Enterprise and Learning Committee

EL(3) 21-09 (p1): 21 October 2009

Future Railway Infrastructure in Wales

Briefing by: Professor Stuart Cole, Wales Transport Research Centre, University of Glamorgan.

Integrated Transport Policy

Any inquiry into rail infrastructure investment has to see that investment within the context of an Integrated Transport Policy of the form currently being pursued by the Welsh Government.

Public sector (governmental) expenditure on railways falls into three categories:

- track and signalling (capital account)
- rolling stock (capital account)
- revenue support to fund, train frequency, train capacity, peak demand and fares which cannot be achieved commercially(revenue account)

The concept of an integrated transport policy has to be considered in terms of its relationships with other aspects of the economy and society and the different elements in such a policy.

Definition

An Integrated Transport Policy examines four relationships:

- Integration within and between different types of transport better and easier interchange between car/bus/rail etc. with better information on services and availability of integrated tickets. Thus it is between public and private transport, between motorised and non-motorised (walking, cycling) transport and within public transport
- Integration with the environment considering the effect of transport policies on the environment and selecting the most environmentally friendly solution whenever possible.
- Integration with land use planning to reduce the need for travel and to ensure new developments can be reached by public transport.
- integration with policies on social welfare, education, health and wealth creation so that cross-cutting policies on issues such as social inclusion, school travel, cycling and walking, and the profitability of business work together rather than against each other.

Elements

If the analysis is confined (for the moment) to passenger transport 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
Walking/cycling facilities investment
Traffic management (physical and fiscal)
Public transport fares levels) and consequent
Public transport service level) contractual payments

Rationale

The key objective of integrated transport is to provide for a split between accessible and affordable modes of travel which are both sustainable and become the preferred modes of travel in Wales.

However, Wales has different spatial characteristics from densely populated urban areas (e.g. Cardiff, Newport, Merthyr, Ebbw Vale, Swansea, Wrexham), through major towns (e.g. Neath, Port Talbot, Llanelli, Aberystwyth, Llandudno) and important rural centres (e.g. Carmarthen, Haverfordwest, Castell Newydd Emlyn, Llandeilo, Brecon, Newtown, Ruthin, Denbigh) to deep rural Wales (e.g. Ceredigion, Gwynedd). The potential for transfer to public transport therefore, varies between urban and rural areas. But even such a difference can be narrowed.

However, improvements are required in the public transport system before car users can be persuaded to change and non-car owners be able to make reasonably timed and priced journeys.

High Speed Rail to South Wales

The Great Western Main Line between London Paddington and south Wales, will be operating the new IEP (Inter City Express Programme) electric trains by 2017, a year later than the service to Bristol. These are faster than the present trains use the same track and cut 15 minutes off the current journey time. They will be capable of diesel and electric traction as part of the electrification programme between London Bristol, Cardiff and Swansea announced by the Prime Minister in Cardiff on 23 July 2009.

This service would continue to use the Severn Tunnel despite that structure's speed limitations. The tunnel is, according to Network Rail evidence to the House of Commons Welsh Affairs Committee (Cross Border Provision of Public Services for Wales: Transport; HC 58; Session 2008-09), adaptable for electric trains. There is space within the tunnel headroom for the overhead wiring and catenary, assisted by track bed reconstruction, and reports of excessive corrosion of overhead wiring have been discounted by Network Rail.

But there is another technology under discussion - that similar to the French TGV and Eurostar. Already in use on the new HS 1 rail link (High Speed route from the Channel Tunnel to St Pancras International Station) and the French TGV 'route nord' it achieves a London to Paris journey in 2 hours 15 minutes at speeds of up to 190 mph.

The second of these routes (HS2) is expected to run from London to the north of England. This has happened because a public interest group made up of government authorities in northern England and Scotland working with private industry and local media has pressed for two routes – one via Cambridge and Newcastle and the other via Birmingham and Manchester to Scotland.

In north Wales the possibilities of at least a part link into TGV style trains is possible. The further to the west in the Manchester – Liverpool axis that the line is positioned the greater the opportunity for north Wales to benefit. In France not all TGV trains travel on high speed (300kph) lines many travel so far on these lines and then divert onto 'classique' track. These routes include for example services to Brittany, the Cote d'Azur and to Geneva. We should not therefore set aside the possibilities of diverted high speed trains along the north Wales main line (NWML).

