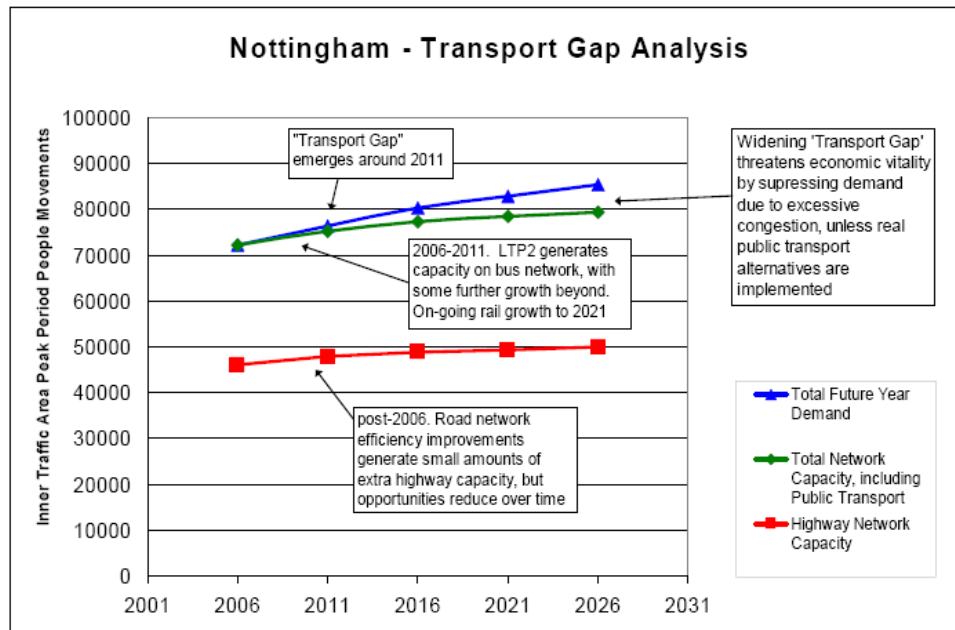


FIGURE 2 The Nottingham transport gap analysis (9)

WORKPLACE PARKING LEVY

In 2000 the city started to consider the options for a charging scheme and its response to government transport policy and advice. In 2002 the City commissioned a study on the options for funding transport improvements (10). The City Council decided to investigate a RUC scheme (10). The principles of the WPL scheme have thus been incorporated in to the statutory transport plans for the conurbation. The city and representatives of the Greater Nottingham area set the following objectives for a scheme to match the requirements of the local economy and its key drivers (10).

- Reduce traffic levels by fiscal restraint to car travel and encourage public transport use.
- Generate funds to provide better alternatives to the car.

Other framework objectives were set:

- To manage congestion/ peak hour weekday flows.
- To manage congestion in the city but mainly on main radial routes and the prime orbital ring road.
- Manage congestion by targeting commuter flows.
- Limit the effects on economic drivers such as shopping, tourism, leisure and city business.
- Obtain adequate public acceptance.
- Maintain City vibrancy and safety without affecting accessibility/ social inclusion.

The following (RUC) issues were reviewed:

- Geographical area of a possible charge,

- The basis of the charge,
 - Area licensing
 - Entry Permit
 - Cordon Charging
 - Multi zone charging
 - Distance based charging
- Time basis of the charge
- Charge level and traffic
- Technology required for implementation
- Exemption and charge privileges

And this led to the following options for review,

- £1 (\$1.60) morning peak wide area entry permit scheme broadly within the ring road/ A6211 (see Figure 1) and similar scheme with a £2 (\$3.20) charge (Options A and B)
- £1 (\$1.60) morning peak inner area entry permit scheme focused on the City centre but crossing all key radial routes, and similar scheme with a £2 (\$3.20) charge (Option C and D)
- A £250 (\$400) charge placed on commuter parking spaces for all employers in the city area with more than 10 spaces. (Option E)

The initial study confirmed that options C and E were the most viable against the scheme objectives and were taken forward for further consideration and consultation. The results of the study and the main conclusions between the charging approaches derived at this stage are detailed in Table 1 (10).

