



**RHONDDA CYNON TAF COUNTY BOROUGH COUNCIL**

**CLIMATE CHANGE STEERING GROUP**

**28TH JANUARY 2020**

**REPORT OF THE GROUP DIRECTOR OF PROSPERITY, DEVELOPMENT AND FRONTLINE SERVICES IN DISCUSSION WITH THE CABINET'S CLIMATE CHANGE CHAMPION (COUNCILLOR RHYS LEWIS)**

**TRANSPORTATION – HOW DO WE REDUCE OUR CARBON EMISSIONS AND CHANGE OUR MODES OF TRANSPORT?**

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**1. PURPOSE OF THE REPORT**

- 1.1 The purpose of the report is to appraise the Steering Group of the current situation regarding carbon emissions and transport and to identify the steps that can be taken to reduce such emissions.

**2. RECOMMENDATIONS**

It is recommended that the Steering Group:

- 2.1 Note the content of the report.

**3. BACKGROUND**

- 3.1 Transport is a derived demand that operates across county boundaries. Whilst there are steps that individual councils can take to decarbonise transport, such steps will be more effective where they are delivered under a coordinated strategy on a regional or national basis, where all parties are focussed on achieving a common goal.
- 3.2 Transportation of goods and people around Wales is fundamental to our current economic model and our well-being as a nation. It is an integral part of most economic, social, environmental and cultural activity. With transport accounting for 14% of Wales' carbon emissions, it is essential that the sector is made more resilient, efficient and low carbon in a cost-effective way, if we are to meet the Welsh Government's requirement to reduce overall carbon emissions by at least 80% (or higher) by 2050.

- 3.3 Welsh Government strategy for reducing carbon is set out in Prosperity for All: A Low Carbon Wales;  
[https://gov.wales/sites/default/files/publications/2019-06/low-carbon-delivery-plan\\_1.pdf](https://gov.wales/sites/default/files/publications/2019-06/low-carbon-delivery-plan_1.pdf)

This establishes a commitment to;

*....putting Wales at the forefront of a shift towards active travel and a low carbon public transport system which is accessible to all and contributes to liveable and sustainable communities. This is backed by a bold ambition for a zero emissions bus, taxi and private hire vehicle fleet by 2028.*

- 3.4 The document anticipates metro style public transport services offering a sustainable transport alternative to the private car and active travel becoming the preferred option for short journeys that are currently predominantly being done by car. In addition, there is an expectation that the take up in electric vehicle usage will accelerate with the Welsh Government supporting investment in electric vehicle charging infrastructure. The approach can be summarised as follows;

- Behaviour Change Measures (Demand Reduction Policies)
- Uptake of Electric Vehicles
- Vehicle and Fuel Efficiency Measures

- 3.5 *Prosperity for All* establishes high level policies covering carbon emissions across the entire Welsh community and economy with the expectation that the *Welsh Transport Strategy* (anticipated to be published late 2020) will flesh out these policies and provide the detail and context required to inform local and regional transport policy and delivery plans.

- 3.6 RCT is proactive at a regional level through the Cardiff Capital Region City Deal (CCRCD) and the Cardiff Capital Region Transport Authority (CCRTA), as well as driving forward projects and proposals that are more specific to RCT.

- 3.7 Working with the WLGA; evidence was recently submitted to the Welsh Government's *Economy, Infrastructure and Skills Scrutiny Committee* regarding *De-Carbonising Transport* and *Prosperity for All*.

- 3.8 This evidence was presented on 13<sup>th</sup> November;

<http://senedd.assembly.wales/documents/g5732/Public%20reports%20pack%20Wednesday%2013-Nov-2019%2009.25%20Economy%20Infrastructure%20and%20Skills%20Committee.pdf?T=10>

- 3.9 As can be seen from the evidence, the commitment to reduce carbon emissions by at least 80% by 2050 is extremely challenging. As indicated earlier, Transport is a derived demand; users of transport are primarily consuming the service not because of its direct benefits, but because they

wish to access other services; employment, health care, education, retail, leisure, tourism or for the delivery of goods and services.

