

## **CANOLFAN YMCHWIL TRAFNIDIAETH CYMRU**

### **Adolygiad Polisi Trafnidiaeth Gyhoeddus**

Cynulliad Cenedlaethol Cymru  
Pwllgor yr Amgylchedd, Cynllunio a Thradnidiaeth

#### **Ateb gan:**

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Hydref 2001

## **WALES TRANSPORT RESEARCH CENTRE**

### **Policy Review of Public Transport**

National Assembly for Wales  
Environment Planning and Transport Committee

#### **Response by:**

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1. **OBJECTIVES OF THE REVIEW**

The Policy Review sets out a vision of a public transport network in Wales capable (in capacity as well as comfort; convenience and reliability) of attracting a significant proportion of car users on those routes which the National Assembly has indicated will be operating at capacities of over 100%, i.e. where the traffic flow exceeded the design capacity of the road. These are primarily in south east Wales, north east Wales and sections of the M4 and A55 Expressway. The definition of public passenger taken in this response includes trains, buses, light rail, monorail, and taxis (often seen as the mode of the rich but for shared Journeys ( where the cost per person may be lower than the bus fare) are in daily use by all sections of society.

It also sets out the delivery of equality of access to public transport for all groups in society - for the young, the elderly, people travelling to work, people looking for work, low income families, the mobility impaired, and for those with cars seeking a reasonable alternative.

The resultant system has to improve mobility, make travel more sustainable (by reducing pollution), take account of existing and planned future land use - those objectives which can only be achieved through considerable investment in the public transport network.

It also became clear that policies pursued in the late 1980's and early 1990's had not reversed the declining trend in public transport usage which had been the stated aim of the policies. Indeed the fragmentation of the bus industry following deregulation had made services less attractive and this together with the framework for delivering privatised rail franchises did not lead to increased integration or long term investment.

Current policies including the longer term Wales and Borders franchise have the potential to deliver but the financial position of Railtrack plc and the UK Government's proposed actions in relation to its control and its investment policies (as reported 7 October 2001) indicate that a totally new approach is required. The joint private/public investment programme will require a new structure for the railways in Wales.

In rural Wales, the free market approach will not provide the level of service deserved by less densely populated areas nor will it provide services during periods of low demand in urban areas (with one primary exception - Oxford).

The investment levels have been considerable but not sufficient to provide an alternative to the motor car. The conflict between social provision/need commercial criteria and the pressures resulting from, for example, the

development of out of town retail centres, have resulted in situations where vital social services cannot be provided costs effectively by supplies and users demands are similarly not met.

The review seeks not to increase subsidy particularly in a non-focussed way, but to make better use of the current levels of revenue support. It does however realise the need for higher levels of investment by both public and private sectors. It also reflects the reality of the bus as Wales= biggest public transport carrier (in number of trips) and the need to integrate local bus and taxi services with a core train and coach network.

This integration as suggested below extends to links between transport and social/economic activity (land use) and will require organisational changes.

## 2. **INVESTMENT PROGRAMME OBJECTIVES**

To achieve modal transfers and to improve travel opportunities for those currently excluded will require:-

- S increases in frequency
- S a wider range of operating times
- S provision of modern vehicles
- S improvements in rail and bus infrastructure at terminals, interchanges and along routes
- S an integrated public transport network (based on those investments) with trains light rail, buses, taxis and long distance coaches providing through services
- S a rural public transport network using GPS techniques incorporating primary routes and demand responsive feeder services to terminal points or intermediate hubs which would put Wales at the forefront of rural public transport provision
- S the realisation that information, interchange and investment equals integration

## 3. **INTEGRATED TRANSPORT POLICY**

The Policy Review has to lead to improved travel quality by public transport which is best achieved through an integrated transport policy.

The National Assembly has consistently indicated its desire to achieve an integrated transport policy. The form of this policy is largely agreed by three of Wales= mainstream political parties represented in the Assembly. It has also gained support from CBI Cymru-Wales, the trades union, the House of Commons Select Committee on Welsh Affairs and the Rail Passengers Committee - Cymru/Wales.

An Integrated Transport Policy examines four relationships:

- 1 between transport and land use
- 2 between public and private transport
- 3 between motorised and non-motorised (walking, cycling) transport
- 4 within public transport

The preferred structure to achieve such integration nationally, regionally or locally has three prerequisites:-

- a a single policy and budgetary authority at the strategic (geographic) level
- b a single co-ordinating body for all modes of transport at the strategic (geographic) level
- c operational level co-ordinating bodies to achieve seamless interchange between modes, within modes, and between modes and land uses/human activities. This relates to physical interface and the provision of through ticketing.

