



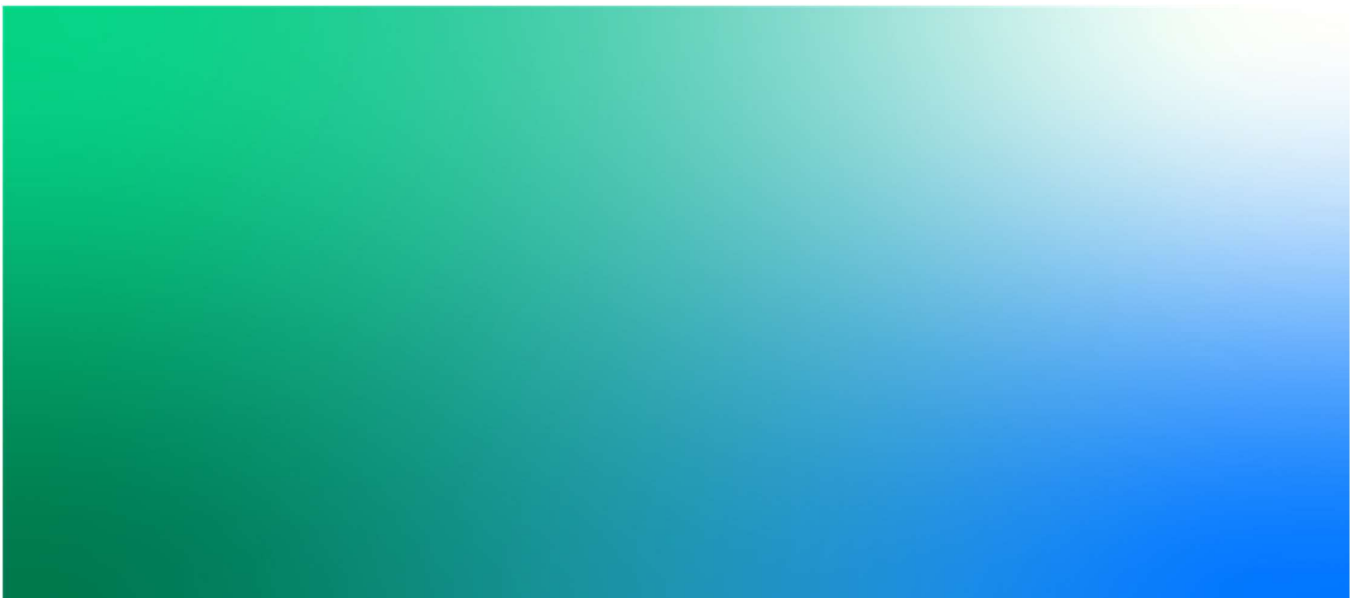
**Porthcawl Development Review**  
**Comparison of 2007 and 2020 Development Proposals**

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08 June 2020

**Bridgend County Borough Council**

Client Reference



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# 1. Introduction

## 1.1 Background

Bridgend County Borough Council (BCBC) are developing the Bridgend Replacement Local Development Plan (LDP) 2018 to 2033(2033 Plan). The 2033 Plan will set out the priorities and objectives for growth and development in terms of land use from 2018 to 2033. It will allocate sites across the borough which are deemed appropriate for development. Porthcawl Waterfront is proposed to be allocated as a key development site, as it was in the LDP 2021. The sites allocation in the 2021 Plan was supported by an evidence base produced by Halcrow completed in 2007. The main body of this evidence can be found in the following documents:

- Porthcawl Regeneration Transport and Access Strategy 2007; and
- Porthcawl Waterfront Visitor Parking Strategy 2007.

This report outlines the transport impacts of the 2033 proposals to determine whether they are likely to be comparable in scale to those allocated in the 2021 Plan..

This review and comparison of the 2021 and 2033 proposals is structured as follows:

- Chapter 1: Introduction and outline of the regeneration proposal
- Chapter 2: Planning policy review
- Chapter 3: Baseline traffic review
- Chapter 4: Mode split review
- Chapter 5: Development proposals
- Chapter 6: Do something traffic review
- Chapter 7: Development parking
- Chapter 8: Visitor parking
- Chapter 9: Conclusion

## 1.2 The regeneration proposal

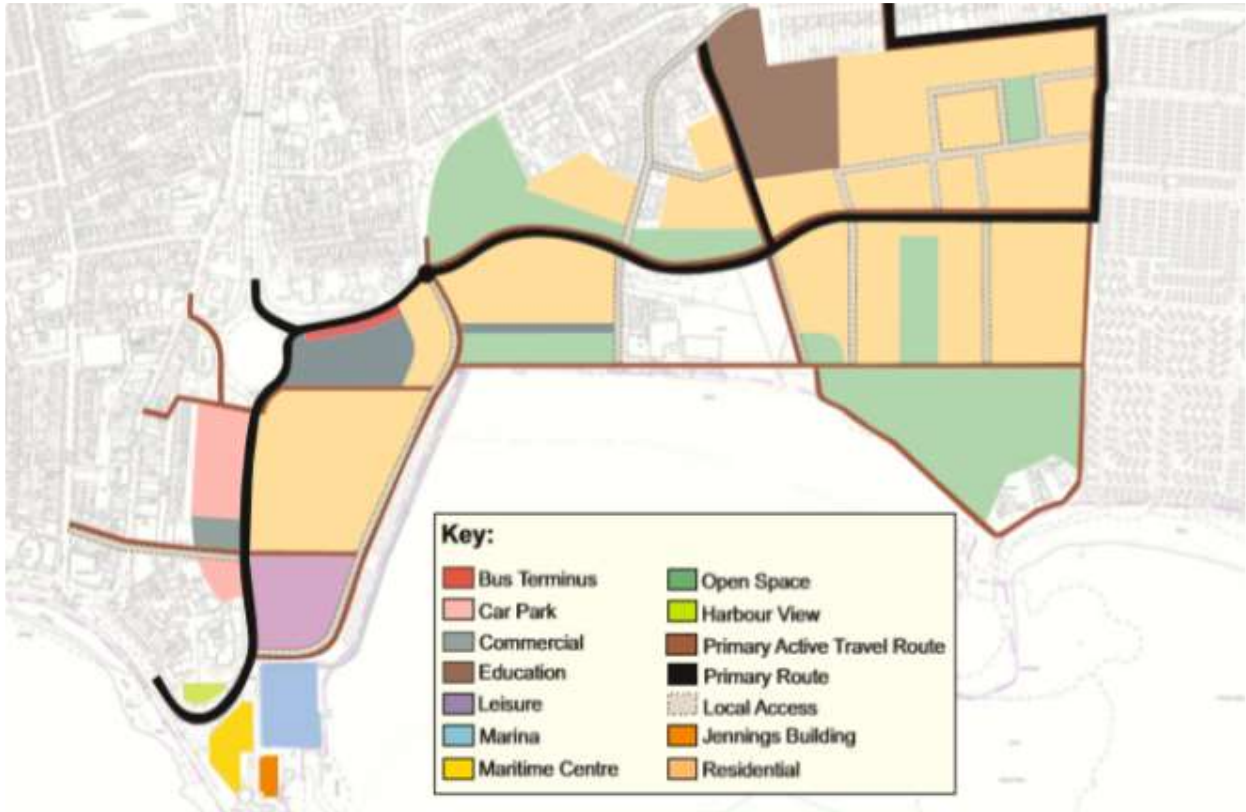
The proposed regeneration site is located within Porthcawl, on the south coast between Cardiff and Swansea. The site is within 5 miles of M4 Junction 37 and is connected to it by the A4229. It lies between the Harbour and Trecco Bay, approximately 380 metres miles east of Porthcawl town centre.