The recent discussions on high speed rail have concentrated on links between London, northern England and Scotland. However, the Cardiff/Bristol conurbations and the south Wales industrial belt meet both the population (3.5 million) and distance criteria set down in 2006 by the Commission for Integrated Transport for high speed rail developments.

The general agreement from the south Wales business community was clearly expressed by CBI Cymru Wales in evidence to the House of Commons *five* years ago as "this kind of long term strategic thinking is needed to overcome the lack of investment in the south Wales network" and "will secure major benefits to industry in south Wales".

Indeed the regeneration of the Lille area of northern France has its parallel in the coal producing valleys of south Wales. Its mines closed but the regeneration of a depressed area following the TGV Nord arrival set up Lille as the third business centre in France. Economic benefits worth £10bn in low economic activity areas in Kent resulted from the construction of the Channel Tunnel Rail Link. Much the same could happen in industrial south Wales and to the tourism industry of north Wales..

As most travel is now seen in terms of travel time rather than distance the speed of travel is vitally important. With the advent of a northern high speed service Cardiff will not only have to compete with Bristol for new jobs contributing to economic growth, but also with Leeds and Newcastle.

The journey time benefits of a dedicated self contained track between south Wales and London can be compared in the context of a journey from Swansea to London and from Paris to Bordeaux. Both take three hours. But Swansea is 200 miles from London and Bordeaux is 350 miles from Paris.

Rail passenger forecasts suggest that overcrowding on the existing strategic rail routes will need the construction of a parallel high speed line to provide increased capacity for inter city passenger traffic and freight. The daily number of conventional and 'TGV' trains would depend on market growth but given the current rates of growth (8% – 10% each year), an increase could be expected.

The route would be expected to include new track from Slough westwards with park and ride stations giving the shortest journey times and allowing interchange with the M4 and the existing train services at junctions 44 (Swansea), Junction 34 (Cardiff) and the Severn Bridge toll plaza (Newport). Taking these trains into the existing city centre stations would increase journey times and require extensive infrastructure expenditure. The experience in France would suggest that the line will be built in stages with a high speed route initially to Swindon, then Bristol. For south Wales to benefit the station for Bristol would need to be to the north of the city in the current Bristol Parkway area and be associated with a second Severn rail crossing.

Support for a western route may come from BAA plc who wishes to see London Heathrow Airport on a high speed line, and the western route from London would pass nearby. Another primary player is Greenguage 21 who might also be persuaded to turn their attention to High Speed 3 coming west rather than north.

The northern English and the Scots see HS 2 as being theirs. They would also like to get the HS 3. If they do it will leave south Wales on the slow train (by comparison) periphery. Wales, in conjunction with the west of England, therefore has to develop a strong case for the HS 3 to south Wales by 2020 and the work recently begun by the Greater Western Partnership (of WAG, SEWEF, advised by the Wales Transport Research Centre, and local / regional authorities in south west England. This joint approach is essential and has to move forward quickly to overcome the efforts in relation to HS 3 put forward by the Northern Way – a pressure group of similar bodies which appears to have delivered HS 2 to the north of England.

Improved North South Rail Link

The railway network in Great Britain has always been London centric. The big companies of the mid nineteenth century all spread out from London – the London and North Western Railway to north Wales and the Great Western to south Wales The process continues with the high speed rail (TGV style) plans. HS1 to Paris; HS2 to northern England and Scotland and (hopefully and if the right pressure is put on the UK Government) HS3 to south Wales and the west of England.

Wales therefore needs to consider how the orientation of the rail network provides not only for its tourist industry and export trade to England and other EU member states; but also how the intra national movements to encourage the different parts of Wales to be adequately linked can be

achieved. The creation of a north south rail route has already begun with a two hourly frequency service between Holyhead and Cardiff and the Gerallt Cymro limited stop service recently introduced.

Several questions arise in the provision of these services:

- Should the frequency be increased?
- Should the journey time be reduced?
- Is there a need for a business class on a train in each direction for the morning and evening services?
- Is there a commercial or economic justification for new lines to be built within Wales to achieve a totally intra Wales north south service?
- Are there alternatives to reopening railway lines?