While (c) may be provided by contractors, (a) and (b) must involve a single body.

### **Elements**

If the analysis is confined (for the moment) to passenger transport, in 2 and 3 above, then the elements may be integrated (with a trade off in expenditure between them based on a single multi-modal evaluation technique). The elements are :-

road investment  
 rail investment (infrastructure/rolling stock)  
 bus investment (terminals and vehicles)  
 public transport interchanges  
 pedestrian/walker/cycling facilities investment  
 traffic management (physical and fiscal)  
 public transport fares levels        )        and consequent  
 public transport service level     )        contractual payments

#### 4. **RATIONALE FOR AN INTEGRATED TRANSPORT POLICY FOR WALES**

Its responsibilities (see Section 4) only provide the Assembly with a national role in roads and a role in road/rail transport through its links with local authorities. This therefore severely limits its ability to balance investment between the best solutions to transport problems. This is highlighted in two reports on options for transport investment in the south Wales corridor and the Cardiff-Newport conurbation. A report by Arup (1999) (currently being updated ?) showed the bus/rail/traffic management options having a significantly higher

economic NPV (return) compared with the road options, and an article in Agenda (Cole, 2000) comparing the costs of the M4 investment proposals to a series of rail enhancement expenditures suggested a similar outcome (see Appendix 2).

The Assembly could currently make a decision on these options but there are financial implications and issues in relation to funding sources (e.g. block grant; current SRA payments, DTLR investment funding etc. for railways) which would need to be considered.

Adding the railways to the National Assembly's expenditure portfolio would require a negotiated settlement in respect of the payments currently made by SRA to train operating companies with services in Wales. The first calculation is difficult as payments are made on a franchise basis and direct infrastructure payments by the UK Government and the private sector and, there are five major and two minor TOC operations in Wales. The current cost of revenue support ( operating subsidy ) alone has been estimated at about , 80m- , 100m (based on passenger miles within each franchise) but the subsidy profile could subsequently be a matter for the Assembly's expenditure priority decisions. The second relates to Transport 2010 (DETR, 2000) and an implied , 300m capital investment and revenue support expenditure per annum for Wales= railways.

These current transport issues have associated with them, a series of transport and land use planning issues, and policy development in relation to the environment and tourism.

Underlying this are the UK Government policies set out in the Transport Act, 2000, which are relevant here.

- a) local Transport Plans, bus strategies and quality partnerships, and bus information
- b) road pricing and charging for parking at the workplace
- c) railways and the role of the National Assembly for Wales.

There are also several more general issues on which further consideration is required. In part they suggest the Transport Act was prepared by four different groups and further examination is needed in two areas:-

- a) consultation between the different players (e.g. county councils and the Strategic Rail Authority)
- b) the role of the Rail Passengers Committee - Cymru/Wales. The Act changes the name of the RUCCW to Rail Passengers Committee (RPC) so it will continue to deal only with rail services. The transport integration objectives would suggest that railway users might be linked to bus, ferry and possibly taxi users (through the county council hackney carriage offices). A model such as the London Regional

Passengers Committee or the previous Transport Users Consultative Council might therefore be more appropriate.

Local Transport Plans (LTPs), the centrepiece of the Government's proposals for the co-ordination of transport movements, have a crucial role in promoting integrated and sustainable transport. They must be seen in the context of users and suppliers and backed by appropriate policies, powers and resources. The policies and proposals in the LTPs must also relate and support the UDPs and be compatible in a regional context.

An integrated transport policy is not anti-road or pro-public transport; rather it seeks to optimise investment expenditure on a sustainable basis. It means getting best value for the investment made but bearing in mind the long term consequences which personal travel and movement of freight has on the environment, health and quality of life. It is not a low cost policy nor need it be unaffordable. (WTRC, 2001)

## 5. **ORGANISATIONAL STRUCTURE**

### **Wales Passenger Transport Authority**

In 1985 and again in 1991 the House of Commons Select Committee on Welsh Affairs recommended the establishment of a Wales and the Marches railway based in Cardiff and of a committee to examine the role of a Cardiff Passenger Transport Authority to determine funding and service quality in the Cardiff commuter areas, and to consider methods of using rail to reduce road congestion.