The site covers an area of approximately 38ha and is currently used mainly as car parks, a former caravan park, recreation space and a fun fair. The regeneration site is proposed in two phases: Phase 1 Salt Lake and Phase 2 Sandy Bay. The land uses proposed within each Phase will comprise:

- Phase 1: A food store, residential units, leisure land uses (such as a hotel) and supporting commercial uses. A 'Bus Terminus' is proposed adjacent to the food store with would connect the regeneration site with Porthcawl town centre and the wider hinterland.
- Phase 2: Public open space, residential units and commercial.

The regeneration proposals aim to integrate the development with the town centre to the west and the existing residential area to the north. Its location enables cohesive sustainable travel routes within and beyond the site, connecting the various land uses with Porthcawl town centre. The land uses and active modes travel routes are shown in **Figure 1-1**.

Figure 1-1: Proposed regeneration masterplan



Further information on the development proposals is provided in Section 5.

## 2. Planning Policy Review

This section provides a comparison of the transport related policy reviewed in the 2007 Transport Assessment (TA) with those which are now current. By reviewing policy that was applicable in the 2007 this section can determine whether the previous policy review remains relevant when considering the proposed 2033 Plan. The new proposals are considered in terms of any new policies which supersede the previous, to determine at a high level, whether the new proposals are compliant with current transport policy.

During production of the previous suite of documents Technical Advice Note 18: Transportation (TAN18) was in consultation draft prior to publication in March 2007. TAN18 supplements Planning Policy Wales setting out the national planning policy framework for Wales. It is specific to transport and provides guidance on transport issues to be considered when developing planning policy and assessing applications and is therefore fundamental to the regeneration proposals. TAN18 sets out guidance on the production of TAs and notes that developments should be in line with national guidance and development plan policy. Given the draft status of TAN18 when the previous TA was being produced, it is not considered that all requirements and guidance were incorporated within the TA.

### 2.1 Transport Assessment (2007) Policy Review

Within the previous TA, the proposals were not considered in term compliance with relevant planning policies. Some relevant policies were reviewed to inform the accompanying strategies: parking strategy, public transport strategy, and cycling and walking strategy. These policies reviewed as part of the strategies have been considered and collated in **Table 2-1**.

**Table 2-1** provides a high-level summary of the status of the previous policies (adopted, superseded) and their resultant relevance to the updated regeneration proposals. It demonstrates that the majority of those current in 2007 have since been superseded by new guidance and policies.

**Table 2-1: Policy previously reviewed**

Policy in the 2007 TA	Current status	Remains Relevant
<i>Parking policy review</i>		
Planning Policy Wales (2002)	Superseded by Planning Policy Wales (2018)	x
Planning Policy Statement 3 (November 2006)	Superseded by the National Planning Policy Framework (NPPF)  The NPPF applies only to England, the national planning framework for Wales is set out in Planning Policy Wales.	x
Better Places to Live by Design: A Companion Guide to PPG3 (September 2001)		x
Planning Policy Guidance: 13 Transport (March 2001)		x
Manual for Streets (MfS) (2007)	The Manual for Streets 2 was published in 2010, designed to be read alongside MfS	✓
South Wales Parking Guidelines (revised edition 1993)	Updated parking policies and guidance within Planning Policy Wales and Bridgend Parking Standards.	x
Planning Policy Wales Technical Advice Note 18	Updated TAN18 adopted in March 2007	x
Parking Policies for Bridgend County Borough (January 2004)	Superseded by Bridgend Parking Standards (2011)	x
<i>Public transport</i>		



Policy in the 2007 TA	Current status	Remains Relevant
Wales Transport Strategy Draft (July 2006)	Superseded by Wales Transport Plan 2008	x
Rail Planning Assessment	Superseded by Planning Policy Wales and National Development Framework	x
Long Distance Bus and Coach Strategy (July 2003)	Replaced by the Local Transport Plan	x
Moving People - Improving Rail (July 2005)	Replaced by the Local Transport Plan	x
Sewta Regional Bus Strategy (February 2006)	Replaced by the Local Transport Plan	x
Sewta Regional Transport Plan	Replaced by the Local Transport Plan	x
Local Authority Bus Strategy (June 2003)	Replaced by the Local Transport Plan	x
Bridgend Area Bus Study (September 2001)	Replaced by the Local Transport Plan	x
Porthcawl masterplanning brief	To be replaced by the Land-Use Framework 2020	x
<b>Walking and cycling</b>		
Walking and Cycling Strategy for Wales (December 2003)	Replaced by various documents including Local Transport Plan, Active Travel (Wales) Act, Wales Transport Strategy	x
Walking and Cycling Strategy for South East Wales 2006-2011		x
BCBC Draft Walking and Cycling Strategy (2006)	Replaced by the Local Transport Plan	x

Whilst no policies were reviewed in the previous TA with regards to the proposals, the policy review informing the supporting strategies covered all relevant policy at the time. That said, all but one of the policies reviewed have been superseded since 2007 and new relevant policies have been adopted. As such the policy review conducted as part of the previous TA is not considered suitable to determine compliance of the proposals with current policy.

## 2.2 Updated policy review

This section identifies current national and local transport policies of relevant to the regeneration proposals. It sets out how the development proposals respond to, and accord with, these policies. Note that the Well-being of Future Generation Act has been considered at a higher level by BCBC in the formation of the masterplan but is included here for completeness.

### 2.2.1 National policy

#### 2.2.1.1 Planning Policy Wales (2018)

Planning Policy Wales (PPW)<sup>1</sup>, updated in December 2018, sets out the land use policies of the Welsh Government acting as a guide to development across Wales. The document reflects the vision of Wales as set out in the Well-being of Future Generations Act 2015 (WBFGA). With the aim "to ensure the planning system contributes towards the delivery of sustainable development and improves the social, economic, environmental and cultural well-being of Wales."

<sup>1</sup> <https://gov.wales/sites/default/files/publications/2018-12/planning-policy-wales-edition-10.pdf>

PPW outlines the key planning principles to support *"the right development in the right place"*:

- Growing the economy in a sustainable manner;
- Making best use of resources;
- Facilitating accessible and healthy environments;
- Creating & sustaining communities; and
- Maximising environment protection and limiting environmental impact.

In terms of transport, the document promotes sustainable transport providing a hierarchy which prioritises walking, cycling and public transport ahead of the private motor vehicle. The importance of ultra-low emission vehicles and their role in decarbonisation is recognised. The document states that the transport hierarchy must be a key principle in development plans, reducing the need to travel and of car-dependent developments.

Chapter 4 of the document focuses on Active and Social Places. It references that streets should reflect the principles of the sustainable transport hierarchy and be safe and attractive to ensure they are social places. Chapter 4 also stresses the importance of public transport availability to ensure a place is sustainable. To encourage public transport, it states that higher densities and mixed-use development should be encouraged in areas accessible by public transport. Where public transport provision is not to a scale that makes them an attractive option, PPW states:

*"They should also consider whether it is necessary to mitigate the movement impact of a development and minimise the proportion of car trips that the development would generate. Where additional public transport would be required to allow development to proceed, an appropriate policy must be included in the development plan, and financial contributions secured through planning conditions and/or planning obligations"*

Ultra-low emission vehicles and associated infrastructure are encouraged in Paragraph 4.1.39:

*Where car parking is provided for new non-residential development, planning authorities should seek a minimum of 10% of car parking spaces to have ULEV charging points.*

In relation to car parking, PPW identifies that parking provision has a major influence on travel choice and development patterns as the locations and style of parking can impact the quality of places. As such the document considers a *"design-led approach should be taken"* to ensure the level of parking is appropriate and does not dominate the development. The approach and provision should *"be informed by the local context, including public transport accessibility, urban design principles and the objective of reducing reliance on the private car and supporting a modal shift to walking, cycling and public transport. Planning authorities must support schemes which keep parking levels down, especially off-street parking, when well designed."*

PPW also stresses the importance of decarbonisation of the transport system through high quality public transport infrastructure. It states that development plans should identify and support appropriate public transport routes, measures and facilities and improvements or additional interchange sites where necessary.