3.10 Transport growth is linked to the economy, as the economy grows, so does the demand to travel. Initiatives such as City Deal exist to drive economic growth and close the significant gap in economic activity that exists between south east Wales and the regional economies across the rest of the UK. A successful City Deal will create a more prosperous region and will tend to lead to greater travel demand.

3.11 RCT is engaged in numerous programmes of works, many of which have positive implications for reducing emissions and helping to de-carbonise transport. These programmes should continue at pace. For example:

- Making Better Use Programme; creating bus priority, increasing the efficiency of our network and reducing delays at junctions, enhancing traffic signals to include latest SCOOT and MOVA controllers.
- Safe Routes to School / Safe Routes in Communities; to encourage walking and cycling – improved pedestrian and cycle facilities, new and upgraded crossings for pedestrians and cyclists, drop kerbs, cycle storage, traffic calming, 20mph limits, etc.
- Bus Corridor Enhancements; reduce journey times, improving bus stops and shelters, providing bus boarding points to allow step free access, maintaining our bus stations and providing passengers with information on bus services.
- Parking Enforcement; RCT employs 14 Civil Parking Enforcement Officers and 2 mobile camera vehicles to deal with obstructive parking, particularly outside schools, on zebra crossings and in marked bus stops.
- Subsidised bus services; whilst approximately 92% of public transport services are run on a commercial basis, the council provides £625,630, which combined with Welsh Government funding and other cross boundary contributions enables a sum of £1,125,280 to be committed to contracted bus services to provide bus services in locations or at times of the days or week when commercial services are not viable. In addition £7,435,270 is spent in RCT every year to provide approximately 60,000 residents with concessionary bus travel.
- Park and Ride; the council has established an excellent track record in developing and delivering park and ride opportunities at railway stations, notably Abercynon P&R extension providing over 300 extra spaces in 2019.
- Active Travel; RCT has delivered numerous Active Travel schemes across RCT, the most recent being Llantrisant Community Route and links. This will be a key area of growth in future enabling shorter journeys that are currently made by car to transfer to walking or cycling, reducing congestion and vehicle emissions and improving health and wellbeing.

## **4 OPPORTUNITIES FOR RCT**

### **4.1 Metro**

- 4.1.1 Metro has the potential to offer a credible, alternative and sustainable transport opportunity to enable car users to switch to public transport for many journeys.
- 4.1.2 The Cardiff Capital Region City Deal has facilitated an investment of around £740 million towards the initial stages of transforming the transport network in south east Wales to create a Metro system. As part of the Wales-wide rail franchise, Transport for Wales (TfW) (a wholly owned arms-length company of Welsh Government) has let the 15-year £5Bn rail franchise to Keolis Amey, operating as Transport for Wales Rail Services.
- 4.1.3 The initial investment will secure full electrification of the Core Valley Lines (CVL) within Rhondda Cynon Taf (and to Merthyr) together with new rolling stock. This will provide an electrified rail service with 4 trains per hour running to Treherbert, Aberdare and Merthyr, towards the end of 2022. The changes will also see the CVL rail lines, stations, etc (which includes those in RCT) coming under the direct control of TfW and transferring from Network Rail during 2020.
- 4.1.4 There will also be a range of complimentary improvements to stations with potential for additional stations and park and ride expansion. A new rail depot is being developed at Taffs Well which will also accommodate the control centre for these rail services.
- 4.1.5 Related Initiatives; As part of the joint City Deal/Welsh Government Metro Plus programme, a new integrated transport hub will be created at Porth. This will be the catalyst for further regeneration of the town. The scheme will enable bus and rail integration linking bus services from Rhondda Fach, Rhondda Fawr and from the Gilfach/Tonyrefail area with rail services at Porth. This integration will build on Metro principles and allow interchange with the 4 rail services an hour that will run each way from 2023.  
Further work is in hand to consider the merits of creating a mass transit link from Cardiff, through the new developments in NW Cardiff and towards Beddau and Pontyclun in RCT.  
Studies have also commenced to consider extensions of the electrified rail service proposed for Aberdare, to extend towards Hirwaun.  
A new station is being promoted close to the new Department of Work and Pensions Offices at Trefforest Industrial Estate.  
Other studies are progressing to consider options for strategic park and ride facilities along the A470 and A4119 corridors and at other sites throughout the Rhondda, Cynon and Taf areas. Other related initiatives will also be developed.
- 4.1.6 Metro must be more than rail and will need to integrate all forms of transport (including ticketing and information) to create a comprehensive, joined-up

and coordinated network of routes and services across; rail, tram, bus, cycling, walking, whilst promoting more sustainable ways of fuelling private cars, freight and service vehicles.

