

## **Edge Lane Public Inquiry**

Evidence from Professor Lewis Lesley

### **Introduction**

Until I retired in 2003, I held the Chair as Professor of Transport Science at the Liverpool JM University. I am a Chartered Civil Engineer and a member of the Institution of Civil Engineers. I was elected in 1988 a Fellow of the Chartered Institute of Transport, and a Fellow of the Institute of Freight Forwarders, and the Chartered Institute of Logistics and Transport. I am also a member of the UK Transport Planning Society. Since graduating in 1974 with a PhD in Transport Engineering from Strathclyde University, I have been involved in promoting road schemes, and also in critiquing and objecting to schemes.

The proposers of such schemes generate significant volumes of material, purporting to prove the case for the scheme. Cost benefit analysis used to be one of the main criteria, much of which is subjective or opinion based dressed up as scientific certainty. This is especially so since many of the impacts, e.g. Noise and pollution, are ignored. More recently the New Approach To Assessment (NATA) adds other factors, including regeneration and value for money.

The large volumes of such materials produced shortly before the inquiry, or even during it, make it impossible for one person to read everything that has been produced. This is sad since there are no doubt nuggets of important information that objectors and their witnesses should know, either because they are central to the support case, or wrong and therefore undermine it. The critical information remains the objectives for the schemes. Why is it being promoted ? Often there are no clear objectives but a set of political imperatives, or a policy devised decades ago, long out of date but rolling on like a juggernaut.

### **1.0 Extra road capacity does not reduce congestion**

Since the 1963 "Traffic in Towns" Buchanan Report, it has been proven that increasing urban road capacity does not decrease road congestion but merely enables more cars to commute, filling the new capacity and worsening the congestion on other roads. The Motorway Box plan around inner London was subjected in 1974 to the longest Public Inquiry at that time. This was rejected because:

- (a) the demolition required was bigger than had been achieved by the Luftwaffe in 1940-1945,
- (b) the cost was likely to absorb most of the UK Capital allocation for the following 20years
- (c) traffic on existing roads would increase by up to 100% from the generated traffic accessing and leaving the motorway box.

More recently the Standing Advisory Committee on Trunk Road Assessment (SACTRA) advised the Government in 1991 that new roads on average generate at least 20% of the traffic which uses them. On the M25 around London about 85% of the traffic is London based, suburb to suburb, which previously did not drive. This year the Government's commissioned M6 Toll Road Assessment Report confirmed that over half the traffic using the road was generated and did not relieve the M6.

The consequence of removing this "bottle neck" on Edge Lane by a dual carriageway will merely transfer the problem closer into the city centre. Even if there was enough resources and public support to build a quasi motorway to Pier Head, there is not enough land to build the car parks needed to accommodate this extra traffic in the city centre. After the Niagara Commission built a Freeway between Toronto and the Falls, the Chairman of the Commission reported in 1951 that there was not enough land for car parking. For all those who could drive.

Of the North American Cities which are most dependent on motor cars, Los Angeles is the most famous. The freeway network of Los Angeles is longer than the motorway network of the whole of the UK. The city centre has 70% of its land devoted to car parking. Peak hour congestion starts at 7am and goes on to 7pm. Yet the air pollution from traffic is so bad that California is mandating 10% of new vehicles as Zero emitters, and investing more in building light rail lines, than the whole of the UK is investing in all forms of urban public transport. Indeed some 19 new light rail lines have been built in North America since 1990, prompted high levels of road congestion and pollution but as importantly a way to regenerate city centre, by allowing sterile parking lots to be redeveloped for value added activities.

Widening Edge Lane will merely transfer the problem further into the city centre, and stifle rather than encourage economic expansion in the city centre due to the land required for parking.

## 2.0 **Examples of new roads in Liverpool**

This is not the first scheme to widen existing roads, or build new roads in Liverpool. The Abercrombie 1949 Town Development Plan proposed three rings at different distances from the city centre, of which the middle ring (Queen's Drive already existed), the outer ring (M57) has been built. The inner ring blighted the Seymour and Russell Street Areas, now being widened some 56 years after the plan. The 1969 MALTS Plan led to another effort to revive an inner ring road. The widening of the Strand, Leeds Street and Byrom Street were the only parts achieved before Merseyside County Council was abolished. Also constructed to relieve traffic congestion were the Churchill Flyovers, and the completely New Islington dual carriageway to West Derby Road and Kensington. These are also poor examples of traffic relief, and even worse examples of the claimed urban regeneration that these roads would catalyse. Some 20 years later the sites demolished remain landscaped, awaiting development, and many fringe areas have been blighted and demolished.