TAs are identified in PPW as an important mechanism for anticipating the transport impacts of a proposal. Technical Advice Note 18: Transport, provides further information on the contents of TA's.

### **Consideration of the proposal in relation to PPW (2018)**

The proposed regeneration site is consistent with the PPW in terms of sustainable modes. The site proposals prioritise access by walking and cycling by identifying key active modes routes and a new bus terminus. The mixed-use proposals are in line with guidance in the PPW for encouraging use of public transport.

PPW outlines the requirements for the impacts of development proposal to be considered through Transport Assessments. As such to ensure compliance, a robust Transport Assessment is required for the proposed development which demonstrates no severe impacts as a result of the development.

Parking proposals for the development are proposed to align with BCBC SPG17, produced prior to PPW. As such it is important that PPW is considered when establishing an appropriate level of car parking.

### 2.2.1.2 Technical Advice Note 18: Transportation

Technical Advice Note 18 (TAN18)<sup>2</sup> provides national advice on transport related issues including parking. It advocates for an efficient and sustainable transport system which improves accessibility, builds a stronger economy, improves road safety, and fosters more sustainable communities.

Of relevance to local plans, the following guidance is provided within TAN18:

- Proposals should be covered by one or more policies, supported by an evidence base, including the extent to which the plan is dependent on the proposals, and the risks involved in its delivery;
- Where planning permission will be required for a road scheme, its inclusion in the plan should normally provide the means to examine both the need for, and the alignment of, the route.
- In setting out policy for minor improvements, authorities may appropriately deal with detailed planning considerations or programme issues through supplementary planning guidance (SPG) related to an adopted plan.

With regard to housing policies and residential allocations, development plans should:

- Promote housing development at locations with good access by walking and cycling to primary and secondary schools and public transport stops, and by all modes to employment, further and higher education, services, shopping and leisure or, where such access will be provided as part of the scheme or is a firm proposal in the RTP;
- Ensure that significant new housing schemes contain ancillary uses including local shops, and services and, where appropriate, local employment;
- Include policies and standards on density, and parking to achieve higher residential densities in places with good public transport accessibility and capacity;
- Encourage residential layouts that incorporate traffic management proposals such as home zones, calming measures and 20 mph zones and, where appropriate, layouts that allow public transport to pass through easily; and
- Require layouts and densities, which maximise the opportunity for residents to walk and cycle to local facilities and public transport stops.

In order to assess impacts and manage implementation of development, TAN18 states that TAs should be produced for developments of a certain scale. The assessment should be based on the person / freight trips generated by the development and include analysis of potential effects on existing movement patterns. TAs should include the production of a 'Transport Implementation Strategy' (TIS). The TIS should set objectives and targets relating to managing travel demand for the development and set out the infrastructure, demand management measures and financial contributions necessary to achieve them. The TIS should set a framework for monitoring the objectives and targets, including the future modal split of transport to development sites.

#### Consideration of the proposal in relation to the TAN18

The proposed regeneration site is consistent with the TAN18 through its promotion of sustainable modes of travel such as new active mode routes and a bus interchange. The mixed- use development is proposed to include shops, commercial and leisure uses, and walking and cycling will be encouraged.

In terms of highway arrangement the need for the proposed infrastructure and its general alignment were determined in 2007 and thus it is assumed, given the similarity of the proposals, this is preserved.

TAN18 details that for a development of this scale the traffic impacts should be considered through the production of a Transport Assessment and a Transport Implementation Strategy should be produced to detail objectives and targets for managing demand. As such, to ensure compliance, a robust Transport Assessment and Transport Implementation Strategy are required for the proposed development.

<sup>2</sup> <https://gov.wales/sites/default/files/publications/2018-09/tan18-transport.pdf>

The development also proposes a new bus terminus to enhance travel by public transport.

As with PPW, guidance in TAN 18 related to parking will play an important role in determining the correct level of car parking provision with the development site.

### 2.2.1.3 Active Travel (Wales) Act 2013

The Active Travel (Wales) Act 2013<sup>3</sup> makes it a legal requirement for all local authorities in Wales to map and plan suitable routes for active travel (walking and cycling), and to build and improve the associated infrastructure each year. Local authorities have a duty to consider the needs of walkers and cyclists and where necessary and possible, ensure provision for them and promote walking and cycling as modes of transport.

Local authorities must encourage walking and cycling, particularly for shorter journeys. The Act has a particular focus on connecting key sites such as workplaces, hospitals, schools and shopping areas with active travel routes, to encourage people to rely less on their cars when making such trips.

#### Consideration of the proposal in relation to the Active Travel (Wales) Act 2013

The proposed regeneration site supports and encourages active modes of travel for shorter trips within and beyond the site to locations such as Porthcawl town centre. As such, the proposals satisfy the requirements set out in the Active Travel Act.

### 2.2.1.4 National Development Framework (Draft)

The Draft National Development Framework (NDF)<sup>4</sup> is a new development plan which sets out the growth and development areas for Wales from 2020 to 2040. It considers the long-term impacts, in line with the WBFGA, and identifies how future challenges will be faced across Wales. The NDF is the highest tier of development plan and is focused on the issues and challenges at a national scale. The consultation draft of the NDF was published in November 2019.

The challenges and opportunities identified in the NDF of relevance to this development include:

- Climate change and decline in biodiversity: In addressing this the document highlights that decarbonisation and resilience should be the focus for all areas, including travel;
- Travel: To address issues relating to fragmented travel the document states that growth should be shaped around sustainable forms of transport and deliver healthier places

Policies of relevance include:

- *Policy 2 – Supporting Urban Centres:* Proposals for new public service facilities of a significant scale should be located in town and city centres. A sequential approach must be used to assess development plan allocations and to determine planning applications for developments. Only in exceptional circumstances should public service facilities of a significant scale be approved outside of town and city centres.
- *Policy 3 – Public Investment, Public Buildings and Publicly Owned Land:* Welsh Government investments and land holdings will support the delivery of sustainable places. The Government will work with all public land owners and investors to ensure that new development of a significant scale is located in town and city centres which are accessible by walking, cycling and public transport. Strategic and Local Development Plans should review publicly owned land, both redundant and in current use, to identify potential sites for development and re-development, including for mixed use and affordable housing developments that will support the creation of sustainable places.
- *Policy 7 – Ultra Low Emission Vehicles:* The Welsh Government supports the increasing use of ultra-low emission vehicles and will work with the UK Government, local authorities, the energy sector and businesses

<sup>3</sup> [http://www.legislation.gov.uk/anaw/2013/7/pdfs/anaw\\_20130007\\_en.pdf](http://www.legislation.gov.uk/anaw/2013/7/pdfs/anaw_20130007_en.pdf)

<sup>4</sup> <https://gov.wales/sites/default/files/consultations/2019-08/Draft%20National%20Development%20Framework.pdf>

to plan for and implement the roll out of electric vehicle charging infrastructure, including the creation of a network of rapid charging points to enable longer distance travel by electric vehicles throughout Wales.