### **Wales PTA**

A Wales Passenger Transport Authority (PTA Cymru)(whose status could be "stand alone" or a NafW department) would be the cornerstone of such a structure. It would provide adequate finance (funded by the National Assembly) and/or the private sector, which created a railway operation which was no longer peripheral to England, but integral to Wales and would assume the roles of the SRA (and possibly Railtrack) within Wales and the Marches. It would finance track development (including new lines or freight line conversion), determine fares, timetables, types of rolling stock, and would either operate trains or contract out their running to private companies using existing legislative powers. It would liaise with Railtrack and the Strategic Rail Authority/English Region/PTA on service integration with railways in England, including Inter-City operations (the responsibility of the Strategic Rail Authority and its franchisees) and would still be part of the Great Britain rail network.

This would generate greater investment in track, and rolling stock (replacing units currently providing a low quality of comfort on some services between Cardiff and the south west of Wales, a return to 3-car sets in place of often overcrowded sets on inter urban lines and the introduction of 4-car sets on busy routes particularly following market growth). Decisions on whether rail

services would run more frequently to e.g. Bangor, Holyhead, Aberystwyth and Hwlfordd/Haverfordwest would also be made by the PTA.

### **Passenger Transport Boards**

Locally, Passenger Transport Boards based on appropriate county council groupings would be responsible for franchising all bus services both commercial and tendered, within an integrated transport system. PTA Cymru tickets would be issued, and bus and train services would be linked. A model was seen in the pre-local government reorganisation Bws Gwynedd which provides a microcosm of effective rural provision - with trains and express coach services providing the backbone, and bus services in towns and rural areas providing the local services and feeder services.

The PTBs would have representatives from county councils, NAFW and user groups (both bus and rail) and would make local decisions on bus services; and bid for finance from, and put proposals for rail services to PTA Cymru. This would ensure a bottom up decision making process where county councils would play a vital role reflective of members' and officers' commitment to the existing consortia.

The achievements to date of the existing consortia of local authorities have been considerable. SWITCH, SWIFT and TIGER are more advanced in the implementation of their plans and the development of working relationships between the member authorities. However the Mid Wales Partnership and TAITH, although more recently established are moving forward apace.

The establishment of the consortia has indicated the need for a regional approach; thus enabling local schemes to be seen within the context of a wide travel area. The PTBs would provide that same essential regional analysis but with a realisation that local needs have also to be represented. The role of the county councils brings in links with land use planning and with traffic management, while the National Assembly provides the overall national big picture of the Wales and Borders franchise (the assumption being that NAFW would assume responsibility for this), the national roads network and a national long distance coach network.

The strategies identified by the consortia would be a key strand in the Public Transport Board's initial activities.

## **6. COSTS**

The issue of costs levels required to operate the current structure compared with the proposed structure will reflect:-

- 1) staff transfers to the new bodies (including many secondments)
- 2) the level of staff increases identified in reports as reflecting increased work loads of the existing structure

- 3) the transfer of railway responsibilities
- 4) the level of capital and revenue support expenditure and the operational costs (including staff costs) commensurate with such changes

The experiences of local government re-organisation in Wales and the establishment of the National Assembly, the Scottish Parliament and the Greater London Authority will provide some indication of cost changes.

Streamlined procedures and a focussed approach to expenditure can often achieve a cost position favourable in terms of costs/benefits compared with the previous position.

It is not felt appropriate to make predictions here other than those in relation to the capital expenditure referred to above and the Case Study in Appendix 2.

## 7. **BENEFITS**

The models discussed in the Policy Review (p.28-31) present several options. The proposal in this response formalises much of what is currently the reality. The PTA/PTB model offers benefits in terms of a framework for policies to be consistent in all parts of Wales to fund and deliver public transport.

The provision for a bottom up decision making by county councils through the PTBs will ensure that the diverse characteristics of need are provided for. The distinctive needs of urban Wales and rural Wales highlight the reality that while decisions on the rail franchise have to be made by the Assembly, decisions on local bus and associated public transport (including taxis) have to be made regionally, and even locally, the whole operation has to be integrated into one total journey network.

The PTA proposed for Wales should not be confused with the models for densely populated urban areas (e.g. Greater Manchester, West Midlands, etc.). In England. There have indeed been suggestions that a better term would be Passenger Transport Partnership. However the Policy Review uses Authority and this response continues with that terminology.