- 4.1.7 Bus is key to extending the reach of Metro to all communities, typically carrying 100 million passengers in Wales every year (4x more than rail). De-regulation of buses in 1985 has meant that bus operators such as Stagecoach, NAT, Edwards, etc are responsible for planning their networks, the routes, the frequencies, the stops, the fares, the days of the week and the time of day during which they run the services. This means that it is more challenging to plan and coordinate services between operators and to integrate with other transport modes. Welsh Government is currently promoting legislation which will enable buses to be regulated where it has not been possible to achieve satisfactory coordination by other measures. Commonly known as franchising, it may offer coordination benefits, but it should not obscure the fact that the main challenge for buses is road congestion.
- 4.1.8 Ongoing traffic growth on constrained highway networks means that bus journeys are becoming slower and less reliable as roads become more and more congested. Operators are having to extend their timetables to maintain journey time compliance (or face fines from the Traffic Commissioner) and introduce additional vehicles into their rosters to maintain headways. This adds significant operational costs which are compounded by loss of income due to lower patronage. Costs are passed on to passengers or to the local authority as subsidies or the services are terminated.
- 4.1.9 This is a vicious circle which will need significant capital and revenue investment to make bus attractive and grow patronage, moving people out of their cars and onto passenger transport. Difficult decisions will need to be made regarding respective priority and allocation of road space.
- 4.1.10 Against a challenging commercial backdrop, progress is being made across the region with electric buses being introduced by Stagecoach, Newport Bus and Cardiff Bus. Other commercial services are mainly being provided on newer vehicles many of which will be Euro 6 compliant. This is partly driven by public sector bus quality requirements when procuring subsidised bus services.
- 4.1.11 The financial commitments facilitated through the Cardiff Capital Regional City Deal in developing the Metro are hugely advantageous to RCT and provide a framework on which Metro will grow and expand across the region. Rhondda Cynon Taf has the opportunity to maximise the advantages presented by these early transformational investments.
- 4.1.12 The Council is seeking to develop complimentary sustainable measures to stimulate economic growth and to make our communities more prosperous, building on the foundations of Metro in RCT. The Council has delivered significant growth in the number of park and ride spaces available

and will continue with this work in conjunction with Welsh Government and TfW.

4.1.13 Active Travel enhancements will be accelerated to enable active travel links to stations and interchanges and between our communities and town centres. This will also encourage active and healthy lifestyles aligned with Corporate Plan priorities. Options for bike hire, including electric bikes will be considered.

4.1.14 Land use planning through the development of the new Local Development Plan should seek to focus development on transport hubs to maximise the benefits of Metro.

## **4.2 Electric Vehicles (EV) and Charging Infrastructure.**

4.2.1 The Council is currently working with the CCRCD/CCRTA to develop a regional approach to the introduction of EV charging infrastructure across strategic Council owned sites and on a strategy to convert all taxis to EV by the Welsh Government target date of 2028.

4.2.2 The Taxi Strategy for South East Wales was recently approved by the CCRTA and will involve further work across the ten councils and their respective Taxi Licencing teams and taxi operators;  
<https://www.cardiffcapitalregion.wales/wp-content/uploads/2019/11/item-6-taxi-strategy-for-south-east-wales-appendix-1.pdf>

4.2.3 The Cardiff Metro Infrastructure Review includes independent review of the area and offers a number of recommendations regarding a way forward which are currently proceeding;  
<https://www.cardiffcapitalregion.wales/wp-tent/uploads/2019/02/appendix-3-cardiff-metro-infrastructure-review-cenex.pdf>

4.2.4 Further work on commercialisation is being concluded and is likely to lead to a procurement process involving numerous councils (and potentially Welsh Government) to secure a commercial delivery partner. This will provide an initial framework of public EV charging points upon which the commercial providers will be expected to develop a wider offer. It is notable that commercial charging points are starting to be delivered in local supermarkets across RCT.