#### Consideration of the proposal in relation to the NDF

The proposed regeneration site is consistent with the NDF policies to maintain developments within towns as the Porthcawl Waterfront Regeneration is located within Porthcawl town to the west of the town centre. The regeneration site will be accessible by walking, cycling and public transport through ensuring strong links within the development site and between the site and town centre. The development also proposes a new bus terminus to enhance travel by public transport.

When considering detailed parking proposals for the site provision for ULEV and rapid charging points should be considered.

#### 2.2.1.5 Wales Transport Strategy (2008)

The Wales Transport Strategy (WTS)<sup>5</sup> was published in 2008 with the main aims of improving transport in order to keep Wales connected, improve the economy, and safeguard the environment. The WTS sets out the key priorities of the Welsh Government:

- Reducing greenhouse gas emissions and other environmental impacts;
- Integrating local transport;
- Improving access between key settlements and sites;
- Enhancing international connectivity; and
- Increasing safety and security.

The WTS outlines that sustainable transport themes should underpin transport policy developed, centring around achieving a more effective and efficient transport system, increasing sustainable and healthy forms of travel and minimising demand on the transport system.

#### Consideration of the proposal in relation to the WTS

The proposed regeneration site is in line with the sustainable transport aims outlined in the WTS. The regeneration site is located within an area easily accessible by walking or cycling and public transport provision will be provided. Through locating the new housing along with mixed use development such as the food store and other commercial uses, it supports reducing the demand on the transport system. The development also proposes a new bus terminus to enhance travel by public transport.

#### 2.2.1.6 Well-being of Future Generations (Wales) Act (2015)

The Well-being of Future Generations Act (Wales) was adopted by the National Assembly for Wales in 2015 requiring public bodies to *"to do things in pursuit of the economic, social, environmental and cultural well-being of Wales in a way that accords with the sustainable development principle"*. The Act lists seven well-being goals:

- A prosperous Wales;
- A resilient Wales;
- A healthier Wales;
- A more equal Wales;
- A Wales of cohesive communities;
- A Wales of vibrant culture and thriving Welsh Language; and
- A globally responsible Wales.

<sup>5</sup> <https://gov.wales/sites/default/files/publications/2017-09/wales-transport-strategy.pdf>

The Act seeks to ensure consideration of sustainability in proposals and therefore public bodies must set and publish objectives to maximise its contribution to achieving each of the well-being goals and set out reasonable steps to achieve them. To act in a sustainable manner the Act sets out that public bodies must take into account:

- The importance of balancing short term and **long terms** needs;
- An **integrated** approach with the well-being goals and with surrounding public bodies;
- The **involvement** of other persons with an interest in achieving the goals;
- A **collaborative** approach seeking to assist other persons or bodies in meeting objectives; and
- How the **prevention** of one problem may contribute to meeting the body's well-being objectives, or another body's objectives.

### Consideration of the proposal in relation to the Well-being of Future Generations Act

The proposed regeneration site has been developed in line with sustainable placemaking principles to ensure the development is well integrated and delivers social, economic and environmental benefits. In terms of transport, the site is located within an area easily accessible by walking or cycling and public transport provision will be provided.

As displayed below, the scheme is in line with wider local objectives to ensure an integrated approach with the local aspirations of Bridgend County Borough Council.

#### 2.2.1.7 Manual for Streets 2

Manual for Streets 2 (MfS2)<sup>6</sup> echoes key principles from the first addition, including:

- Application of a user hierarchy – pedestrians are at the top. Thus, the needs of pedestrians are considered first when designing, building, retrofitting, maintaining and improving streets;
- Recognising the importance of the community function – streets to be considered as spaces for social interaction. Streets to integrate and not segregate communities and neighbourhoods;
- Promoting an inclusive environment – design that recognises the needs of people of all ages and abilities. Designs must recognise the importance of way-finding and legibility;
- Reflecting and supporting pedestrian and cyclist desire lines;
- A locally appropriate balance should be struck between the needs of different user groups – traffic capacity to not always be primary consideration in street design;
- Encouraging innovation – a flexible approach to street layout; and
- Designing to keep vehicle speed at or below 20 mph – in particular, where there is significant pedestrian movement.

The Manual for Streets 2 document acknowledges the benefits of reducing reliance on motorised vehicles and opening up spaces for shared purposes. Notably, *"making appropriate provision for road-based public transport, cycling and walking can help encourage modal shift from the private car, and so contribute to the sustainability and health agendas"*.

Enhancing street environments through removal of clutter, use of shared space and enhanced street lighting can help stimulate local economic activity, reduce street crime and encourage a sense of local community. This in turn encourages more local, shorter distance travel on foot or by cycle. Ultimately conforming to MfS's first principle of user hierarchies.

### Consideration of the proposal in relation to MfS2

The regeneration proposals are consistent with MfS2 in prioritising the provision of active travel infrastructure within the site and considering links to Porthcawl town centre. Way-finding and signage are considered within the

<sup>6</sup> <https://tsrgd.co.uk/pdf/mfs/mfs2.pdf>

masterplan document. MfS2 should be considered in detail when developing the masterplans layouts for each site within the development.

## 2.2.2 Local policy

### 2.2.2.1 Bridgend Local Transport Plan

The Local Transport Plan (LTP)<sup>7</sup>, adopted in September 2015, sets out the visions and objectives for the transport systems in Bridgend up to 2030. It considers 3 timeframes: short term (2015-2020), medium term (2021-2025) and long term (2026-2030).

The vision set out in the LTP is: *An effective, accessible, integrated and sustainable transport system that can meet the short, medium, and long- term needs of a changing population, the economy and society.* This is supported by key priorities. Those of relevance to this proposal are:

- To support economic growth and safeguard jobs with a particular focus on City Regions, Enterprise Zones and local growth zones; and
- Encourage safer, healthier and sustainable travel.

Parking is a key element of the LTP. It is identified within the plan that parking provision is important to town centres to ensure that they attract tourism and shoppers who do not have access to public transport.

Porthcawl is identified within the LTP as a location for tourism opportunities with regeneration in the area improving transport, housing and commercial profile of the town. The LTP details short and long-term plans to improve active modes of travel within Porthcawl:

- Short term: Create an off-road shared-use route for pedestrians and cyclists from the existing Rest Bay community route on West Drive, to the proposed Porthcawl regeneration site at Porthcawl; and
- Long term plan: Provision of a mainly off-road, shared use route for pedestrians and cyclists linking Bridgend with Porthcawl that will complement the All Wales Coastal Path and link with the proposed Porthcawl to Pyle route.

### Consideration of the proposal in relation to the LTP

The regeneration proposal will help support key priorities in encouraging safer, healthier and sustainable travel through providing active travel infrastructure and a bus terminus. The short-term plans to enhance the off-road shared use cycling and walking route has been complete and links to the regeneration site enabling strong active mode links to the site.

Proposals to allow public parking for various land use elements to be communal and available to all ensure that ample parking will be available for normal operation of the development.

### 2.2.2.2 Bridgend Parking Standards (2011)

The Bridgend Parking Standards<sup>8</sup> compliment local development guidance set out in the LDP. It is based on guidance prepared by CSS Wales on behalf of the 22 local authorities constituting the regional transport consortia. Note that the South East Wales Transport Alliance, of which BCBC were a member, were stood down in 2014.