TABLE 1 Outline of Initial RUC Options for Nottingham (10)

	RUC scheme option A - outer area entry permit scheme; am peak charge of £1 per day	RUC scheme option B - outer area entry permit scheme; am peak charge of £2 per day	RUC scheme option C - inner area entry permit scheme; am peak charge of £1 per day	RUC scheme option D - inner area entry permit scheme; am peak charge of £2 per day	WPL scheme option E - covering City; charge £250 per space per year; 10 space threshold
Potential morning peak period direct traffic reduction impacts (target year 2006)	Daily reduction of 2100 inbound trips, plus 4700 trips re-routed away from charged area	Daily reduction of 4200 inbound trips, plus 4700 trips re-routed away from charged area	Daily reduction of 2600 inbound trips, plus 6800 trips re-routed away from charged area	Daily reduction of 5300 inbound trips, plus 6800 trips re-routed away from charged area	Daily reduction of 500 to 1400 inbound trips (depending on % of employers passing charge on to employees)
Targeting of traffic reduction	Congestion - causing trips not particularly well targeted	Congestion - causing trips not particularly well targeted	Congestion - causing trips reasonably well targeted	Congestion - causing trips reasonably well targeted	Targets commuting trips for those with workplace parking
Gross revenues over 10 year operational period	£159M	£307M	£199M	£386M	£93M
Total cost over 10 year period	£66M	£68M	£70M	£73M	£9M
Net revenues over 10 year operational period	£93M	£239M	£129M	£313M	£84M
Implementation timescale	4 years	4 years	4 years	4 years	2 years
Likely acceptability to the general public	Low	Low	Low / moderate	Low/ moderate	Moderate
Likely acceptability to the business community	Low / moderate	Low / moderate	Moderate	Moderate	Low
Technological risk	Low / moderate	Low / moderate	Low / moderate	Low / moderate	Low
Traffic management requirements	Moderate / high	Moderate / high	Moderate	Moderate	Low / moderate
Ability to specially treat economically important groups	Low / moderate	Low / moderate	Moderate	Moderate	Good

As the proposals have developed, time constraints have also influenced the scheme decision making process as the need for revenue streams to coincide with the planned program and funding of public transport improvements (mainly extension of the tram via a scheme called NET Phase 2) has become an issue (9). It should also be noted that this is mainly a consequence of the fragmented and time consuming nature of the systems for transport funding and major scheme planning approval used in the UK.

Consequently following government outline funding approval for the extension of the NET tram system (currently being taken through planning and funding separately) a WPL approach has been taken forward for consultation on the basis of Option E above (see Table 1) (10). The main driver for this option seems that it is quick to implement enabling the generation of an income stream for the concurrent plans and presents little implementation risk and cost in both technological and monetary terms. The proposed WPL scheme encompasses the governments outline WPL proposals and the aims set for the city detailed above.

Consultation Phase

Public consultation on the scheme took place in Summer 2007 when stakeholder groups were consulted as well as the delivery of 123,000 project leaflets to households and businesses. The proposals were extensively advertised in the local media and via a dedicated website (11). Approximately 2500 responses were received, 39% from the city area, 50% from non city residents (who are those most likely to have to pay the charge, as they travel further to work in the city mainly by car), 4% were from businesses, and the remainder from further afield and pressure groups. Of the city residents 68% were generally supportive, but across the wider sample 43% were in support and 55% objected (12). Following the initial consultation key themes and topics were identified such as the cost to businesses, the equity of the scheme and the effect on non-peak hour commuters. The consultation also revealed that public transport was in need of improvement. The findings and the detailed comparisons against RUC from this phase are summarized in Table 2 (13).

TABLE 2 Detailed Comparison of WPL and RUC for Nottingham (13)

Criteria	Workplace Parking Levy	Road User Charging
<ul style="list-style-type: none"> • Direct impact on congestion through charging, particularly at peak times • Indirect impact on congestion through use of funds raised through charging, particularly at peak times. 	<ul style="list-style-type: none"> • Low direct impact on traffic and congestion levels • Medium indirect impact on traffic and congestion levels through proposed package of measures to be part-funded by WPL revenue 	<ul style="list-style-type: none"> • Potentially high direct impact on traffic and congestion levels (depending on scheme form and charge levels) • Potentially high indirect impact on traffic and congestion levels (depending on enhanced package of measures using extra funding generated by RUC)
<ul style="list-style-type: none"> • Flexibility in the treatment of different circumstances 	<ul style="list-style-type: none"> • Good flexibility 	<ul style="list-style-type: none"> • Good flexibility
<ul style="list-style-type: none"> • Level of technological risk 	<ul style="list-style-type: none"> • Very low 	<ul style="list-style-type: none"> • Low – medium
<ul style="list-style-type: none"> • Road building and traffic 	<ul style="list-style-type: none"> • No road building 	<ul style="list-style-type: none"> • No road building requirements