One other new road in Liverpool is the Kingsway Tunnel, which required a large part of Scotland Road to be demolished, and its resident Catholic population dispersed to Kirkby and Skelmersdale, in the name of slum clearance. This loss of a critical mass of resident population, doomed the rest of the area. The Tunnel has not eased congestion in the Queensway Tunnel, but has led to a modal switch from rail to road, so that 70% of those working in the city centre now drive.

Widening Edge Lane will merely repeat the mistakes of earlier road schemes in Liverpool, which have not reduced congestion, nor stimulated economic expansion. Indeed Liverpool's two main competitor cities, Dublin and Manchester are not building new roads but improving rail based public transport.

### **3.0 Reducing Road Capacity reduces traffic**

The opposite of reducing capacity reduces congestion is also true. Indeed as early as 1967 this was proven with the Pimlico Traffic Precinct, reducing road capacity in inner London, without worsening congestion. This scheme stopped commuters driving through the area. The displaced traffic just disappeared. After an earthquake demolished the Embarcardo double deck Freeway in San Fransisco, the city took the opportunity not to rebuild the road but to replace it with a linear park, cycle tracks, footpaths and a light rail line. Not only did this improve the local environment but it improved the traffic flow on the rest of the freeway network, by reducing the daily traffic volume.

The A57 Liverpool-Lincoln road starts at Pierhead. It used to go along Church Street and moves to pedestrianise Liverpool's most important shopping street were resisted because of the claimed extra congestion that would be caused by the displaced traffic. When Henderson's Department Store burnt down, Church Street had to be closed until the unsafe building could be demolished. Congestion was not worsened by the displaced traffic. In comparison to other European cities Liverpool has a tiny pedestrianised centre. Like those promoting the widening of Edge Lane, much of the traffic planning in the city appears to be stuck in a 1950's time warp.

Barcelona has had a policy for over 20years of incrementally reducing carriageway capacity by widening footways, and creating public transport lanes. Barcelona advertises this traffic calming as part of its tourist attraction. Probably the most successful examples of traffic restraint can be found in Holland and Germany. In Holland residential precincts (Woonerfen) not only remove 'rat run' traffic but make motorists automatically guilty if a pedestrian is hit. In Germany part of the reduction in highway capacity has been converted into green strips and other civic recreational areas. Ironically Kensington is one of the few examples in Liverpool where comprehensive measures of road closures, tree planting and signing has eliminated extraneous through traffic, leaving the neighbourhood for residual access traffic only and play space. Sadly other residential areas with equal claims to traffic calming, merely get 20mph signs.

Widening Edge Lane is the wrong policy, it should be narrowed.

#### **4.0 UK and EU policy is to reduce dependency on cars**

UK and EU policy is to reduce dependency on motor cars as a way to reduce urban road congestion, reduce dependency on oil, reduce greenhouse gas emissions, and reduce the health risks from vehicle crashes and polluting exhausts. This was reinforced by the UK signing the Local Agenda 21 Treaty in Rio de Janeiro in 1991, requiring Local Authorities actively to reduce motor car traffic. The EU has enacted a number of Directives which require member states to implement LA21. This was formalized as UK policy by PPG13. The UK policy assumes that increasing urban road capacity is not an acceptable option. The Merseyside LTP also presumes that measures other than more road capacity will be adopted to accommodate increasing personal movements. Something like 3 out of 4 Merseyside car trips are less than five miles long. Other EU countries (including Poland) have higher levels of car ownership than Liverpool but have lower per capita car use. Other EU countries like Denmark and Germany have demonstrated that it is possible to increase urban bike use from 2%, (the Merseyside level) to over 10%. In Denmark over half of all secondary children go to school by bike. Diverting 20% of all Merseyside car use to bikes would require an investment smaller than that proposed to widen Edge Lane. It would also have significant health benefits, directly from more exercise and indirectly from less pollution.

The money required to widen Edge Lane would achieve larger benefits being spent on traffic restraint and calming measures, as required by LA21.

#### **5.0 Motor Transport a major cause of urban diseases**

It has been well established since the early 1990's, that corridors of motor vehicle exhaust concentrations, correlate with high incidents of asthma, and cardio vascular diseases. The major pollutants from motor transport, PM10's, NOX and CO are all indicated clinically in these disease concentrations. The UK Chief Medical Officer of Health calculates that some 24,000 people pa die directly from exposure to motor vehicle exhausts, which compares to about 3000 killed from road crashes. Motor traffic is also the most frequently cited and most serious urban noise nuisance, exceeding the WHO maximum levels in most cities including Liverpool most of the time. Motor traffic is cited in numerous noise surveys as being three to four times more serious than the next, aircraft noise.