The standards state that when assessing the parking requirements for a development, a number of factors should be taken into account:

- *Accessibility to and the service provided by the public transport system;*

<sup>7</sup> <https://www.bridgend.gov.uk/media/4087/bridgend-ltp-wg-approved-version-may-2015-2030.pdf>

<sup>8</sup> [https://www.bridgend.gov.uk/media/1851/spg\\_17\\_-\\_parking\\_standards\\_volume\\_1.pdf](https://www.bridgend.gov.uk/media/1851/spg_17_-_parking_standards_volume_1.pdf)

- *The availability of private buses or the extent of carpooling;*
- *The relative proportions of full time / part time / local catchment of labour;*
- *Accessibility by walking and cycling;*
- *The existing and possible future congestion in streets adjacent to the development;*
- *Accessibility to and the availability of public and/or private car parking space in the vicinity.*

It notes that a reduction in parking standards for developments at a non-residential point of destination shall not be applied unless an acceptable travel plan has first been submitted for consideration. Further, for residential developments flexibility may be applied to the reductions in standards depending on the local circumstances and the impact that an increase in on-street parking would have.

It should be noted that the BCBC Parking Standards were developed prior to the various national policies outlined above and thus were not considered during their development.

Parking standards set out in this document are further considered in Sections 7 and 8 of this report.

### **2.3 Summary**

The comparison of 2007 transport policies with those that are current determined that none of the previous policies, with the exception of Manual for Streets, which is an advice document, remain relevant. Many national policies had been superseded by Planning Policy Wales (December 2018), Wales Transport Strategy (2008) and the emerging National Development Framework. Regional and local policies have been superseded by the Bridgend Local Transport Plan (2015).

Nevertheless the new, 2033, proposals are considered comply with current transport related policies such that they promote active and public transport and healthy places. As development proposals are advanced it is clear that national policies require careful consideration of parking levels to balance the needs of a site with the desire to reduce trips by private car.

Furthermore, as required by policy, the production of a robust transport assessment, evaluating the impacts of the individual schemes within the masterplan, together with a TIS will ensure the proposals are compliant.



### 3. Baseline Traffic Flow

#### 3.1 Introduction

This section outlines the “do nothing” scenarios provided in the previous TA. Which considered the 2007 proposals it compares the “do nothing” future scenario (2018) included in the previous TA with traffic counts undertaken in 2019. This establishes an understanding of the baseline scenario and identifies any significant changes to the transport network since the production of the previous TA.

Growth factors for 2018-2019 and 2018-2033 have been established using TEMPro (v7.2b). The growth anticipated between 2018 and 2033 is compared with the growth anticipated between 2007 and 2018. The comparison provides an understanding of the potential for background traffic growth on the traffic network.

#### 3.2 Comparison of Predicted Future Traffic Growth and Recent Surveys

The 2006 baseline traffic flows from the previous report (2007) were established from junction turning counts and deployment of automatic traffic counters (ATCs) throughout Porthcawl, and are shown in **Appendix A**. Traffic growth factors derived from the TEMPro database were applied to the baseline data (2006) to give estimates of ‘Do Nothing’ traffic flows in the predicted opening year of 2008 and a future year of 2018. The TEMPro growth rates used within the 2007 assessment are displayed in **Table 3-1**.

**Table 3-1: TEMPro Growth Rates used in the 2007 Assessment**

Year	TEMPro Growth Rate
2006 – 2008	1.023
2006 – 2018	1.140

It was agreed in the 2007 report that a low growth rate was appropriate as the Porthcawl Waterfront Regeneration proposals were predicted to represent the vast majority of the likely future development in the area until 2018. Thus the summation of development flows plus any growth rate would give a robust assessment of future traffic flows. The junction modelling undertaken in the 2007 assessment showed that all junctions from the 2006 baseline data operated within capacity.

The 2018 ‘Do Nothing’ estimated traffic flows from the 2007 assessment are to be compared with recent traffic flows gathered from ATC surveys along various carriageway links throughout Porthcawl undertaken by BCBC between the 17<sup>th</sup> and 23<sup>rd</sup> of August 2019. In order to be comparable with the 2018 ‘Do Nothing’ flows the traffic flows from the ATC surveys have specifically been taken from a weekday, which in this case was Wednesday the 21<sup>st</sup> of August 2019, and from the same peak hours used in the 2007 assessment which were between 08.00 and 09.00, and between 17.00 and 18.00.

The predicted 2018 ‘Do Nothing’ traffic flows, as shown in **Appendix A**, are displayed by turning vehicle movements at various junctions throughout Porthcawl. The 2019 ATC surveys on the other hand show traffic flows along different carriageway links. In order to compare the two, the 2018 ‘Do Nothing’ junction turning movements have been used to estimate the likely traffic flows at the position of the 2019 ATC surveys. In situations, in which the 2018 ‘Do Nothing’ traffic movements onto a carriageway link differs from the traffic movements off the carriageway link, the maximum predicted flow has been used for the purpose of comparison.

**Table 3-2** compares the 2018 ‘Do Nothing’ traffic flows from the 2007 assessment with the 2019 ATC surveyed traffic flows at various key carriageway links throughout Porthcawl.

The table shows that for the majority of the assessed sites the 2018 ‘Do Nothing’ traffic flows were higher than the 2019 ATC traffic flows. This is especially true during the AM peak, when the do nothing predictions for 2018 all exceeded the actual flows counted in 2019. However, at some sites, the 2019 ATC traffic flows were higher than the 2018 ‘Do Nothing’ traffic flows during the PM peak. It’s worth noting the busier strategic carriageways, such as

A4106 Newton Nottage Road, A4106 dual carriageway and The Esplanade displayed significantly higher traffic flows in the 2018 'Do Nothing' scenario in comparison to the recent 2019 ATC surveys. These results indicate that the traffic growth applied in the 2007 study over-estimated the increase in traffic flows to 2019, particularly during the AM peak. Therefore, it is clear that the predicted growth in background traffic has, in most instances, not occurred.

**Table 3-2: Comparison of 'Do Nothing' 2018 and ATC 2019 Traffic Flows**

Site	Direction	Do Nothing 2018 (2006 Base Traffic)		ATC Traffic Surveys 2019		Comparison: ATC 2019 – DN 2018	
		AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
<b>A: A4106 Newton Nottage Road</b>	Eastbound	711	771	405	585	-306	-186
	Westbound	596	660	425	642	-171	-18
	Overall	1307	1431	830	1227	-477	-204
<b>C: New Road</b>	Eastbound	144	153	75	158	-69	+5
	Westbound	182	187	52	187	-130	0
	Overall	326	340	127	345	-199	+5
<b>D: Eastern Promenade</b>	Northbound	31	63	20	114	-11	+51
	Southbound	43	82	34	133	-9	+51
	Overall	74	145	54	247	-20	+102
<b>E: The Portway</b>	Northbound	348	324	156	334	-192	+10
	Southbound	333	272	158	284	-175	+12
	Overall	681	596	314	618	-367	+22
<b>F: The Esplanade</b>	Eastbound	371	358	172	330	-199	-28
	Westbound	355	317	130	321	-225	+4
	Overall	726	675	302	651	-424	-24
<b>G: A4106 Dual Carriageway (Southbound)</b>	Southbound	586	634	339	606	-247	-28
<b>H: A4106 Dual Carriageway (Northbound)</b>	Northbound	509	560	277	536	-232	-24

### 3.3 2033 'Do Nothing' Traffic Flows

The 2019 ATC surveys provide baseline data for the latest assessment (2020), from which predicted 'Do Nothing' traffic flows for the future year of 2033 can be estimated by applying traffic growth rates from the TEMPro (v7.2b) database.

TEMPro (v7.2b) growth rates for weekday traffic were gathered for the county of Bridgend as well as the Middle Super Output Areas (MSOAs), Bridgend 018 and Bridgend 019, that together cover the town of Porthcawl. In order to undertake a robust assessment, the highest TEMPro (v7.2b) growth rate, taken from Bridgend 018 MSOA, as shown in **Table 3--** has been applied to the baseline data (2019) to predict the future 2033 'Do Nothing' traffic flows.