management requirements	requirements <ul style="list-style-type: none"> • Low traffic management requirements 	<ul style="list-style-type: none"> • Low - medium traffic management requirements (depending on scheme form)
<ul style="list-style-type: none"> • Initial investment required • Revenue collection efficiency (cost of collection as a % of revenue collected) 	<ul style="list-style-type: none"> • Low initial investment • Low operating cost and good revenue collection efficiency 	<ul style="list-style-type: none"> • High initial investment • Medium operating cost and modest revenue collection efficiency (depending on scheme form)
<ul style="list-style-type: none"> • Implementation timescale required 	<ul style="list-style-type: none"> • Short implementation timescale (2010 achievable) 	<ul style="list-style-type: none"> • Medium implementation timescale (2012-13 achievable)
<ul style="list-style-type: none"> • Attraction / retention of employers and retail facilities • Accessibility to work and education • Environmental impact 	<ul style="list-style-type: none"> • No impact or small positive or negative impact on attraction / retention of employment and retail facilities most likely • Medium positive impact on accessibility overall • Low positive environmental impact (emission reduction) (scheme only – excluding NET Phase Two etc) 	<ul style="list-style-type: none"> • No impact or small positive or negative impact on attraction / retention of employment and retail facilities most likely (depending on scheme and package details) • Potential for medium to high positive impact on accessibility, but with need for special measures to combat social exclusion for some low income groups • Potential medium positive environmental impact (scheme only – excluding NET Phase Two and other package elements).
<ul style="list-style-type: none"> • Public acceptability • Business acceptability 	<ul style="list-style-type: none"> • Medium public acceptability (shown through Public Consultation) • Low acceptability to business (shown through Public Consultation) • 	<ul style="list-style-type: none"> • Low to medium public acceptability likely (depends strongly on package of measures surrounding RUC scheme) • Medium acceptability to business likely (depends strongly on scheme form and package of measures surrounding RUC scheme)

In order to progress the consultation process rather unusually a public examination of the proposals was made by the City Council so as to allow business and residents a further chance to air their views. The examination was held on the lines of an informal planning hearing in October 2007 and included an independent planning inspector from the UK Planning Inspectorate. The aim was to provide a structured debate where all stakeholders were able to present their views. Some 685 representations were received by the independent examiner, of which 109 were invited to participate in the hearing process, only 28 took part, (18 representing 14 business organizations, and 10 general members of the public) (14).

From the original representations received 5 topics (incorporating 31 issues) were identified for debate by the examiner. The main topics were, transport impacts, economic impacts, alternatives to the levy, the scope of the scheme, and its operation (14).

LESSONS AND CONCLUSIONS ON WPL FROM THE PUBLIC EXAMINATION

The key issues and perceptions about WPL that came out of the public examination and the conclusions drawn by the independent examiner which identify some key lessons about implementing workplace parking schemes are extracted and précised from the independent examiners report below (14).

Perception Issues and Concerns from the Examination

Equity of the Charge

- It was felt that those currently with free workplace parking have an advantage over those who have to pay. If an individual has an advantage it depends on if their remuneration has been adjusted to allow for free parking. Government policy sees the taxation of workplace parking as a tool for tackling congestion, and, as a by-product, for improving public transport.
- WPL was perceived as a very blunt instrument, which is perhaps why it was perceived as unfair in many respects by a wide range of individuals, employers and other organizations. Its principal drawback is that it would not distinguish between those who travel in congested periods on congested roads, and those who do not. It does not distinguish between those who have practicable public transport alternatives and those who do not. In addition it could take more of the disposable income of those on low incomes than of those on high incomes. It was concluded that one of the reasons the Council has not distinguished the scheme between employees on the basis of their different needs and their different access to public transport alternatives was that they wanted a system which was administratively simple (for the Council) and relatively cheap to operate. It was also felt that for an employer the administrative cost of acquiring a license would be small (leaving aside the actual charges), but the cost of developing and administering a workplace travel plan in concert with the scheme could be substantial.
- Without significant targeted effort by the Council, there is a risk that employers would not assess and manage their car parking, and would not pass on the charge sensitively, with due regard to the differing needs and travel opportunities or options of their employees. It might cause hardship to those on low incomes, who might include those with caring responsibilities, those who have to carry heavy materials to work, shift workers, and others without practical alternatives.

Scheme and Pricing

- A sophisticated RUC scheme, allowing drivers to be charged only when traveling in congested conditions, would be, and would be perceived as, a fairer means of tackling congestion. Because it need not operate early in the morning or late at night it would be less likely to affect those without public transport alternatives.
- RUC like the WPL could be considered regressive, but it would be more subtle in its impact if it charged only for the journeys made on congested lengths of road, which should be possible with modern technology. It would raise money for public

transport improvements. The fact that it would be less cost-efficient than the proposed WPL did not appear to be an insurmountable barrier to its adoption, as it would be self-financing. For the Council, the fact that RUC would not distinguish between those with free parking and those without, nor between those on shopping and leisure trips and others, is a disadvantage. However, even if it is a disadvantage, it appeared to be outweighed by the greater transparency and greater focus on congestion of RUC.