If Wales is to develop its own integrated transport policy best suited to the needs of Wales, certain key functions have to be transferred from UK institutions (see Appendix 1). The Policy Review sets out (p.29) the need to link a series of key activities:-

- a national Wales rail network(Wales and Borders franchise) NafW
- PTA
- the national road network NafW
- bus policy (regulation) NafW (from DTLR)
- regional public transport policies PTBs/CCCs
- local roads CCCs

land use planning	CCCs
bus quality partnerships	CCCs
traffic management	CCCs

This structure will achieve all the requirements of an integrated transport policy. The concerns that it will lead to a top down approach are understandable but unfounded if the function of the PTA and PTBs are clearly set out. The new structure would ensure that information was fully available on all bus and train services in Wales. Local public transport needs would be met and the all-Wales body would bid for finance purely for public passenger transport operations.

The parallel for such a system exists in other member states of the European Union where high investment levels, with co-ordination policies of services, fares and infrastructure developments, may be found in major centres as well as in local areas. The regional councils of France have responsibility for local railway services (with SNCF) and for bus operations in the municipalities. In Sweden regional public transport bodies run local bus and rail services in a country with many rural mountain areas, a small population (8m) and a concentration of people in a small part of the total land area. The Netherlands have a national ticketing system for local public transport (the Nationale Strippenkaart) and a national railway service. The proposals for Wales, which equates in many ways to a French region or to a geographically smaller version of the Netherlands of Sweden, would be taken further to the point where control and finance, policy and service provision, though not necessarily all operations, are conducted by one national, and five associated local bodies. In Austria, the Land (equivalent to the PTB areas) have responsibility within their areas for all local public transport and land use planning and which link into a national policy for rail services. Joint ticketing exists on all services within the Land.

Changes arising from de-regulation and privatisation are not entirely irreversible or necessarily incompatible with the development of an integrated transport policy and the establishment of a Wales PTA and local PTBs. The political will now exists in Wales to make the necessary changes. But is London politics sufficiently interested to understand the advantages of restructuring the passenger transport network in Wales rather than create a large centralised Strategic Rail Authority? What is to be the role of the National Assembly in developing an integrated transport policy when Government of Wales Act, 1998, refers only to responsibilities towards buses and roads and possibly light rail, but not to main line railways.

And of considerable importance, how would the funding for different modal options be achieved through the National Assembly. What levels of funding will be available and how will the evaluation and allocation of the funding be decided. The Government has recently stated its support for regional PTAs, and the European Union's Directorate General for Transport and Energy (DG-TREN) has in its current White Paper been supportive of an integrated public transport policy.

The Wales PTA could also be seen within a supportive fiscal framework using various fuel taxes; a land use planning policy integrated with transport infrastructure; changes in the decision making process inherent in the proposals outlined above; the setting of environmental targets promoting greener forms of transport; and landscape and countryside protection policy. Within this context a sustainable integrated transport policy for Wales could be developed as in the Wales Transport Strategy (AWC 1995) and one which would receive local support.

There is considerable discussion whether the PTA should be a function within the National Assembly or a stand alone body sponsored by the NAW. In reality there is little difference between them as the Assembly would determine overall budgets and policy. The PTBs would be a partnership of the NAW and the relevant counties and upward policy making would be achieved by PTB representatives on the PTA.

### **Short term and longer term**

The achievements of the public transport consortia have seen considerable and in the short term legislation only provides for these.

In the longer term (over 2-5 years) the National Assembly must press for the PTA/PTB model of statutory bodies to be brought into operation if the tests set out in the Policy Review are to be met.

## **8. TESTS FOR ALTERNATIVE ORGANISATIONAL STRUCTURES**

The Babbie report (p.53) sets out the tests to be applied in making a final decision. A brief commentary has been applied to each, to illustrate how this proposed structure meets that test.

### **Relevance to area**

The travelling public's needs on both a local and national level are met. The detailed local programmes linked to commercial decisions by local bus companies will remain the responsibility of the PTBs and thus county councils.

### **Accountability**

The bottom up approach ensures local needs are met and local accountability achieved through PTB membership. The NAW's role in ensuring good value and that its policies are delivered as a consistent basis will be achieved through the PTA.