**Table 3-3: TEMPro Growth Rates used in the 2020 Assessment**

Year	TEMPro Growth Rate
2019 – 2033	1.1546

The TEMPro growth rate used to calculate the future 2033 'Do Nothing' traffic flows, is slightly higher (0.0146) than the TEMPro growth rates used within the previous assessment (2007) to calculate the 2018 'Do Nothing' traffic flows.

Table 3-4 displays the predicted 2033 'Do Nothing' traffic flows by applying the TEMPro growth rate of 1.1546 to the ATC surveys gathered in 2019.

**Table 3-4: 2033 'Do Nothing' Traffic Flows**

Site	Direction	2019 ATC Surveys		2033 Do Nothing (TEMPro Growth: 1.1546)	
		AM Peak	PM Peak	AM Peak	PM Peak
<b>A: A4106 Newton Nottage Road</b>	Eastbound	405	585	468	675
	Westbound	425	642	491	741
	Overall	830	1227	958	1417
<b>C: New Road</b>	Eastbound	75	158	87	182
	Westbound	52	187	60	216
	Overall	127	345	147	398
<b>D: Eastern Promenade</b>	Northbound	20	114	23	132
	Southbound	34	133	39	154
	Overall	54	247	62	285
<b>E: The Portway</b>	Northbound	156	334	180	386
	Southbound	158	284	182	328
	Overall	314	618	363	714
<b>F: The Esplanade</b>	Eastbound	172	330	199	381
	Westbound	130	321	150	371
	Overall	302	651	349	752
<b>G: A4106 Dual Carriageway (Southbound)</b>	Southbound	339	606	391	700
<b>H: A4106 Dual Carriageway (Northbound)</b>	Northbound	277	536	320	619

Although these calculations have been undertaken using the industry standard method it should be borne in mind that the assessment of the 2007 has shown that traffic growth predicted using the same method did not occur. Therefore, there may be unique characteristics in and around Porthcawl which are impacting upon predictions by this method. As a result, it may be the case that the predicted background growth between 2019 and 2033 does not fully occur adding an element of robustness to the analysis.

### **3.4 Summary**

The comparison of baseline traffic flows has shown that, save for specific instances in the PM peak along Eastern Promenade and Portway, the 2018 study over-estimated the increases in traffic likely to occur when compared to the 2019 surveys.

Traffic growth predictions using the industry standard TEMPro method predict a slightly larger growth in traffic from 2019 to 2033 (1.1546) when compared to that between 2007 and 2018 (1.140). However, given the apparent failure of this method to adequately predict general growth in and around Porthcawl there may be specific circumstances or characteristics of the local area which reduce the accuracy of this method.

## 4. Mode Split

### 4.1 Introduction

Analysis of the travel mode split in Porthcawl was undertaken for the 2007 TA using 2001 census data. This section reviews the 2001 mode split against that from the 2011 census and enables a high-level comparison of travel habits of local residents.

### 4.2 Modal split comparison

Table 4-1 shows the modal split of journeys to work based on 2001 and 2011 census data. The data shows the average for Porthcawl East and Porthcawl West.

**Table 4-1: Modal split (Source: Census 2001 and 2011, Porthcawl East and West Wards)**

Mode	Journey to Work Mode Split (2001)		Journey to Work Mode Split (2011)		Difference	
	Number	Percentage	Number	Percentage	Number	Percentage Inc.
<b>Car Driver</b>	1382	66%	1,697	69%	315	15%
<b>Car Passenger</b>	167	8%	150	6%	-17	-1%
<b>Bus</b>	86	4%	56	2%	-30	-1%
<b>Cycle</b>	0	0%	46	2%	46	2%
<b>Taxi</b>	18	1%	7	0%	-11	-1%
<b>Pedestrian</b>	409	19%	438	18%	29	1%
<b>Motorcycle</b>	24	1%	12	0%	-12	-1%
<b>Other</b>	21	1%	47	2%	26	1%
<b>Total</b>	<b>2107</b>	<b>N/A</b>	<b>2,453</b>	<b>N/A</b>	<b>346</b>	<b>16%</b>

Analysis of the census data shows that between the 2001 census and 2011 census, there was a 16% increase in the number of commuters inbound, outbound and within Porthcawl, attributing to 346 additional trips. Overall, the modal split in 2011 is broadly comparable to that in 2001 with the majority of residents in Porthcawl (69%) travelling to work by car. Whilst the percentage of people travelling to work by car has increased, there remain a significant number of people travelling to work by alternative modes.

Notably, the number and proportion of people cycling as their main method of travel to work has increased from 0% to 2% indicating that cycling to work has increased in popularity. However, walking to work and car passenger remain the second and third most popular mode of travel to work after car driver.

The provision of a new bus terminus to be delivered at a very early stage within the 2033 proposals, assuming it is supported by a commensurate improvement in the coverage, frequency and quality of services, will act to increase the opportunities for residents to travel by public transport and thus offer an opportunity to reduce trips by private car to a rate below that of 2007.

## 5. Development Proposals

### 5.1 Introduction

This section outlines the development proposals included in the Porthcawl Waterfront Regeneration. It compares the new land uses with the land uses in the previous TA. The trip rates for the previously and currently proposed land uses are compared, as are the total number of trips associated with each of the proposals. The distribution of the trips is considered in the “Do Something” traffic flows presented in Section 5.3.

However, at this time Jacobs understands that the content of the development, such as housing density and precise land uses is currently indicative. Precise details will be determined after allocation.

### 5.2 Development land use

In the 2007 Transport Assessment the main land uses for the regeneration of Porthcawl comprised retail (including a superstore), residential and a marina. Additional leisure and school land uses were included to support the residential development. **Table 5-1** highlights the proposed land use area and compares these with those of the 2033 proposals.

The quantity of dwellings to be delivered was under deliberation at the time of the 2007 TA and as such a “worse-case scenario”, in terms of potential impact on the transport network, was tested assuming a development of up to 1,600 dwellings. It was established that 1,600 dwellings could be accommodated on the network.

**Table 5-1: Land use in the 2007 and 2020 proposals**

Land Use	Size / Units	
	2007 Proposal	2020 Proposal
Superstore	50,000 sqft	2,322 sqm (25,000 sqft)
Retail	20,000 sqft	-
Residential	1600 units (Worst case scenario test: 1,600 units)	1,033 units (Worst case scenario test: 1,500 units)
<i>Private flats</i>	<i>266 units</i>	<i>Dwelling type split unknown</i>
<i>Retirement Flats</i>	<i>266 units</i>	<i>Dwelling type split unknown</i>
<i>Holiday Flats</i>	<i>266 units</i>	<i>Dwelling type split unknown</i>
<i>Town Houses</i>	<i>800 units</i>	<i>Dwelling type split unknown</i>
Marina	400 berth	-
Library	Not known	-
Restaurant	Not known	-
Temporary Events Centre	Not known	-
School	Not known	-
Commercial	-	1.5 ha
Leisure	-	1.13 ha

### 5.3 2007 Proposal Trip Generation

To gather an estimation of the trips generated by the 2007 development proposals, trip rates from the TRICS 2006(b) database were applied to the various land uses. It was determined that the TRICS analysis should exclude surveys located within suburban areas, edge of town and neighbourhood centres and focus on town centre and edge of town centre locations in order to comply with the character of the Porthcawl development.