Presentation Issues

- Insufficient weight was given to the significance of workplace travel plans in the way that the WPL proposal has been developed and presented.
- Presenting the proposals has posed a significant challenge for the Council. They have chosen not to present the proposed WPL as simply a deterrent measure for those drivers with free workplace parking, but as part of a general package of public transport improvements. Clearly those paying the tax would wish to see some obvious benefit to themselves, as well as to the rest of the public.

Traffic Issues and Displacement

- The WPL scheme has the potential to deliver public transport benefits to Nottingham through expenditure on transport projects, including NET Phase Two. It would probably however have a very small direct effect upon the growth in traffic congestion alone (<300,000 journeys between 2011 and 2012), but a somewhat larger indirect effect through its support of public transport improvements.
- In the immediate aftermath of charging being passed on by an employer, there might be a displacement of parking onto nearby streets, where there are no parking controls, with consequent environmental effects on those streets.

Public Transport Provision

- In order to attract drivers from their cars, there needs to be not only convenient, frequent, reliable public transport, but also single cross operator ticket arrangements at prices which are perceived to be acceptable in comparison to the cost of motoring. There are concerns that the laws enforcing competition between operators still create barriers for effective through ticketing.

Business Impact

- Employers could choose to move to new locations outside the City (although this in itself may present a cost to employers and their staff due to relocation costs or increased commuting costs above the WPL). The greatest risk is the sense of alienation and hostility which might be engendered. The risk might be mitigated by workplace travel plans and pricing charges which recognized the reality of employees' travel choices, and did not charge, or charged less, to those who made the least contribution to congestion, or who had no practical alternative to traveling by car.

Economic Impact

- Unless and until other local authorities, particularly those in neighboring areas, decided to introduce their own WPL or RUC schemes, the WPL in Nottingham could be a disadvantage when potential incoming investors were weighing the costs and benefits of relocating there. This disadvantage however might be offset by the existence or promise of better public transport. Similarly, the WPL would be one factor in a whole array of considerations for businesses contemplating moving to new premises, and it might be sufficient to tip the balance in persuading them to move to a site inside or outside the City. (NB. The current tram line has been successful at attracting businesses to relocate on its corridors in the city.)

Alternative Funding for Transport Improvements

- Other funding mechanisms for the local contribution towards the tram extensions could be considered including direct local taxation, business rates or a local lottery.

Recommendations from the Examination

The main recommendations for the scheme again summarized from the examination report are as follows (14):-

- The promoters should not proceed with the WPL unless and until they have developed a detailed, costed program (funded from the predicted proceeds of the WPL) for engaging with employers to advise and assist them in developing workplace travel plans, and in particular car parking management schemes which will assess the differing needs and resources of employees, and allocate and charge for spaces accordingly.
- The promoters should not proceed with a WPL unless and until: (i) they have identified the most likely locations for displaced parking, and made contingency plans for combating it; (ii) they have allocated an assured level of resources for implementing any necessary parking control measures.
- The promoters should present the WPL and its relationship to transport improvements more clearly to the public and to business.
- The promoters should be more precise and transparent about the measures on which the proceeds of the WPL would be spent, and in particular stress that they would set aside a specific sum for advising on, encouraging and supporting the preparation of workplace travel plans, in order to demonstrate the immediate as well as the long-term benefits of the proposed package.
- If the promoters decide to implement the proposed WPL, they should ensure that the public transport benefits associated with it are clearly publicized and swiftly realized.

- It could be possible for employers to pass on the charge by means of salary sacrifice, and that this would effectively reduce the charge for an employee via tax breaks. If WPL proceeds the promoters should inform employers about the salary sacrifice provisions and actively encourage them to ensure that employees benefit from those provisions where appropriate.
- By requiring that any fundraising scheme should be in place by 2010 the promoters have effectively ruled RUC out of contention. Were there no such constraint, an RUC scheme should be pursued as a fairer way of taxing commuters, investing in public transport and reducing the growth in congestion.
- A 100% discount should be given for the first 10 spaces in every case.
- The scheme should not charge for spaces which are used by business visitors who are genuinely calling in occasionally or for short periods rather than commuting on a regular basis.

