

Report of the Cabinet Member for Environment and Infrastructure Management

To the Development & Regeneration Scrutiny Performance Panel – 31 July 2019

Transportation Infrastructure – how is it supporting the development of the city centre - Scoping Report

Purpose: To brief the Development & Regeneration Scrutiny Performance

Panel on transportation elements of the City Regeneration

process.

Content: A briefing on recent and planned improvements.

Councillors are Consider the information provided and to forward views to the

being asked to: Cabinet Member via a letter from the Panel Convener.

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1. Background

- 1.1 The Wales Transport Strategy places a duty on local authorities to have a transport strategy in place. This is realised through the Local Transport Plan (LTP) for each authority, which provides transport policy and infrastructure programme.
- 1.2 The current LTP for Swansea Council was adopted by Council in January 2015 and subsequently accepted by the Welsh Government in May 2015. The LTP was developed jointly across South West Wales, through collaborative working with Carmarthenshire County Council, Neath Port Talbot County Borough Council, Pembrokeshire County Council, and Swansea Council.
- 1.3 The LTP vision is 'To improve transport and access within and beyond the region to facilitate economic regeneration, reduce deprivation and support the development and use of more sustainable and healthier modes of transport'.
- 1.4 The LTP objectives are:

- To improve the efficiency and reliability of the movement of people and freight within and beyond South West Wales to support the economic growth in the City Region.
- To improve access for all to a wide range of services and facilities including employment and business, education and training, health care, tourism and leisure activities.
- To improve the sustainability of transport by improving the range and quality of, and awareness about, transport options, including those which improve health and well-being.
- To improve the integration between policies, service provision and modes of transport in South West Wales.
- To implement measures which will protect and enhance the natural and built environment and reduce the adverse impact of transport on health and climate change.
- To improve road safety and personal security in South West Wales.

2.0 Recent actions as part of the LTP

2.1 Strategic Transport Model - Swansea Council commissioned Arup in 2014 to develop a strategic transport model to undertake an assessment of the transport impact of Local Development Plan proposals. The strategic transport model covers the whole county including both private vehicle and public transport trips. The strategic transport assessment provides key background technical evidence and is an important element in demonstrating the impact of proposals upon the transport network and demonstrating the suitability of proposed sites. Crucially, the model tests the cumulative impact of proposed developments, far more accurately than individual transport assessments together with overall effects of any improvements. Currently the model is being used as the basis of TFWs South and Mid Wales model, and is being substantially refreshed and upgraded to ensure it is fit for testing transport impacts into the future.

2.2 Telematics Infrastructure

- 2.2.1 **Traffic Management System (TMS)** Telematics operates TMS a system that integrates all traffic signal infrastructure into a central database enabling coordination, control and monitoring of signalised traffic junctions.
- 2.2.2 MESH network previous capital projects have supported investment in digital communications, rolling out a dedicated communications network across the whole of the city centre area, Carmarthen Road, Fabian Way and the key M4 corridor interchanges. This system enables a multitude of sustainable technologies to link together in a common database and TMS systems including CCTV monitoring, Journey time analysis, pollution monitoring and remote access to traffic signal installations. This technology has also delivered a significant annual saving compared to the previous BT private wire system.
- 2.2.3 **SCOOT** (Split Cycle Offset Optimisation Technique)

The city centre series of traffic signal junctions is operated under the SCOOT computer programme as part of the Telematics TMS system, which uses vehicle counts measured via vehicle detectors buried in the road surface which are automatically and continually fed into a validated traffic model, this automatically adjusts green times, cycle times and offsets between junctions in a coordinated network of traffic signal junctions. Typically, SCOOT control offers around a twenty percent improvement in terms of vehicle capacity.

2.3 **Late Bus Strategy** - Late bus strategies are currently being implementing using First Cymru's GPS system called 'Ticketer', installed as part of their new ticket machines. This GPS system uses data to monitor real time bus locations.

The Ticketer data is shared with the Swansea Council's common database creating the ability to compare the location of buses against existing timetables. This data can be used to optimise signal timings to create more accurate and reliable bus journey times, across a network, route or single junction.

This technology is a softer approach compared to existing forms of bus priority, which interrupted traffic signal junctions providing buses with priority at junctions whether it was required or not. The new system, only assists those buses that need it, whilst still maintaining coordination between adjacent junctions as a whole, and minimising unnecessary interruption to the traffic signal region.

This system is in the final stages of implementation.

- 2.4 Strategic Car Parking model This work is currently underway to assess the provision of car parking within the city centre and further work is planned to assess the wider county area. The model will allow council officers to test various development scenarios in terms of predicting future demand for car parking.
- 2.5 Sustainable and Active travel forms The existing cycle network is being expanded to support the Active travel Act and making sustainable travel networks between residential areas and centres of employment. Making our communities more accessible through Safe Routes in Communities projects.

3.0 Considerations and challenges

The strategic traffic model has allowed transport planners to predict where future pressures will occur, within the highway network. This enables a targeted approach to bids for Capital Funding from the Welsh Government to promote sustainable forms of travel, (in compliance with the Wellbeing of Future Generations Act and the Active Travel Act.). It encourages a modal shift onto public transport, and also the recognition that key elements of the existing highway infrastructure has to be improved, or alternatively understanding the impact of Doing Nothing.

Development Plans along the Fabian Way corridor could generate additional traffic to extend journey times along the route four fold, posing a challenge

to the city's economic regeneration plans, being the prime link between the city and the M4 eastwards. It is essential that these issues are addressed as projects are developed.

Links in terms of vehicular, public transport and Active Travel between the city centre and the Carmarthen Road corridor (ultimately up to J47 of the M4) are compromised by the current layout of Dyfatty interchange. This must be addressed to provide good linkages with the west of the region. In addition, the areas of Plasmarl and Hafod are subjected to significant amounts of unnecessary through traffic, as a result of a Dyfatty interchange, resulting in increased vehicle movements, risk to vulnerable sections of the community and increase exhaust pollution within this densely populated residential area.

Funding is a key challenge in that the Local Transport Grant has been drastically reduced over recent years, to a point where it is no longer a suitable or reliable mechanism to address the transportation related issues that underpin a successful delivery of the region's economic regeneration ambitions. Further the City Deal lacked any significant transportation improvements.

Welsh Government have now mooted the possibility of a South West Wales Metro, however, given the limited rail infrastructure within the region, it will differ from the Cardiff model. It is envisaged that the region's existing rail, bus routes, car parking, active travel and highway networks should be better connected via hubs or interchanges to encourage greater travel choice and connectivity of journey. It is envisaged that this approach will support the economic regeneration of the region, however, significant investment by the Welsh Government is required.

4.0 Conclusions

- 4.1 The LTP provides a strategic link between transport improvements and economic regeneration ambitions.
- 4.2 Considerable advancements have been made in recent years, in Transport provision.
- 4.3 In order to continue providing sustainable transport networks, plus improvement of key infrastructure interchanges, across the South West Wales Region it is essential that a planned and resourced programme, receives Welsh Government support and funding, over a five year period,

5. Legal implications

none

6. Finance

Delivery of capital infrastructure improvements has traditionally relied upon Welsh Government Capital Grant funding and any further capital programmes are predicated on continued funding from the Welsh Government.

Background papers: none

Appendices: none