Consider the position for rail travellers between Bangor and Cardiff

Current

Journey Time: 4h15m (+/-)

Fastest 3h 56m (Gerallt Cymro)
Train frequency: 8 trains per day (tpd)

Options for improvement

Option 1: Limited Stop Service

The planned doubling of track between Wrexham and Chester for much of its length will eliminate the need for the Gerallt Cymro to travel via Crewe. It will also provide for a two hourly frequency limited stop service running in the alternate hours to the existing service between north and south Wales. This could reduce the journey time to 3h50 if station stops were restricted to Bangor, Llandudno Junction, Rhyl, Chester, Wrexham, Shrewsbury, Abergavenny / Cwmbran, Newport and Cardiff.

Such a service would also provide a regular fast service between Wrexham and Cardiff which it does not currently enjoy.

Journey Time (Estimated)

Bangor - Cardiff 3h 40m (4h 15m) Wrexham - Cardiff 2h 10m (2h 42m)

This involves no further major rail infrastructure investment above the £47m planned expenditure for the Wrexham Chester section of the north - south route. It will however form the basis of a higher frequency service following robust negotiations between the Welsh Government, Network rail (for paths) and the train operating company involved.

Option 2

This considers the train operating pattern in Option 1 but with associated levels of line speed investment to be considered

Estimates vary, but journey times could be reduced by the following investment levels and achievement of the attendant lines speeds throughout the journey with a consequent reduction in journey time. Engineers advise that achieving line speeds of 100 mph can cost considerably more than that of 90 mph. Lines speeds at present vary between 75 mph and 90 mph. This is even the case along the NWML and in such circumstances operators would normally limit the speed over the whole route to the lower number unless there was a section of line of sufficient length to justify differing speeds

Holyhead - Cardiff

Route Investment: £120m

Journey Time (Estimated)

Bangor - Cardiff 3h15m Wrexham - Cardiff 2h 0m

The additional costs associated with 100mph travel are likely to provide an acceptable benefit / cost ratio to justify expenditure

Suggested Network Speed and Capacity Improvements

There are several key routes in other parts of the network along which capacity increases should be considered. There would also be requirements for journey time reductions / line speed increases.

Within the present Network Rail Financial Control Period 4 (2009 - 2014)

- Aberystwyth Shrewsbury increased to hourly with line speed increases to reduce journey time by 20 30 minutes
- Merthyr Cardiff service increased to 3 tph in place of 2 tph.
- Gowerton Llanelli track redoubling providing capacity for additional frequency to Carmarthen and Pembrokeshire
- Major investment in the Cardiff area core corridor with two extra platforms at Queen Street Station (north bound and Cardiff Bay) and two at Cardiff Central Station (Maesteg / commuter terminating services and north south metro services platform 8 on the south side) together with a significant increase in capacity at Cogan Junction south of Cardiff and on which all capacity and frequency improvements in the Vale of Glamorgan are based. These would provide for airport access (see below) and also increase rail travel into Cardiff from a major commuter area
- The resignalling and major track work along the SWML and the Great Western main Line I England

Beyond Control Period 4 (Post 2014)

Valley Lines and other commuter services re - thought as the Cardiff / S
 E Wales Metro Rail service covering all routes from Treherbert, Aberdare,
 Merthyr, Ebbw Vale, Penarth, Barry, Cardiff Airport and Bridgend via the
 Vale of Glamorgan line. The Metro concept would extend to the South
 Wales Main Line (SWML) with services to stations such as Pencoed
 Pontyclun and LLanharran, Maesteg and Newport.

- Increased capacity and frequency on City Line from Radyr via Danescourt to Cardiff central
- A reinstated line from City |Line to Creigiau along the existing formation to serve the recent growth in housing in the area north west of Cardiff.
- Re-opening of the Moat Lane junction to Builth Road section primarily for freight operation to enable increased use of both the Cambrian and Heart of Wales lines for freight movements between south Wales and North West England and give some relief to the congestion in the Cardiff - Newport areas.

New / Re-opened Stations

The two primary criteria for such developments are:

- Access to key strategic centres
- Park and ride facilities to reduce traffic flows on congested lengths of road into urban centres or into tourist centres.