REVISED PROPOSALS AND THE WAY FORWARD

Following the consultation the City Council as promoters have taken note of most of the recommendations from the examination and voted to proceed with the WPL. It has submitted to the Government for final approval the scheme outlined below (15). The government may call for a further public inquiry prior to giving the city the legal powers to implement the scheme (although the examination may have already fulfilled the function of an inquiry). The revised scheme is such that:-

- The charge would be city wide within the City council boundary.
- All liable employers (i.e. those with more than 10 spaces) would have to obtain a license. This includes spaces in both the public and private sector. (i.e. the factories and major employers detailed above as well as schools council offices etc. However medical facilities would be exempt.)
- Customer/Visitor spaces and fleet vehicle spaces would receive a 100% discount.
- Spaces at essential services such as hospitals would receive a 100% discount.
- Disabled parking spaces would receive a 100% discount.

The scheme should start in 2010 with a phased implementation charge of £185/space/year (\$296) (it was originally proposed to be approximately £300 (\$640). This discount is to provide an incremental implementation, this will rise over the first five years by inflation plus a mark up to £364 (\$582) by 2015 with inflationary rises thereafter. Phased cost introduction would allow the planned public transport improvements to come on stream prior to the main part of the charge (13).

It should be noted that this charge is approximately £1/day parking charge (\$1.60), currently parking in Nottingham in car parks and on street costs about £8/day (\$13), although shopper discounts do apply off peak, typical return public transport fares are £2.80 (\$4.50).

Based on the above scheme the proposals would cover nearly 37,000 parking spaces including 3,651 spaces in schools (an allowance of 10% reduction in spaces when the levy come in has been made based on experience elsewhere in the cost calculations) (13).

The 100% charging discount for 10 or less liable parking spaces means that over 3,000 small employers would not pay any charge. Around 500 larger employers would be liable.

Enforcement of the scheme will be undertaken by current on-street parking officers who will have extended powers to enter premises to determine whether unlicensed workplace parking is being provided. It is expected that vehicles will be required to display a WPL permit where their parking requires the space in which they are parked to be licensed. The enforcement procedure where unlicensed workplace parking is being provided is expected to be set out in WPL regulations. It is expected that a penalty charge will be payable. However, as yet these regulations are still to be developed and relevant national legislation to allow enforcement of WPL schemes still has to be approved by the UK parliament.

An employer assistance package is being developed that will include providing guidance and information to help employers introduce travel planning and parking management policies and to administer the scheme and pursue tax issues, including 'salary sacrifice' possibilities (15).

Work has also commenced to develop a program for developing traffic management measures, such as residents' parking schemes, should any problems occur in residential areas if employees decide to avoid the WPL charge by parking on street, although the details of this still remain in development.

It is estimated that the income from the Levy will be £5.6m (\$9m) in 2010, rising to £10.8m (\$17.3m) in 2014. The total Net revenue is predicted to be £91.7m (\$148m) (in 2005 prices) over a 20 year life of the scheme. The implementation costs are approximately £1.9m (\$3m) and this will include the employer assistance package. The annual operating costs, met by the revenue generated, will be in the region of £0.6m (\$1m,) (13).

CONCLUSIONS

- It is clear the WPL is perceived as a crude tool, and does not necessarily target the key congestors who would pay under a RUC system.
- To develop a WPL support needs to be provided to help employers develop strong and robust workplace travel plans in conjunction with the charge. This is required to help target the parking charges to employees who do have public transport options for getting to work, as well as to deliver the congestion reduction benefits.
- Complementary measures need to be planned and costed into schemes at an early stage such as implementation support and travel planning advice, and proposals to prevent displaced parking to residential streets.
- WPL is a relatively quick system to implement manage and operate when compared with the more costly RUC solutions where both the costs and risks of the technology are yet to be fully refined or evaluated.

- As RUC technology improves and becomes cheaper a move to such a scheme would be more equitable, therefore perhaps WPL should act as a short –term stop gap whilst RUC technology is further refined. In view of this and in a wider context perhaps WPL can be considered as an intermediate step between the already accepted and familiar concept of parking charges and full RUC. WPL is perhaps an incremental approach to decision making.
- As with all RUC systems they can be unpopular, however business can present a powerful lobby, against such schemes. Political frameworks and control structures can have significant influence on the schemes implemented.
- A parking levy may not deliver reduction in traffic alone. It is the improvements that are funded by a levy that help most in reducing or constraining traffic growth.
- Obtaining stakeholder support and acceptance presents significant challenges for communication strategies for the scheme promoters. This should include a clear statement of the public transport improvements to be funded and an explanation of the benefits to the payers themselves of reduced traffic.
- The negatives of the cost of the charge may be offset by improved transport provision and the benefits it brings. However, it must be recognized that one can not happen without the other.

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