Background Paper 17
Transport & Networks

July 2016
1.0 Context

1.1 Over the last 30 years we have seen massive increases in personal travel, car ownership and distances travelled alongside major reductions in the availability and frequency of public transport, large increases in road transport (vehicle numbers and increasing lorry size) and significant differential changes in the costs of public and private transport.

1.2 Today there is increasing concern at the loss of some rural services such as places of worship, schools, post offices, pubs, garages and small shops and the potential for closure of rural rail services and bus services. Opportunities are being identified for more local delivery of some services in rural areas, such as out posted consultants’ clinics and remote monitoring of certain health conditions and increasingly organisations are identifying opportunities for web or video conferencing and home based working.

1.3 Pressures are mounting from the impact of our current travel patterns on climate change and forecast reductions in fuel oil reserves and increasing costs.

1.4 The capability to adapt to these changing circumstances will dictate the future quality of life in Snowdonia, individual and community wealth, social wellbeing and environmental quality.

2.0 Sustainable Transport Networks

2.1 Transportation in rural North West Wales is a complex issue which is changing rapidly as the policy base shifts through the influence and requirements of the Welsh Government (WG). WG is assuming strategic control over transportation and now controls rail services and to a lesser extent bus services through its various grant and subsidy mechanisms, notably Transport Grant and its payments to Arriva Trains Wales as the National Rail Franchise holder.

2.2 To a great extent the management and control of the bus networks is exercised through the Local Authorities which through their subsidies of uneconomic routes in rural areas can provide services to remote communities to a greater or lesser extent. This control is complicated by the ability of bus companies to declare that they can run an economic service on a route which enables them to establish a competing service and maintain complete control of their own timetable which may be at odds with wider strategic timetables and management of the networks as a whole. Similarly, bus services can be established in competition to rail services on economic routes to the potential detriment of the rail services
as a whole and possibly endangering the future of the route. The lack of consistency in subsidy methods and passenger incentives can make this even worse.

2.3 The Authority regards transportation as also encompassing networks of cycle routes, footpaths and access opportunities. This reflects the importance of tourism to the economy and social fabric of the National Park. The existence of national cycle routes 8 and 5 through and adjacent to the National Park provides a spine of access which can be built on by providing strategic cycle routes and access routes into, onto and through the National Park and its mountains and valleys. This provision links to the Park’s Sustainable Tourism Initiative aims of providing sustainable infrastructures for local businesses to market and exploit with the resultant economic and social benefits and enhanced community cohesiveness.

2.4 The Green Key Initiative and its Snowdon Sherpa Bus Service has been generously grant aided through Transport Grant and Local Authority subsidy to greatly improve the frequency and quality of the service as well as helping achieve the strategic sustainable aim of encouraging people to use public transport as opposed to their cars. The ability to catch a bus to the starting point for your walk and to catch a bus back to your accommodation at the conclusion of your walk is a considerable attraction and Green Key has sought to enhance this in imaginative ways, for example, the Nantlle Ridge taxi scheme. The ability of these buses to carry cycles and rucksacks is also important as is the linking of routes from stations and to the start of other local footpath networks. This builds upon the National Park Authority Leisure Networks initiative which develops local circular and link routes in partnership with communities. Route plans are then placed on the Authority website but again provide infrastructure for local businesses to exploit. It must not be forgotten, of course, that the greatly enhanced bus service also benefits local people who have access to an urban standard of frequency and reliability.

2.5 The National Park Authority has no specific statutory responsibility for public transport other than the way in which it interprets its second purpose. It chooses at present to interpret it as appropriate to assist and work in partnership to develop public transport, cycle and walking networks both to facilitate enjoyment and understanding and local social and economic wellbeing but also to achieve sustainable use of the National Park and protect its environmental assets by creating model shift from cars to public transport by tourists and local people. It is vital that model shift is not seen merely as being important in terms of travel to work but also in altering tourist behaviour in how the countryside is accessed.