The following are examples of the type of new / re-opened station to be considered. They are intended to give members indicators, are not in any priority order nor is the list exhaustive

- Development of Cardiff Airport and its aspirations to double its passenger numbers will be assisted by the construction of the Gateway Wales railway station and direct busway link to the Airport's planned terminal building upgrade. The new station could result in up to 20% of airport passengers travelling by train. The frequency of 4 tpd to / from Cardiff Central would make this as attractive as that at Newcastle airport where that level of modal split is being achieved. These might be envisaged as two stopping trains form Valley destinations (30 min journey time) and two fast services taking 15 minutes, possibly extensions of the current Gloucester service in the WAG Wales and Borders Franchise (Arriva Trains Wales) and the Portsmouth Harbour First Great Western service. The latter would involve converting that operation into an 'express' service with stoops at principal stations. It would require agreement from England's Department for Transport, the sponsoring department for that franchise, and negotiations with statutory consultees
- Park and Ride is an essential part of rail service development. While it might not impact on the overall environmental consequence of the motor car it will reduce congestion in the most severely affected parts of the south east Wales conurbation. Park and Ride at existing station and also at locations such as Severn Tunnel Junction, Miskin and St Mellon's where the M4 motorway and the existing SWML are in close proximity. The high level of car ownership and the fact that railways cannot be constructed to all settlements adds importance to these provisions. The park and ride principle should be seen as a key criterion for new and reopened stations
- To increase demand on a limited stop service from north to south Wales and also to Chester and London, park and ride facilities would be developed at key stations such as LLandudno Junction, RHyl and FFlint.
- Consideration of existing underused stations such as those built for the Swanline service in the 1970's (e.g. Baglan, LLansamlet) which failed to

develop its full potential. The increase in frequency from the present two hourly service is required if train services are to extend the current success of the park and ride bus services introduced by Swansea City Council to contribute to reduced congestion in the city centre.

- A new station at Landore north of the existing Swansea (High Street) station. This would avoid trains serving south west Wales reversing from the present station thus reducing journey times. It would be associated with high frequency bus service links into the new Swansea shopping area
- In parallel with this is the extent to which the track redoubling between Gowerton and LLanelli can contribute to the increase in frequencies in Carmarthenshire and Pembrokeshire with through services or connecting links at Carmarthen. Re instating the eastbound platform at Gowerton with improved park and ride facilities and the creation of a purpose built park and ride facility at Whitland station are the type of scheme to which the Welsh Government and Network Rail should give consideration

Role of an Integrated Coach - Rail Network

The alternative to re opening lines, where construction costs might be prohibitive, is the development of a new franchised Traws Cambria bus / coach network provided for in the Transport (Wales) Act 2006. Fully integrated into the Welsh Government's Wales and Borders franchised and contracted rail services, there would be common branding to indicate to passengers the integrated timetables and ticketing of a single national operation. It can provide high quality public transport for those areas which once had train services and which are unlikely even in the medium (15 – 20 year) term to have a rail service re instated.

The highest profile services in this category are:

- Carmarthen Aberystwyth where track bed has been lost or sold and built upon and where the costs of re building would need to find an additional benefit to those currently in WelTAG to justify its construction even on economic grounds
- Moat Lane junction Merthyr
- Caernarfon NWML
- NWML via Ruthin Corwen linked to the Heart of Wales Line

The most likely to be completed is that from the NWML to Caernarfon. Some of the others are likely be served by the new Traws Cambria For example;

- Carmarthen Aberystwyth
- Barmouth Wrexham
- Merthyr Newtown
- Aberystwyth Bangor

The Carmarthen – Aberystwyth rail service had a journey time of 2h 25m. Along generally the same route the current X40 Traws Cambria service takes the same time. However the new Traws Cambria concept in an integrated network would expect to achieve a journey time of 2h05m. To provide a benefit cost ratio sufficiently high to justify rail re investment there would need to be a journey time of perhaps 1h 30m and environmental and

economic (e.g. tourism or employment) benefits. The last cost figures available are from 1995 when the cost was estimated at £250m. The rate of increase of construction costs over the last 15 years would indicate a cost of over £400m

Light Rail in Urban Areas

The three cities in Wales where the movement of traffic and its possible transfer through a change in modal split would justify light rail investment are Cardiff, Swansea and Newport.