### **Development of an integrated public transport network**

The acquisition of rail responsibilities by the NAW would ensure full integration with local bus and taxi provisions in the partnership. The local authority powers in relation to land use planning and traffic management

provides the remaining element in an overall integrated transport policy.

### **Quality of political decision making**

The operation of existing consortia can only be enhanced through statutory bodies whose such status and requirement to deal with large scale funding would of necessity attract high calibre politicians at county and national level.

### **Effective rail powers**

The PTA would be in a position to manage the Wales and Borders franchise, and would provide county councils with an input to rail operations and policy.

### **Effective bus powers**

The introduction of London-style bus franchising would provide improved integration and facilitate the construction of seamless interchanges at all major centres in Wales.

### **Effective highways powers**

The PTA links into national roads through the NAFW and the PTBs link into local roads and traffic management through the county councils.

### **Influencing land use planning**

The public transport structure would link into the county councils= powers in respect of land use planning through the county councils= direct input into PTBs.

### **Impact on passenger travel**

This is the most important of all the tests. Modal split changes and increased accessibility to these currently excluded provide the sources of new public transport trips.

The integration of bus, rail, light rail and taxi operations will also provide two of the three Is identified in achieving Integration and enhancement of public transport usage. PTI Cymru has to be moved forward into full operation to achieve a one-stop shop information service for public transport users. The development of seamless Interchange at over forty locations in Wales between trains, buses and taxis can only be achieved through a close operational and budgetary association of PTBs and PTAs.

The creation of a statutory formal structure for the existing consortia into PTBs is essential to achieve local and regional integration. Linking the operations of the regional PTBs into the national networks is a function of the NAFW and hence the PTA. Railways in Wales can only operate on a national basis and the SRA=s decision to establish the Wales and Borders= franchise

indicates how its expertise has recognised the efficiencies and enhancement of rail service quality and thus passenger travel increases which are to be gained from that arrangement. The logical next step is the NAFW assuming responsibility for that franchise.

### **Impact on the carriage of freight**

This is only briefly dealt with in the Review but clearly has an impact on the finances of particular rail services and affects also aspects of the environmental and capacity issues affecting roads.

### **Capital**

While levels of investment to date have reflected the funds available, the level of funding has not been sufficiently high to achieve the changes in modal split necessary if sustainable travel is to emerge.

The decision by the minister to introduce a five-year budget is also to be welcomed providing as it aims to an indicative forward programme of major road and rail infrastructure investments in Wales over the next five years@. (Minister for Environment, Sue Essex, 10 January 2001)

The expenditure is a reflection of the funding made available within the Welsh block grant. However it does not approach the levels indicated in the UK Government=s "Transport 2010" ten-year plan for transport. A figure of ,6bn per annum for 10 years reflects a figure of about ,300m per annum for Wales - and that for railways alone.

The advantage of a PTA/PTB structure is its ability as a powerful financial force to work towards achieving that level of rail investment and similar appropriate increases in vehicle and infrastructure investment for buses. There is no reason why the funding process proposed (though not yet delivered) for the railways cannot be applied to bus operation.

## **APPENDICES**

### **Appendix 1            The role of the National Assembly**

To achieve an integrated transport policy covering all modes within the National Assembly for Wales, more responsibilities, powers and functions would need to be transferred from London departments.

## Functions required to achieve an integrated transport policy

The National Assembly and local authorities between them require to have the policy making role for, and power to finance:-

- road construction investment and maintenance
- bus service frequencies, routes, and subsidy/contract payment levels
- investment incentives
- rail investment (DTLR/Railtrack/SRA)
- rail passenger service levels and contractual arrangements with TOC=s (SRA) (block grant would be increased by an amount commensurate with current expenditure)
- environmental issues
- land use/development
- current powers of the Traffic Commissioners (DTLR)
- traffic reduction/traffic management policy and regulation (DTLR/NAW)
- personal safety of pedestrians, cyclists and provision for those groups
- mobility impaired people
- liaison with Sustrans in Wales
- airport development (DER) and air service development and regulation (with appropriate private sector involvement) (DTLR, CAA)
- bus industry regulation (DTLR)
- public transport policy generally (DTLR)
- rail regulation (Rail Regulator) and user group representation (RPC-Cymru Wales)
- regulatory framework for taxis/private hire cars (part DTLR, local councils)
- port development and shipping services promotion (DTLR)
- integration of road/rail freight operations (PACT) (Railtrack, DTLR)

(Note: Names in brackets indicate present holders of that responsibility where these are not the National Assembly.)

