RESPONSE TO THE NATIONAL INFRASTRUCTURE CALL FOR EVIDENCE

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Paragraph 3. London's Infrastructure

RESPONSE. 3.1.2

THE ECONOMY

The effect of the development of our rail and road network in the UK was to bring economic development to areas which would have otherwise remained in a backwater.

Goods could flow freely between centres of manufacturing and businesses could interact with their counterparts in centres across the UK.

The government Command Paper, **Action for Roads A network for the 21st century,** sets out the government's vision for our roads:

Our road network is also the life-blood of the economy, performing a crucial function in supporting jobs and growth.

Roads provide critical connections. They link major economic centres, and connect our major ports and airports. Many people use them to get to railway stations and to connect to other modes of transport. Four of the new stations planned under High Speed 2 will link to the motorway network.

Roads support job creation and unlock new development. They provide access to labour markets and unlock new opportunities for factories and businesses. More than 1 million jobs are associated with road transport. Factories and other businesses regularly consider access to good roads and other transport connections in making decisions about where to locate

INFRASTRUCTURE AND THE ECONOMY

It has become increasingly evident that new infrastructure brings in its wake new development. This illustrated in the requirement for every local authority to develop planning documents which must include how the local infrastructure of the area with be developed in order to promote growth and prosperity within the area. Wherever one goes, isolated land suddenly becomes desirable to developers as soon as a new road makes development economically feasible – housing, employment and community use. It is happening all the time.

However, the amount of traffic congestion has become unacceptable within the London conurbation. Do we build more roads, provide more buses? What can we do? Land is scarce and valuable and not an infinite commodity; there comes a time, that even with the best of intentions, it becomes impossible to plan ourselves out of the congestion dilemma facing the London conurbation.

How can we provide more capacity given the scarcity of land? We need to look outside the box. How can we provide more capacity without compromising vital resources?

Double-Decking - Road over Rail

ECONOMIC GROWTH FOLLOWS INFRASTRUCTURE DEVELOPMENT

HOW CAN WE INCREASE ROAD CAPACITY?

Our suggestion is to build elevated roads above the existing railway tracks as they approach London.

Typically, these elevated roads would be:

- dual purpose roads carrying all traffic or,
- limited to vehicles up to 3.5 tonne GVW which would only need short, sharp interchange ramps and narrow lanes, limited access and exit at appropriate locations

Their use could be for:

- express traffic.
- service and delivery vehicles

They would have a futuristic road design which would maintain and increase the global perception of London as a centre of excellence.

The infrastructure building would create jobs and would enhance the desirability of the city of London for inward investment and would contribute to the international status of the city.

Across the world there are many examples of double-decking, but mainly in the use of roads. However, there are many examples of dual purposes bridges carry both road and rail.

LONDON RAILWAY CORRIDORS

We consider that there is potential in studying the routes set out below, to determine the feasibility of building roads on top of the railway infrastructure.

- Charing Cross to Sevenoaks
- Euston West Coast Line to Watford
- Fenchurch Street to Barking
- King's Cross - East Coast Line to Hatfield
- Liverpool Street to Romford
- Marylebone to Amersham
- Paddington to Slough
- St. Pancras to Luton airport
- Victoria to Gatwick Airport
- Waterloo to Guildford

All of these lines approach London from many different directions. Many of these lines have adequate land at the track side which would facilitate the building of elevated roads. We recognise some lines would have greater potential than others and the method of construction may need to vary between different routes.

Construction activity would not impact on other road users as it would it would if major roadworks were introduced on the road network

Time has not permitted us to make an in depth study of these corridors but we submit this concept for serious consideration.

STUDIES

HOW TO "BUILD OUR WAY OUT OF CONGESTION" INNOVATIVE APPROACHES TO EXPANDING URBAN HIGHWAY CAPACITY (USA)

Study on double decking

"Alstot, in a paper for the American Society of Civil Engineers, argued that on wide west coast urban expressways, with over 80 percent of the traffic in light vehicles, it is wasteful to build the whole cross-section to heavy truck standards"

Advantages

- Minimal extra land space required.
- Very little need for compulsory land purchase or re-development.
- Construction of infrastructure will boost economy & create jobs.
- Reduction in CO2 emissions from queuing traffic.
- Improves direct access into the centre of city.
- Reduction in traffic on over-populated routes & resulting increase in pedestrian safety.
- Lanes could have short, sharp interchange ramps and narrower lanes
- Continuity of service on the railways due to protection from inclement weather.
- No further demand on green space – minimal impact on the environment
- More opportunity for business expansion (attraction to investors)

CURRENT OPTIONS TO SOLVE LONDONS CONGESTION

"The Mayor of London wants economic output to grow at the same rate as New-York between now and 2030"

His Roads Task Force - Transforming key corridors - Report

The Report includes "TfL is working to investigate opportunities to transform key corridors outside central London, including the North and South Circulars.

The study is looking at options for major schemes on radial and orbital corridors across London, including the feasibility of fly-under, new tunnels and 'decking-over' sections of road.

We salute the Mayor for the work he has done and the London Road Modernisation Plan.

This submission is intended to build on the objectives of the Plan.

ROAD OVER RAIL Examples

Bangladesh

Bangabandhu Bridge

The bridge established a strategic link between the eastern and western parts of Bangladesh. It generates multifarious benefits for the people and, especially, promotes inter-regional trade in the country. Apart from quick movement of goods and passenger traffic by road and rail, it facilitated transmission of electricity and natural gas, and integration of telecommunication links. The bridge is on the Asian Highway and the Trans-Asian Railway which, when fully developed, will provide uninterrupted international road and railway links from southeast Asia through Central Asia to northwest Europe.

Basic features of the bridge are length (main part) 5.63 km; width 18.5 metre; spans 49; deck segments 1263; piles 121; piers 50; road lanes 4; dual-gauge railway (broad gauge and metre gauge). Cost - 2.97 billion USA dollars

https://www.youtube.com/watch?v=S6pXWw6fHk0

Denmark-Sweden

The Öresund Bridge runs between Denmark and Sweden as a double decker, double-track railway running underneath a motorway bridge. The bridge runs nearly 8 kilometres (5 miles) from the Swedish coast to the artificial island of Peberholm which lies in the middle of the strait. The crossing is completed by a 4 km (2.5-mile) a tunnel, from Peberholm to the Danish island of Amager.

The cost for the Öresund Connection, including motorway and railway connections on land, was €4.0 billion

JRA 5th January 2016