Cardiff would be the city giving the best rate of return. The response to congestion by car commuters has led to a 10% per annum growth in rail passenger demand. This shows no sign of falling thus justifying the Welsh Government's investment in longer platforms, longer trains with more capacity, new stations, added park and ride capacity and new services and increased frequencies.

The present modal split (percentage of total travellers to the city centre) in Cardiff is:

Car: 43 Bus 25 Walk 15 Train 12 Cycle 1 Coach 2

The city had the benefit of an extensive rail network albeit largely designed for moving coal as the basis of a commuter network. That could still be used for light rail from Taffs Well to the city centre and along the southern city routes. It is operationally possible to use such routes for heavy rail but with timing constraints However the routes to the south could be entirely converted and those to the north have, from Taffs Well south, a four track formation most of which remains in the public sector. Sections adjacent to Cardiff University main campus might be considered for route protection to prevent construction of new buildings.

Light Rail has the advantage of having lower operating costs but with the initial high cost of investment. A detailed study would be required to estimate the capital costs but recent examples are:

- Bordeaux: 2005 new four line light rail system; capital cost (including track overhead wiring and rolling stock) of £900m
- Sheffield Supertram: initial build 1995; 18miles long; capital cost £240m. Construction costs in 2010 would be at least double at £500m. The system is part on street and part ex-heavy railway line. Cardiff could provide a greater proportion of the operation on ex-heavy rail with city centre operation alongside the National Museum, Greyfriars Road, the Castle, St Mary's Street and Cardiff Central Railway Station where the heavy rail system would be used to Penarth, Barry and the Vale of Glamorgan. A branch to Cardiff Bay would then be possible.
- Manchester Metro: 20 mile extension; estimated £575m

The Cardiff rail routes currently total 29 miles, if a light rail service operated from Taffs Well via Cardiff Central to Cardiff Bay, Penarth, Barry and Cardiff Airport. In Manchester the use of existing heavy rail lines to Bury and Altrincham still required major relaying though little new land. This would be a similar position in Cardiff giving an estimated cost of £700m - £800m. This however has to be seen as indicative only based on other cities experience. A further 28 miles would include Rhymney and Coryton services.

Swansea because of the total demand level might find the economic justification more difficult. The new Metro operation could be converted as could disused track to the east and north west of the city centre (along the Clyne Valley cycle way, a disused railway towards Dunvant and Gorseinon. Again park and ride facilities would be a key aspect of the investment

Electrification of Diversionary Lines

There has been no indication that the primary diversionary line between south Wales and London will be electrified. It would have been appropriate and in the longer term at a lower cost had the DfT decided to double the track on the line from Swindon via Kemble to Gloucester and to electrify that line at the same time. A similar issue arises on the Vale of Glamorgan line. This would have reduced the need for bi modal (diesel and electric) powered trains under the electrification programme from south Wales to London.

The doubling of that track is a welcome development given that the original report from the Office of Rail regulation did not see the route as strategic in any way. This was indeed the case for local services in the area. Since then discussions between the Welsh Government and the DfT / Network Rail in London has at least made that route a case for double track.

Governance and Future Railway Planning / Additional Powers Over Rail

Elements relating to railways in Wales which finally appeared in the Transport (Wales) Act 2006 included:

- National Transport Strategy
- Wales and borders rail franchise (Railways Act 2005)
- Joint Transport Authorities
- Passengers representative Committee for Wales responsible to the NAfW and not DfT

These and other key areas are identified in the table below with indications on the powers which remain to be transferred.

Table 1 Powers which should be transferred to Wales

All those elements of governance not currently with the National Assembly / WAG should be included in a new Transport Wales Bill. These are shown in *italics* in the table above.