2.6 Strategic management and development of transport matters are controlled by the Welsh Assembly Government and local authorities.
3.0 North Wales Joint Local Transport Plan

3.1 This Local Transport Plan was jointly prepared by the North Wales Local Authorities in response to Welsh Government’s requirement for LTP’s to be submitted by January 2015. The aim of the LTP is to:

“remove barriers by delivering safe, sustainable, affordable and effective transport networks”

3.2 The Plan aims to address the key issues for North Wales:

- The ability of the strategic road and rail corridors to provide the necessary good connectivity, for people and freight, within North Wales, to the ports and to the rest of the UK to support the economy and jobs, including tourism;
- The lack of resilience of the road and rail networks to planned and unplanned events including extreme weather;
- The need for good access to and between the three Enterprise Zones in North Wales;
- The lack of viable and affordable alternatives to the car to access key employment sites and other services; and
- The need for good road links to / from the trunk road network into the rural areas to help retain the viability of local businesses and support the Welsh language and culture.

The Plan covers a detailed programme from 2015-2020 and a framework for schemes until 2030. It sets out a range of interventions and schemes for all modes of travel, some applying across all authorities and some locally based. Schemes respond to the issues for transport in the region and complement those being developed at the national level and across borders.

Short and long term plans, which are relevant to Snowdonia National Park Authority include the following.
## Short term plans

<table>
<thead>
<tr>
<th>Scheme Name</th>
<th>Local Authority</th>
<th>Description</th>
<th>Priority</th>
<th>Local, Regional or National Significance</th>
<th>Funding Source(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bridge Strengthening (Pinch Points)</td>
<td>Gwynedd</td>
<td>The proposed scheme is to re-deck, refurbish or strengthen the bridges that have substandard load capacity and are subject to monitoring regimes in order to minimise disruption to the local communities. This will be implemented at 14 sites in a phased programme according to priority.</td>
<td>County Priority Project</td>
<td>Local</td>
<td>WG - LTF, County Council, Heritage funds</td>
</tr>
<tr>
<td>Public Transport Infrastructure Improvements</td>
<td>All Authorities</td>
<td>This scheme will include elements such as bus priority measures, bus boarding improvements, signage improvement, safe accessible routes to stations, bus stops and strategic bus routes, shelter provision and improvements.</td>
<td>County Priority Project</td>
<td>Local</td>
<td>WG - LTF, EZ, Town/ Community Councils</td>
</tr>
<tr>
<td>Interactive Signing</td>
<td>All Authorities</td>
<td>Installation of interactive signs to reduce speeding.</td>
<td>County Priority Project</td>
<td>Local</td>
<td>WG - LTF</td>
</tr>
<tr>
<td>Safety Enhancement – Collision Cluster Sites</td>
<td>All Authorities</td>
<td>The proposed scheme involves an annual analysis of collision data to identify cluster sites and corridors and develop individual schemes to reduce the number of accidents at these sites and overall within the region. Specific focus on locations with disproportionate numbers of casualties, specifically schemes that target vulnerable groups as identified in the Welsh Government’s road safety framework.</td>
<td>Regional Priority Project</td>
<td>Local</td>
<td>WG - LTF</td>
</tr>
</tbody>
</table>
Medium and Long term plans

<table>
<thead>
<tr>
<th>Scheme Name</th>
<th>Local Authority</th>
<th>Description</th>
<th>Priority</th>
<th>Local, Regional or National Significance</th>
<th>Funding Source(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Travel Routes - Conwy Valley</td>
<td>Conwy</td>
<td>Provision of Active Travel Routes linking the Conwy Valley settlements of Llanrwst and Betws-y-Coed with the coastal cycle path NCR5 and with other villages within the Conwy Valley.</td>
<td>County Priority Project</td>
<td>Local</td>
<td>WG - LTF, ERDF</td>
</tr>
</tbody>
</table>

4.0 Mid Wales Joint Local Transport Plan 2015

4.1 This Local Transport Plan was jointly prepared by the Mid Wales Local Authorities in response to Welsh Government’s requirement for LTP’s to be submitted by January 2015. The aim of the LTP is to:

“remove barriers by delivering safe, sustainable, affordable and effective transport networks”

4.2 The Plan aims to address the key issues and opportunities for Mid Wales:

- Difficulties in gaining access to employment and services, particularly for those without a car and because of the need to travel long distances;
- Poor opportunities for passing, pinch point and constraints on the strategic road network lead to increased journey times and reduced journey time reliability for the movement of people and goods within the region and to key destinations outside of Mid Wales;
- Increased risks to the resilience of the network through impacts of climate change, including flood risk;
- Opportunities to increase mode share by active travel modes and to improve the health and well-being of the local community and to continue to improve the road safety record.