Widening Edge Lane will allow more traffic and therefore generate more pollution and noise. There are few economic measures to protect residents against this.

## **6.0 Realistic alternative options not considered:**

Equivalent cities on the Continent are actively reducing road capacity for motor vehicles to reduce the public health impacts of motor traffic. Some of this road capacity is being converted to other uses, e.g. children's play space, and public amenity space. The rest is being reallocated to cycling and public transport use, giving uncongested operating conditions for public transport, and safer more direct routes for cycling. Together these make attractive and acceptable alternatives for short car trips. In Liverpool some 70% of car trips are under 5 miles in length and 50% are under 3 miles long. From work in other cities motorists are willing to transfer to public transport and even cycling, where these are perceived to be safe and reliable.

Indeed Denmark starting in 1980 with only 2% (the same as the UK and Merseyside) of all trips cycled, has raised this 11%, and 60% of secondary school trips are by bike. In Germany a similar transformation over an equivalent time period has raised cycling from 2% to 10% of all trips made nationally. A BMA study in 1995 showed that middle aged men cycling instead of driving to work would increase their life expectancy on average by 10 years, balancing the slightly higher risk of death from a traffic crash, against improved health and fitness from the exercise of cycling. It could even be argued that the NHS rather than the DfT should be responsible for promoting cycling, as a way of reducing hospital costs from unfit, overweight people.

These measures include:

### **6.1 Traffic calming and management**

Kensington is an isolated example of a residential area which has benefited from traffic calming measures. How many of the car trips on Edge Lane are wholly internal to Liverpool, and therefore amenable to being attracted to cycling or public transport? Similarly simple traffic management of Edge Lane would remove the present bottle neck, at less than 1% of the proposed road scheme costs. Such measures would enhance the co-ordinated "green wave" Traffic Control Scheme, metering the traffic onto the next road section at a rate it can accept without congestion, and tidal flow arrangements. These would all address the present problems, without increasing capacity and therefore generating further car traffic.

### **6.2 Walking and cycling**

Walking accounts for about 80% of Liverpool trips under 1 mile length, and 40% of those between 1-2 miles. Walking is a sustainable method of transport and is already widely used. Indeed all car drivers have to walk at both ends of their trip. For short car trips (e.g. taking children to school) walking all the way would hardly make any difference to journey time but a significant impact on the local environment, since short car trips are the most polluting. Walking and cycling are also very sociable modes of transport but too vulnerable from motor vehicles.

### 6.3 Public transport

Liverpool still enjoys high public transport use compared to other UK cities outside London. Indeed the bus traffic along Kensington is larger than whole Merseyrail Northern line network. Edge Lane is also paralleled by the City Line of Merseyrail with Stations at Edge Hill, Wavertree Technology Park and Broad Green. Earlier Merseytravel proposed in 1998 a park and ride facility at Broad Green at the end of the M62, from where trains take only 9 minutes to reach the City Centre, faster than would be possible even with the widening of Edge Lane.

Widening Edge Lane ignores existing sustainable modes of transport, and is likely, as Kingsway Tunnel showed, of diverting public transport trips and so weakening the service.

### 7.0 Is this a transport or urban redevelopment project ?

Given the size of the CPO area, much larger than needed for a mere road widening scheme, it raises the question as to whether it is a back door comprehensive redevelopment scheme much loved in the 1960's, which used the "slum clearance" powers of the Housing Acts, as in Scotland Road. Planning Blight has reduced the value of private property and already requires compensation under the European Convention on Human Rights.

The proposers cannot guarantee that they will not leave the area along Edge Lane looking like Scotland Road, or New Islington.

Widening Edge Lane is not an incremental solution. These are much less costly and can be reversed if less than success. It would be sad if the operation to widen Edge Lane was successful but the patient died ?

### 8.0 Conclusion

The Secretary of State cannot reasonably agree to the CPO of such large numbers of property, unless satisfied beyond doubt that there are no other options which offer better value for money. Destroying communities, for which Liverpool has previous examples, is easy to achieve. Building a new community is much more difficult and takes decades. Perhaps the Secretary of State might help Liverpool to become an exemplar city less dependent on cars. This is certainly the developing culture in the rest of Europe. Barcelona, an earlier European Capital of Culture was able to show that it is possible to have a civilised city, with less than 50% of its traffic in cars. Can Liverpool reduce its 70% dependency ?