4.2.5 Three bus companies have recently been granted funding to develop electric bus services in the region, Newport Bus, Cardiff Bus, Stagecoach Caerphilly. The expansion of the services, which involve investment in new buses and charging infrastructure, will be an aspiration for the region.

4.2.6 The Council's own fleet is predominantly diesel based and will itself be subject to review with the intention of moving towards more sustainable forms of fuel as the market for suitable vehicles matures and cost effective and fit for purpose solutions emerge. The Council is currently trialling hybrid and EV options and will monitor the potential for other sustainable fuel solutions for larger fleet vehicles (such as hydrogen).

4.2.7 Use of pool cars to reduce internal travel costs has been effective and has also lead to informal car sharing or use of public transport as staff no longer need to have their own car available at work for work related travel. The extent of this impact is not known and there is not a formal car-sharing initiative in place.

### 4.3 Complementary Strategies and Demand Management

#### 4.3.2 Home to School Transport

4.3.3 The Council also commissions significant volumes of transport services through its Home to School transport commitments. Whilst the options to convert these services to greener energy are limited, RCT's approach to school transport offers significant benefits for sustainable travel, particularly in respect of;

- The Council's generous eligibility criteria means that proportionately more pupils travel to school by bus than would be the case if the Council operated at statutory distances and age groups. Consequently, the Council operates the largest schools transport operation in the country meaning that far less parents feel the need to transport their pupils to school. This reduces overall carbon emissions from the "school run" and also has the beneficial effect of reducing the amount of traffic on our roads and levels of congestion – this has benefits for air quality.
- The Council operates the most efficient school transport operation in the country with its vehicle occupancy rates (i.e. number of pupils per bus) being the highest in Wales. Combined with smart route planning, this means that the service is provided with the fewest number of buses possible.

#### 4.3.4 Land Use Planning

4.3.5 The Council will shortly been to review its Local Development Plan. This will need to consider a) how appropriate land use can reduce the need to travel or b) how land use can influence travel choices. Planning Policy Wales Edition 10 has placed a new emphasis on sustainable forms of development.

4.3.6 At the present time, some 100,000 commuters travel into Cardiff for employment every day, many of those from RCT. Whilst Metro has a role to play in the necessary growth of the city, the extreme tidal nature of travel demand is unsustainable in itself and polycentric growth across the region must be used as a tool to balance travel flows and reduce journey distances. The establishment of Transport for Wales offices in Pontypridd is an excellent example of how such growth should be targeted at other major centres across the region where there are excellent public transport options. Such investments can also complement and help to sustain our town centres.

#### 4.3.7 Technology

4.3.8 Digital technology offers the opportunity to help to limit the need to travel. Agile and home working can reduce the number of work related trips that we make and skype, video conferencing, etc, can reduce the need to travel to attend meetings, etc, this is pertinent to RCT as we operate over a number of sites across the county borough.

4.3.9 Technology is also underpinning the development of new transport models; Mobility-as-a-Service (MaaS) is beginning to deliver integrated journey planning via apps and reducing reliance on car ownership.

#### 4.3.10 Car Parking Charging Strategies

4.3.10 These local strategies can influence mode choice and reduce the attractiveness of car over other modes. Car park charges are emotive and involve wider considerations such as the ongoing viability of our town centres.

#### 4.3.11 Congestion Charging or Workplace Car Park Charging

4.3.12 As introduced by London and Nottingham respectively, they discourage car use and can provide a revenue stream for investment in sustainable transport (e.g. work place charging provided a revenue stream to enable capital borrowing to initiate Nottingham Tram). These measures are more appropriate for consideration by major cities but could influence mode choice in RCT if introduced elsewhere.