The Plan covers a detailed programme from 2015-2020 and a framework for schemes until 2030. It sets out a range of interventions and schemes.
for all modes of travel, some applying across all authorities and some locally based. Schemes respond to the issues for transport in the region and complement those being developed at the national level and across borders.

**Short term plans**

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<tr>
<th>Scheme Name</th>
<th>Local Authority</th>
<th>Description</th>
<th>Priority</th>
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</thead>
<tbody>
<tr>
<td>A496 Llandecwyn Roundabout</td>
<td>Gwynedd</td>
<td>The scheme will improve access to the Snowdonia EZ (Llanbedr area) via the A496 in Llandecwyn and from the A487(T) over Pont Briwet from Penrhyneddraeth by implementing improvements to the roundabout junction at Llandecwyn. The scheme will address accident issues and improve traffic flow and capacity. The A496 is the strategic link between the Snowdonia Enterprise Zone and the trunk road network.</td>
<td>Regional Priority Project</td>
<td>National</td>
</tr>
<tr>
<td>A496 Maentwrog to Blaenau Ffestiniog</td>
<td>Gwynedd</td>
<td>The scheme is to improve the standard and safety of transportation along a 7.7km (4.8 mile) section of the A496 County Road between the junction with the A487 near Maentwrog, north to the junction with the A470 in Commercial Square, Blaenau Ffestiniog. The A496 is the strategic link between the Snowdonia Enterprise Zone and the trunk road</td>
<td>Regional Priority Project</td>
<td>National</td>
</tr>
</tbody>
</table>
### Pont Briwet Bridge Replacement Scheme
- **Location**: Gwynedd
- **Details**: The Pont Briwet project is almost complete following substantial funding from European Regional Development Fund, through the Welsh Government, as well as Network Rail, TraCC and Gwynedd Council. The scheme involves the construction of a replacement rail and road bridge across the Dwyryd River near Penrhyndeudraeth, a new cycle/footpath, widened access roads and improvements to Llandecwyn station. The new improved bridge provides the important economic link to the rural communities of Ardudwy as well as safeguarding the future of the Cambrian Coast railway. There is a need for funding in order to enable the scheme to be completed, following issues that led to delays and the timing of the ERDF programme closure.

Following completion of the scheme there is a need to consider the impacts on Penrhyndeudraeth from the changes in infrastructure and implement improvements if necessary.

### Strategic Routes Alleviation of Flood Risk Areas
- **All Authorities**: A large proportion of the region is deeply rural, having dispersed settlements with few centres that offer a wide choice of employment opportunities. Despite low average income there are necessarily high levels of car ownership. Where flood events impact on connections to these areas this impacts on access to employment and services. The project will be to address areas where flooding leads to impacts on connections.