The desire by DTLR and existing bodies to retain these responsibilities acts as a barrier to the role of the National Assembly (NAW) in developing its own policies. A study of the first six months operation of the Local Government; Environment, Planning, Housing and Transport Committee (NA 1999, 2000) through their agenda and minutes will indicate the area in which the Committee sees itself having a role.

In June 1999, it reviewed the Transport Legacy for Wales (WTAG, 1999); in November it considered in detail the draft guidance to local authorities in Wales on Local Transport Plans. This has a significant implication in the provision of statistics on a local and national basis in measuring the achievement of its primary objectives (NA LG-E, July 1999)

- protect and enhance the natural environment
- economic efficiency
- improved traveller safety
- accessibility for non-car users and car users
- providing integration within transport modes and with land use.

These are overarching areas - the detailed requirements of the plans need detailed statistical analysis if the right decisions are to be made. And bringing the committee's deliberators up to date, at its 19 January 2000 (NA LG-E, Jan 2000) meeting it considered the Transport Bill's references to railways, local transport plans and bus strategies, road user charging and workplace parking levies; and the progress on the Road Traffic Reduction Acts.

The Committee's discussions in November 1999 (NA LG-E, 08-99) on implementing integrated transport policy in Wales identifies the breadth of analysis and the range of starting point documents (see section 1) which the Assembly has to consider (much of it in liaison with county councils and other stakeholders). There is in the briefing paper (NA LG-E, 08-99 Item 3) a list of areas in need of further work:-

- national public transport network
- rail strategy
- national cycle network
- national concessionary fares scheme
- reducing the impact of traffic
- integrated transport networks

## **Appendix 2            Case Study - Road or Rail?**

Capacity problems at peak periods along the M4 between Cardiff and Newport present the National Assembly with difficult decisions. There are two possible solutions:

- § major improvements to the road network in the Cardiff and Newport area to accommodate the expected rise in demand.
- § enhancement of track quality, signalling and rolling stock on the east-west railway route and the encouragement of east-west luxury coach operations through improved traffic management.

Road investment policies over the last thirty years have been based on predict and provide and led to an expansion of road capacity to meet the increased ownership and usage of motor cars. The non-sustainability of such policies is clearly set out in the Transport Framework for Wales (TFW, 2001) and the Public Transport Policy Review (EPT, 2001) which proposes alternative policies to reduce road traffic.

However there is a need to compare schemes on a multi-modal basis (rather than evaluate one scheme at a time) using wide ranging evaluation factors in place of more limited quantitative monetary factors and the Assembly is considering a methodology of its own based on quantitative techniques currently used in other European Union member states. Any such evaluation techniques would allow comparisons between alternative road/railway investment proposals within an integrated transport policy aimed at radical sustainable solutions and a change in the split between car and public transport.

In an evaluation of capital investment schemes there are factors (known as externalities) to be considered, such as journey time saving, vehicle operating cost savings, environmental benefits, safety improvements, access, and the achievement of an integrated transport plan. These are the criteria which have to be used as a means of comparing alternative road or rail solutions to a particular transport problem.

The remaining question is how many people need to be persuaded to transfer from road to rail; what investment is required and at what cost?

The future capacity increase to be achieved by the M4 schemes is 10,000 - 15,000 vehicles per day - at an average occupancy of 1.5 persons per car, this represents 14,000 people. The future railway line capacity therefore has to be defined in terms of train paths needed and how many could be provided given the variation in type and speed of trains (freight, express, stopping passenger trains), signal spacing, speed restrictions, train stopping patterns and the commercial requirements of train operators, to achieve a capacity increase near to that figure.

### **The Road Option**

The road proposals were included in the Strategic Review (WO, 1998b) produced by the Welsh Office and involve a new length of motorway across the Gwent levels, widening the M4 motorway at Coryton, a new southern distributor road around Newport and a link road to Cardiff International Airport. Not all of these schemes are committed expenditure but they are options to solve a lack of anticipated capacity compared with current demand on the existing M4. The estimated costs of these works are shown in Table 1 below.