In order to undertake a robust assessment of the residential element of the development, an assessment of 1,600 mixed-use dwelling types was carried out to give an indication whether the road network had the ability to accommodate this level of development. It was agreed for assessment purposes that the 1,600 dwellings be split into the following housing types displayed in **Table 5-2**.

**Table 5-2: Residential types used for Trip Generation Assessment in the 2007 Proposal**

Residential Type	Number of Units
Private Flats	266
Retirement Flats	266
Holiday Flats	266
Town Houses	800

**Table 5-3** displays the different TRICS trip rates gathered for the various assessed land uses during both the assessed AM and PM peak hours. In addition, **Table 5-3**, also displays the trips generated by the different land uses as well as the whole development. Although, the development proposal included other land uses, it was agreed that these land uses would provide no additional, or minimal trips, or that they should not be included as council officers did not wish to design the highway network to cater for specific events at leisure land uses.

**Table 5-3: Trip Rates and Trip Generation for 2007 Development Proposal**

Land Use	Size	Peak Hour	Unit	TRICS Trip Rates			Generated Trips		
				Arrivals	Departures	Total	Arrivals	Departures	Total
Supermarket	50,000 sqft	AM	per 100m <sup>2</sup>	4.35	2.45	6.80	242	137	379
		PM	per 100m <sup>2</sup>	7.78	8.21	15.99	434	458	892
Private Flats	266 units	AM	per unit	0.05	0.19	0.24	13	51	64
		PM	per unit	0.16	0.08	0.24	43	21	64
Retirement Flats	266 units	AM	per unit	0.03	0.05	0.08	8	13	21
		PM	per unit	0.06	0.04	0.10	16	11	27
Holiday Flats	266 units	AM	per unit	0.03	0.03	0.06	8	8	16
		PM	per unit	0.10	0.06	0.16	27	16	43
Town Houses	800 units	AM	per unit	0.17	0.44	0.61	136	352	488
		PM	per unit	0.46	0.25	0.71	368	200	568
Marina	400 berths	AM	per berth	0.03	0.02	0.05	12	8	20

Land Use	Size	Peak Hour	TRICS Trip Rates			Generated Trips			
			Unit	Arrivals	Departures	Total	Arrivals	Departures	Total
		PM	per berth	0.04	0.04	0.08	16	16	32
Total Generated Traffic during AM Peak:							<b>419</b>	<b>569</b>	<b>988</b>
Total Generated Traffic during PM Peak:							<b>903</b>	<b>722</b>	<b>1625</b>

**Table 5-3** shows that 988 trips were predicted to be likely generated by the proposed developments at Porthcawl Waterfront during the AM peak, whilst 1,625 trips were predicted for the PM peak period. The significant difference between the overall generated trips of both peak hours can be partly explained by the trips rates used for the 'Supermarket' land use, in which significantly higher trip rates of 7.78 and 8.21 were used during the PM peak compared to the AM peak, which were just 4.35 and 2.45.

### 5.4 2020 Proposal Trip Generation

To estimate the trips likely to be generated by the 2020 proposals, trip rates from the TRICS (v7.7.1) database have been applied to the various land uses. To ensure consistency with the approach taken in the 2007 assessment, the analysis excluded surveys located within suburban areas, edge of town and neighbourhood centres to comply with the character of the Porthcawl development. In addition, the analysis excluded surveys within the Greater London region and chose only surveys that had been carried out on weekdays.

Although only 1,033 residential units are currently proposed as part of the latest design, in order to undertake a robust assessment 1,500 residential units have been assumed to be included in the latest proposals in order to understand if the road network has the ability to accommodate this level of development. To ensure a robust assessment of trip generation the 'Houses Privately Owned', category has been used. In reality, it is likely that as the development comes forward a mix of housing tenures, such as affordable housing or rented flats, will be included resulting in a lower trip generation.

Furthermore, due to the lack of information regarding the specifics of the commercial land use, office land use surveys from the TRICS database have been used to provide these trip rates. Office use represents the most intensive specific land use associated with the commercial category and thus will likely present a higher number of estimated trips than may be experienced following development.

The full raw data of the different land use TRICS analysis for the 2020 development proposals is provided in **Appendix B**.

**Table 5-4** displays the different TRICS trip rates and trips generated by the various land uses and overall development during both the AM and PM weekday peak hours.

**Table 5-4: Trip Rates and Trip Generation for 2020 Development Proposal**

Land Use	Size	Peak Hour	TRICS Trip Rates			Generated Trips			
			Unit	Arrivals	Departures	Total	Arrivals	Departures	Total
<b>Food Store</b>	2,322 sqm	AM	per 100m <sup>2</sup>	3.063	2.738	5.801	71	64	135
		PM	per 100m <sup>2</sup>	4.944	5.021	9.965	115	117	231
<b>Residential</b>	1,500 units	AM	per unit	0.153	0.329	0.482	230	494	723
		PM	per unit	0.236	0.196	0.432	354	294	648
<b>Leisure (Hotel)</b>	1.13 ha	AM	per 100m <sup>2</sup>	0.175	0.260	0.435	20	29	49
		PM	per 100m <sup>2</sup>	0.241	0.153	0.394	27	17	45
<b>Commercial</b>		AM	per 100m <sup>2</sup>	1.603	0.252	1.855	232	37	269



Land Use	Size	Peak Hour	Unit	TRICS Trip Rates			Generated Trips		
				Arrivals	Departures	Total	Arrivals	Departures	Total
	1.45 ha	PM	per 100m <sup>2</sup>	0.182	1.047	1.229	26	152	178
Total Generated Traffic during AM Peak:							<b>553</b>	<b>623</b>	<b>1176</b>
Total Generated Traffic during PM Peak:							<b>522</b>	<b>580</b>	<b>1102</b>

In contrast to the estimated trip generation of 2007 proposals, the estimated trip generation for the 2020 scheme does not show a significant difference in overall trip generation between the two peak hours. However, the 2020 scheme has the potential to generate more AM peak trips when compared to the 2007 proposal. This is likely the result of including the office land use as proxy for the commercial use, the details of which is currently unknown. These provide a high arrival trip rate during the AM peak, thus a robust analysis.

### 5.5 Trip Generation Comparison

**Table 5-5** provides a comparison between the estimated trips generated by the previous (2007) and latest (2020) development proposals. The major difference between the two, is that the latest development proposal (2020) has the potential to generate more trips during the AM peak, but fewer trips during the PM peak.

**Table 5-5: Trip Generation Comparison**

Peak Hour	2007 Development Proposal			2020 Development Proposal			Comparison: 2020 DP – 2007 DP		
	Arrivals	Departures	Total	Arrivals	Departures	Total	Arrivals	Departures	Total
<b>AM</b>	419	569	988	553	623	1176	+134	+54	+188
<b>PM</b>	903	722	1625	522	580	1102	-381	-142	-523

Furthermore, when considering the results in **Table 5-5** it is important to bear in mind that a number of factors may be over estimating the number of development trips reaching the existing highway network. For example, insufficient information is available to provide robust estimates of

- Trip internalisation, those trips which will remain within the development itself. These trips would not exit the development and thus would not reach the existing transport network
- Linked trips, those which have multiple destinations and have thus been counted twice in the analysis. This reduction can range from 10% to 30% dependant on the final development mix.
- The precise land use associated with the commercial elements which will likely be reduced due to a variety of land uses on site rather than office space alone.
- The analysis considers that 1,500 dwellings will be provided by the development far above the 1,033 currently expected.