### Bridge Strengthening (Pinch Points)
- **Gwynedd**: A significant number of bridges have been assessed as having substandard vehicle load capacity and are subject to monitoring regimes in order to minimise disruption to the local communities. 14 sites have been identified where current weight limits or substandard capacities are inhibiting economic growth. The proposed scheme is to re-deck, refurbish or strengthen these bridges in a phased programme according to priority. A significant issue in determining priority will be whether a structure carries an emergency route for use in the event of a Trunk or Principal Road closure.
<table>
<thead>
<tr>
<th>Project Description</th>
<th>Location</th>
<th>Detailed Description</th>
<th>Priority Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Llanbedr Airfield Access (SEZ)</td>
<td>Gwynedd</td>
<td>To provide a new multi-user access road to connect the Llanbedr Airfield site to the A496. This will improve access to the Snowdonia Enterprise Zone and the connections to the others in the triangle of EZs (Anglesey and Deeside).</td>
<td>Regional Priority</td>
</tr>
<tr>
<td>Active Travel for &quot;designated&quot; localities</td>
<td>All Authorities</td>
<td>The proposed scheme will aim to meet the requirements of the new Active Travel Act in each of the Local Authority areas by funding improvements to walking and cycling links. In Southern Gwynedd this will cover the four designated localities of Blaenau Ffestiniog, Tywyn, Dolgellau &amp; Barmouth.</td>
<td>Regional Priority Local</td>
</tr>
<tr>
<td>Rail Hub Improvements</td>
<td>All Authorities</td>
<td>The scheme comprises improvements to access to rail stations. In Powys this includes Scheme A - Machynlleth Railway Station Interchange: rail/bus interchange and enhanced car park and Scheme B) Welshpool Railway Station Additional Car Parking.</td>
<td>Regional Priority Project</td>
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</tr>
<tr>
<td>Public Transport Information</td>
<td>All Authorities</td>
<td>This scheme will seek to deliver the following in the region: Real Time Bus Information – fixed information displays at key interchange locations – such as at Aberystwyth Passenger Transport ‘Gateway’ Wi-Fi at strategic public transport interchanges and hubs where there is little or no mobile telephone coverage to enable public transport users to access existing/ new web and app–based travel information. Associated improvements to the general presentation, accessibility and availability of travel information.</td>
<td>County Priority Project</td>
</tr>
<tr>
<td>Actual Time Passenger Transport Information via Smart Mobile App</td>
<td>All Authorities</td>
<td>The project is to roll out a mobile app on bus routes that can deliver ‘actual time’ passenger information by communicating via a device on the service bus with smart phones. It has the potential to provide better than ‘real time’ passenger information, as it ‘learns’ the route and the time it takes to travel between stops and can then relay this information to waiting passengers. The data source will be Traveline Cymru. The app has been trialled successfully on one route in mid Wales. It also has the potential (with further development) to become an integrated public transport information &amp; prepaid ticket ‘portal’ all in one place.</td>
<td>County Priority Project</td>
</tr>
<tr>
<td>Motorcycle Safety</td>
<td>All Authorities</td>
<td>The Local Authorities Road Safety Officers work in Partnership with the Emergency services and the Police initiatives to improve motorcyclist safety which is a significant issue in the region. The scheme is to analyse collision reports and implement improvements to enhance safety such as motorcycle safety barriers, signage, road markings and minor physical works.</td>
<td>Regional Priority Project</td>
</tr>
<tr>
<td>Scheme</td>
<td>Authority Level</td>
<td>Description</td>
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<tr>
<td>Interactive Traffic Speed Signing</td>
<td>All Local Authorities</td>
<td>The scheme provides for the replacement or installation of interactive speed signs to reduce speeding through the region's towns and villages.</td>
<td></td>
</tr>
<tr>
<td>Energy Efficiency/Safety - Street Lighting Renewal</td>
<td>All Authorities</td>
<td>Many street lighting columns across the region are more than 40 years old and are currently fitted with inefficient lanterns/lamps. In Ceredigion as an example, the Council has recently converted thousands of streetlights across Ceredigion to the latest energy efficient LED technology. The old columns, however, are unsuitable for LED conversion. Renewing them would allow the Councils to complete the LED conversion programme. Unless the columns are replaced soon, the Councils will be forced to remove them.</td>
<td></td>
</tr>
<tr>
<td>Junction Safety Enhancements</td>
<td>All Authorities</td>
<td>The scheme involves improvements to locations, particularly at junctions, where there have been significant problems with road traffic collisions. The schemes will involve the following types of improvement: removal of acceleration de-acceleration lanes; signing and lining enhancement; realignment; surface re-grade and surface construction design and improved sight lines (low maintenance visibility lines). As an example the Innovation Campus development at IBERS, Plas Gogerddan with £40m investment requires highway junction improvements on the A4159 to facilitate jobs and growth on the campus. In addition, pedestrian road safety and access improvements will be required on the highway adjacent to the Campus. These works will complement further proposed active and sustainable travel interventions connecting the site with neighbouring communities and proposed improvements to public transport infrastructure and services.</td>
<td></td>
</tr>
</tbody>
</table>
5.0 Road improvement initiatives since adopting the Eryri LDP

Pont Briwet

5.1 The planning for a replacement Pont Briwet began in 2010 in a joint venture with Welsh Government, Network Rail and Gwynedd Council. Some issues with the old bridge included single file crossings controlled by traffic signals at either end of the bridge and weight restrictions which meant only cars could cross. The new bridge carries a single track railway and a two lane carriageway as well as a cycle/footpath of around 2.5 metre width. The bridge opened for railway use during September 2014 whilst it opened for road traffic during July 2015.

A470 Improvements - at Cross Foxes and Gelligemlyn

Maes yr Helmau to Cross Foxes

5.2 This part of the scheme involved realignment and re-construction of the narrow winding section of the A470 between Maes yr Helmau and the Cross Foxes junction, east of Dolgellau. The scheme aimed to improve road safety and reduce journey times and resulted in a new road of approximately 1.3 miles length at a cost of around £11 million. The scheme was completed late 2013.