#### 4.3.13 Taxation

4.3.14 Essentially a high level policy tool for central and national government. The fuel tax escalator was introduced by central government to stem traffic growth. It proved to be both effective and deeply unpopular. Whilst in operation, traffic growth levelled off and started to decline but widespread unrest lead to it being suspended with the consequence that traffic growth resumed at similar levels to those experienced before the impact of the escalator.

4.3.15 Vehicle taxation has also been used to influence choice of vehicle purchase with more polluting vehicles attracting higher levels of taxation depending on fuel type and CO2 emissions.

## **5 EQUALITY AND DIVERSITY IMPLICATIONS**

5.1 Equality and Diversity issues will be considered as part of determining the final detail of proposed schemes or emerging strategies.



## **6 CONSULTATION**

- 6.1 There are no consultation requirements relating directly to the report.

## **7 FINANCIAL IMPLICATIONS**

- 7.1 The report provides information which highlights measures and initiatives that can support the de-carbonisation of transport. Creating the conditions to achieve modal switch from cars to sustainable transport alternatives will require major capital investment in infrastructure and ongoing enhanced revenue investment in services, along with strategies to win hearts and minds. Some of the cost may be offset by income from demand management measures but these will generally be more regional in nature.
- 7.2 Actions or policy changes will require further reports which will involve detailed consideration of the financial aspects of any recommendations.

## **8 LEGAL IMPLICATIONS OR LEGISLATION CONSIDERED**

- 8.1 The report provides information regarding de-carbonising transport. Actions or policy changes will require further reports which will involve detailed consideration of legal aspects of any recommendations.

## **9 LINKS TO THE CORPORATE AND NATIONAL PRIORITIES AND THE WELL-BEING OF FUTURE GENERATIONS ACT.**

- 9.1 Action to reduce the impact of carbon emissions from the transport sector are linked to and support several local and national policy documents and plans. In addition to the details outlined in Section 3 of this report, the actions set out will enable the Council to maximise its contribution to all seven of the well-being goals contained in the Well-being of Future Generations Act 2015.
- 9.2 The actions will also assist the Council in delivering the three main priorities, and associated commitments, contained within its Corporate Plan covering the period 2020 – 2024.
- 9.3 The other major Plan covering RCT which is relevant in this context is the Well-being Plan of the Cwm Taf Public Services Board. One of the objectives in this document is to “help people live long and healthy lives and overcome any challenges”. Improving air quality and encouraging more active travel journeys will help to tackle the problems of obesity that exist and premature respiratory related deaths that occur within the Cwm Taf area.

## 10 CONCLUSION

10.1 Travel demand is complex and influenced by a range of factors. It is a derived demand which will tend to increase with economic growth and prosperity.

10.2 RCT has many levers at its disposal related to transport infrastructure and services, its own fleet and travel demands, and these must be maximised in favour of;

- Eliminating or reducing the need to travel
- Encouraging and promoting sustainable transport infrastructure and services
- Working with the Capital Region to engage, influence and develop regional and national initiatives to minimise carbon emissions and change transport mode

10.3 The following potential specific actions are offered for consideration. Consideration should be given to;

1. Collaboration at regional and national level to develop high level coordinated strategies to decarbonise transport.
2. Seek to maximise the benefits of Metro to RCT by promoting complementary programmes of investment that enable sustainable growth.
3. Accelerate Active Travel infrastructure provision and promote the benefits of active travel.
4. Assess the merits of promoting Transit Oriented Development via the Local Development Plan and proposed Strategic Development Plan
5. Continued collaboration with the Cardiff Capital Region City Deal, the Cardiff Capital Region Transport Authority and Welsh Government to introduce:
  - i. EV Charging Infrastructure
  - ii. EV Taxis
  - iii. EV Public Bus Services
6. Continue to trial low carbon vehicles for its own fleet and introduce a programme for phased implementation of LCV's as appropriate and fit for purpose vehicles enter the market.
7. Establish a base-line of staff travel to work modes and develop strategies to enable and promote sustainable travel to work.
8. Work to encourage polycentric growth across the region to reduce the length of travel to work
9. Engage in any future considerations related to congestion or workplace charging proposals, should they be promoted anywhere in the region or at a location that has implications for RCT.
10. Maximise the benefits of technology to reduce the need to travel or to travel more sustainably.