*Table 1: Road Construction Proposals Cardiff-Newport Area*

, m

<i>M48 Magor - Castleton (Gwent Levels)</i>	330.0
<i>M4 widening Coryton</i>	40.0
<i>Link road to Cardiff International Airport</i>	46.0
<i>Newport Southern Distributor Road</i>	81.0
<b>Total</b>	<b>497.0</b>

### **The Railway Option**

The infrastructure investment to meet the additional capacity needs would include signalling for increased frequency, bi-directional operations to increase capacity, additional platforms, improved junctions, and improvements to track condition. For instance, more capacity could be provided at Swansea if a through station with frequent bus links at Landore replaced the present Aterminal@ station, which in itself is now some distance from the central business district.

In parallel to this, train investment would bring better performance, interior refurbishment, seat pitch increase, and reduce the mix of train types. On the south Wales main line at present there are train combinations whose performance varies between an InterCity 125 and a Pacer train; this does not maximise line capacity. Passenger capacity increase may also be achieved through longer trains, platform length, width and access, signalling and depot capacity.

These are the investment elements required to achieve the capacity levels which match the suggested road programme. Costing is a difficult (one might say courageous) exercise since carefully estimated passenger numbers are required as are data on the state of the track, current signalling system headways, the interworking of different train times. However, Table 2 provides an estimate using parallel data from similar schemes, to give an indication of the alternative rail costs.

**Table 2: Estimated Investment Needed to Upgrade Rail Services**

	<i>, m</i>
<i>System upgrade (signal, track, bi-direction, junctions, pinch parts)</i>	180
<i>Additional trains (1)</i>	90
<i>Station quality improvements (heating, park and ride, information) (2)</i>	20
<i>Integrated bus/rail interchanges (at Cardiff, Swansea, Newport, Port Talbot) (3)</i>	10
<i>Road improvements to existing airport road</i>	10

**Total**

**391**

Notes

(1) This will give a service every 15 minutes from Newport to Carmarthen; and a service Carmarthen-Cardiff International Airport - Cardiff Central every 30 minutes. These are four car sets with a capacity of 250 seats. The figures exclude the replacement of InterCity 125 sets by Great Western Trains.

(2) Heating and good quality lighting at all railway stations on the SWML with facilities open during train operating times.

(3) These are indicative examples. Other stations may require similar facilities or bus station links.

This alternative programme could provide an estimated increase in rail capacity for 10,000 seated passengers per day and reduce the need for major road investments such as the M4/M48 corridor and access to Cardiff Airport. They would also provide a new source of traffic for the airport which is vital to secure its development (WCC, 1998) plans to increase its passengers 1.6m to 3.6m per year (CIA, 1998). Not all will wish to travel by train and some road improvements are indicated. Similarly internal airport transport facilities to the Terminal building will be necessary.

The increase in frequency to four trains per hour is known from other studies to attract passengers and achieve increased load factors. Delay risks are minimal and timetables begin to be set aside by passengers - all of which increase the attractiveness of the train, affect modal split and lead to a reduced subsidy profile. These improvements need to be matched by other public transport improvements, particularly local bus network feeder services and the seamless interchange so often absent at major south Wales stations.

Rail Cymru (Cole 2001), (copy attached) is the proposed Wales and Borders rail franchise. One of its roles would be to consider the funding of a new SWML service. However while such decisions remain entirely in the financial and operational hands of the SRA there can be no integration of the two decisions. This takes us back to the prerequisites set out in Section 2. Operationally franchise could remain with the SRA. Fiscal and strategic integration would however have to be transferred to the National Assembly.

**ACHIEVING THE OBJECTIVES**

At present the Assembly's powers are confined to road investment although it will be able to continue to assist local authorities to fund new stations and line re-opening. However, it cannot make the comparative assessment of road and rail investment outlined here.

One prerequisite of an integrated transport policy is a common budgetary framework for all major expenditure decisions. This enables a common evaluation methodology to be used to compare investment options, for example between road, rail or traffic management. In 1990, the Golden Gate Bridge Authority in San Francisco introduced high - speed, high - standard coaches with priority routing in place of a new bridge.

Ironically, at the same time, the opportunity to invest in the east-west rail corridor was missed when the Second Severn Crossing was built. With an integrated transport policy the provision for rail in the centre of the bridge with links to the Welsh and English networks would have provided additional alternative track capacity to the Severn Tunnel thus making investment choices easier. Now a similar opportunity exists in the M4 corridor to choose the best integrated solution determined by a single budgetary authority - in this case the National Assembly for Wales.