Gelligemlyn

5.3 This section of A470 road improvement was designed to improve road safety and to reduce journey times. The scheme involved re-aligning and re-developing 2km of the A470 between Ganllwyd and Llanelltyd and cost approximately £8.6 million. Work started on this section of the A470 during April 2012 and was completed in 2014.

Proposals for a new Dyfi Bridge, Machynlleth

5.4 Proposals for a new Dyfi Bridge have been published for consultation by the Welsh Government which is responsible for trunk road improvements in Wales. This new development could, according to Edwina Hart, commence construction by late 2016. The proposed new bridge would be used in place of the 200 year old current Dyfi Bridge which is narrow and a 'pinch point' for traffic between North and Mid Wales. There are also flooding issues with the current bridge as traffic has to detour around 20km to get over the river during heavy flooding. It is estimated that the whole project will cost in the region of £25 million. The design plans for the new structure, which will span 550 metres, was presented in a public exhibition in Machynlleth during October 2015.
6.0 Implications for the Eryri Local Development Plan revision

6.1 The proposed Lon Tryweryn Multi User Path which would create a multi-user path between Bala via Fron Goch to the National White Water Rafting Centre, Tryweryn is already safeguarded as a recreational route on the Eryri Local Development Plan proposals map.

6.2 Consideration will need to be given to the proposed Llanbedr Bypass which creates access road to connect the Llanbedr Airfield site (also an Enterprise Zone) to the A496 and provide better infrastructure for any potential developments on the site. The scheme aims to improve and alleviate congestion within Llanbedr and improve road safety within the settlement.

7.0 Transport Networks within the National Park

7.1 Appendix 1-5 includes work undertaken by the policy and strategic plans department on the public transport services within the National Park as part of the evidence base for the Eryri LDP. This will need to be updated as part of the Eryri LDP revision. Using GIS, maps were created which outline:

- Public Transport in Snowdonia – this map outlines both bus and train routes, the map shows bus routes that have regular frequent services, routes that have certain days or infrequent services and the Sherpa seasonal service. (appendix 1)
- Bus frequency within the National Park, this map shows the frequency of buses travelling through settlement within the National Park. (appendix 2). This map provided evidence which helped to inform the development of the settlement strategy for the Local Development Plan.
- Train Frequency within the National Park, this shows the settlements within the National Park that are served by trains; it also shows the frequency of the train service within each settlement. (Appendix 3)
- Bus service to nearest accessible service centre by travel time, which arrives before 9:00am and leaves after 5:00pm. This also outlines settlements where this is not possible. (Appendix 4).
- Train service to nearest accessible service centre by travel time, which arrives before 9:00am and leaves after 5:00pm. This also outlines settlements where this is not possible. (Appendix 5).
Appendix 1

Public Transport in Snowdonia National Park
Appendix 2

Frequency of Bus Service

The map shows the frequency of bus service in the area, with symbols indicating different service frequencies. The map includes major towns and cities such as Bangor, Conwy, Caernarfon, Blaenau Ffestiniog, Dolgellau, Y Bala, Machynlleth, Tywyn, and others. The legend explains the symbols used to represent frequencies such as 30 min, 1 hr, 1-2 hr, Daily - Sherpa, 3 a Day, 2 a Day, 1 a Day, 3 Days a Week, 2 Days a Week, 1 Day a Week, and None.

Appendix 3

Frequency of Train Service

Trains Frequency to Settlement
- 1-2hr
- 2-3hr
- Seasonal
- No Train Service

- Narrow Gauge Line & Station
- British Rail Line & Station

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Hawlfraint Awdurdod Parc Cenedlaethol Eryri, 2008.
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Appendix 4

Bus Service to nearest accessible Service Centre by Travel Time
Arriving before 9.00am leaving after 5.00pm

Travel Time
- <15m
- <30m
- >1hr
No Work Day Service
Certain Days or Inrequent Service
Regular Frequent Service
Sherpa - Seasonal Service

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Appendix 5

Train Service to nearest accessible Service Centre by Travel Time
Arriving before 9.00am leaving after 5.00pm

Travel Time to Service Centre by Travel to Work
- < 30m - Yes
- <15m - One Way
- <30m - One Way
- <15m - No
- <30m - No
- <1hr - No
- No Train Service

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