Railway related powers are shown in bold

Present function (with current responsibility holder)	Principal changes / transfers to WAG or NAfW
Public transport policy generally (DfT) **	Transport strategy to include national public transport co- ordination. Local bus service franchising as an option (this is currently in Huw Lewis' LCO)
Road construction investment and maintenance	Retained by NAfW
Bus service frequencies, routes, and subsidy/contract payment levels	Retained by NAfW/CC's
Bus industry regulation (DfT) **	New regional strategic transport boards, based on existing consortia, with representation for NAfW and county councils. Provided for in the Transport (Wales) Act 2006 as Joint Transport Authorities
Investment incentives **	Retained by NAfW Retained by DfT
Rail investment (DfT/Network Rail/)**	WAG already has the power to invest in rail infrastructure and rolling stock. Investment powers similar to those of the ORR to be transferred to WAG with adequate increases in the Welsh block grant Statutory relationship between WAG and Network Rail
Rail passenger service levels and	Policy and direction of the Wales
contractual arrangements with	and Borders railway franchise with WAG. Advice on other inter-
train operating companies (WAG / DfT) **	city services to/from Wales, to be transferred to WAG
Rail regulation (ORR) **	To be shared between ORR and WAG
User group representation (RPC- Cymru Wales) (DfT)	Passenger Transport Users Committee for Wales established under Transport (Wales) Act 2006
Environmental issues	Retained by NAfW/CC's
Land use/development	Retained by NAfW/CC's
Powers of Traffic Commissioners (DfT) **	Transfer of appointment to WAG with same powers as the Local Transport Act (2008) gave to DfT
Traffic reduction/traffic management policy/regulation	All DfT policy making powers transferred to WAG. Local

(DfT**/NAfW/CC/CBC's)	regulations with CC's or JTA's
Personal safety of pedestrians, cyclists	Retained by NAfW/CC's
and provision for those groups	, , , , , , , , , , , , , , , , , , , ,
Mobility impaired people	Retained by NAfW/CC's
Liaison with Sustrans in Wales	Retained by NAfW/CC's
Airport development and air service development and regulation (with appropriate private sector involvement) (DfT, Civil Aviation Authority) **	Air transport service development and airport capital development (within EC state aid rules) are actions WAG can already take. Air transport policy decisions should be shared with DfT / CAA)
Regulatory framework for taxis/private hire cars (part DfT **, CC/CBC's)	DfT aspects on policy to be transferred to WAG
Port development and shipping services promotion (DfT **)	DfT have a free market approach to ports. WAG has an interventionist approach. This reflects the different position of ports in England compared with Wales. In Wales investment is needed to grow the cruise market. The ports return is very low. The economic benefits are considerably greater. See Ports in Wales, House of Commons Welsh Affairs Committee report October 2009 (Evidence published in June / July 2009)
Integration of road/rail freight operations (Network Rail/DfT ** /WAG)	Direct responsibility for Freight and maritime facilities grant transferred to WAG

Sources: Extract from the submission by Professor Stuart Cole to the All Wales Commission

Abbreviations used:

- WAG Welsh Assembly Government
- DfT Department for Transport (GB or England; it has two roles)
- CAA Civil Aviation Authority
- ORR Office of Rail Regulation
- NR Network Rail
- CC's County, City or County Borough Councils. All three titles have been adopted in Wales by the county level authorities

Rationale

The key objective of integrated transport is to provide for accessible and affordable modes of travel which are both sustainable and become the preferred modes of travel in Wales.

However, improvements are required in the public transport system before car users can be persuaded to change, and non-car owners are able to make reasonably timed and priced journeys.

The National Assembly's previous (2005) responsibilities only provided it 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.

The Transport (Wales) Act provided for Joint Transport Authorities (JTA's) to be set up. Although the geographical area was not specific, one would expect the areas to be similar to those of the current Regional Consortia. The JTA's would have statutory powers with local authority and WAG representation thus providing a national body to consider railways and the new Traws Cambria services and the JTA's to provide the 'bottom up' input. This would give a stronger future structure for an integrated public transport system.

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 DfT investment funding for railways) which would need to be considered.

Adding decisions on railway fares, frequencies and investment to the National Assembly expenditure portfolio as proposed in the Railways Act (2005) would require a negotiated Welsh Block Grant settlement in respect of the payments currently made by the DfT to train operating companies with services in Wales or through direct infrastructure payments. The Network Rail infrastructure investment programme has also to be considered.

Some interesting questions now arise:-

- Does the Transport (Wales) Act enable the Assembly to create policies which are not consistent with UK policies? For example, could the franchising (supply side competition) of bus services in Wales replace demand side competition? This is seen by many as a requirement for full passenger transport integration and exists in London.
- If differences arise between the local authorities and the NAfW over the content of the strategy how is it to be resolved?

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