### 5.6 Summary

This Chapter of the report offers a summary and comparison of the trip generation of the two development proposals, 2007 and 2020. It provides an extremely robust trip generation of the 2020 proposals for the 2033 Plan which:

- Considers 'privately owned dwellings' only and offer no reductions for the inclusion of affordable homes or flats.
- Does not offer any reductions for trip internalisation
- Does not offer any reductions for linked trips
- Considers the most intensive land use for the commercial elements of the development

- Provides an analysis for 1,500 dwellings rather than the 1,033 currently proposed.

Despite this robust analysis, which likely overestimates the number of trips generate by the revised 2020 proposals, there does not appear to be an increase in trips which would materially impact upon the highway. The AM peak period shows an increase of 188 trips between the two proposals which, when dissipated around the highway network is unlikely to create any capacity issues. The PM peak shows a sharp reduction in trips when compared to the 2007 proposals. This appears to be the result of a reduction in both the size of food store proposed and a change in shopping habits since 2007 which generates fewer peak period trips.

## 6. Do Something Traffic Flows

### 6.1 Introduction

This section outlines and compares the 'Do Something' traffic flows from the previous 2007 development proposals for the future year of 2018, and the latest 2020 development proposals for the future year of 2033.

### 6.2 2018 'Do Something' Traffic Flows

The previous report applied a TEMPro growth rate of 1.140 (detailed in Section 3) to the initial 2006 baseline data to estimate future 'Do Nothing' traffic flows in 2018. In order to estimate 'Do Something' traffic flows, the generated trips per land use are usually applied to the spreadsheet and distributed according to different assumptions (many of which are usually based on census data or existing traffic movements).

However, in addition to applying and distributing the development's traffic generation, the previous report also took in consideration the following impacts on the road network:

- Shopping trips reverting from out of town stores back to Porthcawl; and
- Future amendments to the Portway Roundabout (in which it was proposed the roundabout be changed from a 6-arm to 4-arm arrangement)

Figure 2.13 of the previous report, included in **Appendix A**, displays the 2018 'Do Something' traffic movements at various junctions throughout Porthcawl, after taking into consideration all additional matters and assumptions. Following the same method detailed in Section 3 to compare the 2018 'Do Nothing' traffic flows with the 2019 ATC surveys, the 2018 'Do Something' junction turning movements from **Appendix A** have been used to estimate their likely traffic flows at the position of the 2019 ATC surveys, in order to compare with the 2033 'Do Something' traffic flows from the latest development proposal (which are estimated in sub-section 6.3). In situations, in which the 2018 'Do Something' traffic movements onto a carriageway link differs from the traffic movements off the carriageway link, the maximum has been used for the purpose of comparison.

**Table 6-1** displays the 2018 'Do Something' traffic flows for the previous development proposal at the location of the 2019 ATC site surveys.

**Table 6-1: 2018 'Do Something' Traffic Flows**

Site	Direction	AM Peak	PM Peak
<b>A: A4106 Newton Nottage Road</b>	Eastbound	914	830
	Westbound	670	740
	Overall	1584	1570
<b>C: New Road</b>	Eastbound	216	224
	Westbound	222	238
	Overall	438	462
<b>D: Eastern Promenade</b>	Northbound	448	523
	Southbound	436	401
	Overall	884	924
<b>E: The Portway</b>	Northbound	289	534
	Southbound	449	529
	Overall	738	1063

Site	Direction	AM Peak	PM Peak
<b>F: The Esplanade</b>	Eastbound	137	105
	Westbound	127	152
	Overall	264	257
<b>G: A4106 Dual Carriageway (Southbound)</b>	Southbound	824	923
<b>H: A4106 Dual Carriageway (Northbound)</b>	Northbound	795	771

### 6.3 2033 'Do Something' Traffic Flows

The 2033 'Do Nothing' traffic flows were predicted by applying a TEMPro growth rate of 1.1546 (Table 3-3) to the traffic flows gathered from the 2019 ATC surveys. Although this may be 'double counting' a number of trips as much of the predicted TEMPro growth may be the result of the proposed development this has been applied to remain consistent with approach taken in the 2007 study.

To gather 2033 'Do Something' traffic flows, the trips generated by the latest (2020) development proposal have been applied and distributed across the road network and added to the 2033 'Do Nothing' traffic flows.

The following has been used to distribute the various land use trips across the local road network:

- Residential & Commercial Trips – have been split into journeys to and from either the Phase 1 (Salt Lake) or Phase 2 (Sandy Beach) developments according to the proportional residential and commercial land use proposed for both phases. These journeys have been distributed according to the 2011 'Location of usual residence and place of work by method of travel to work (MSOA level)' census data, for the MSOA areas of Bridgend 018 and Bridgend 019, that together cover the town of Porthcawl;
- Leisure (Hotel) Trips – it has been assumed, as the leisure land use is likely to facilitate a hotel, that all journeys to and from the facility are to be from out of town and would arrive or leave via junction 37 of the M4; and
- Food Store Trips – are likely to be local journeys and have been distributed according to the proportional traffic movements of the 2006 baseline data.

Table 6-2 displays the 2033 'Do Something' traffic flows at the position of the 2019 ATC site surveys.

**Table 6-2: 2033 'Do Something' Traffic Flows**

Site	Direction	2033 'Do Nothing' Traffic Flows		Trip Generation: 2020 Development Proposal		2033 'Do Something' Traffic Flows	
		AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
<b>A: A4106 Newton Nottage Road</b>	Eastbound	468	675	19	59	487	734
	Westbound	491	741	45	23	535	765
	Overall	958	1417	64	23	1022	1499
<b>C: New Road</b>	Eastbound	87	182	158	112	245	294
	Westbound	60	216	78	95	138	311
	Overall	147	398	236	207	382	605
	Northbound	23	132	118	80	141	212

Site	Direction	2033 'Do Nothing' Traffic Flows		Trip Generation: 2020 Development Proposal		2033 'Do Something' Traffic Flows	
		AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
<b>D: Eastern Promenade</b>	Southbound	39	154	61	80	100	233
	Overall	62	285	178	160	241	445
<b>E: The Portway</b>	Northbound	180	386	112	207	292	593
	Southbound	182	328	240	98	422	426
	Overall	363	714	351	305	714	1018
<b>F: The Esplanade</b>	Eastbound	199	381	103	98	301	479
	Westbound	150	371	79	77	230	447
	Overall	349	752	182	175	531	927
<b>G: A4106 Dual Carriageway (Southbound)</b>	Southbound	391	700	314	261	705	961
<b>H: A4106 Dual Carriageway (Northbound)</b>	Northbound	320	619	352	341	671	959

### 6.4 'Do Something' Traffic Flows Comparison

Table 6-3 provides a comparison of the 2018 and 2033 'Do Something' traffic flows. The overall 'Do Something' traffic flows at sites A, D and E were predicted to be higher in the 2018 scenario. Sites C, G and H displayed higher 'Do Something' traffic flows for the AM peak in the 2018 scenario, whilst in contrast the PM peak showed higher 'Do Something' traffic flows in the 2033 scenario.

The 'Do Something' traffic flows estimated along The Esplanade (Site F) were significantly higher in the 2033 scenario. This may be due to the fact that residential and commercial trips estimated to be arriving from or destined to the Bridgend 018 MSOA based on the 2011 census data, were assumed to have used The Esplanade within their journey. In reality these trips may have approached or left the different land uses through Porthcawl town centre or along the A4106 dual carriageway.

Finally, even though the assessment of the latest (2020) development proposal was quite robust in which high trip rates were used for the residential and commercial land uses, the 2033 'Do Something' traffic flows in general weren't as high as those predicted in the 2018 scenario for the previous (2007) development proposals.

**Table 6-3: Comparison of 'Do Something' Traffic Flows**

Site	Direction	2018 'Do Something' Traffic Flows		2033 'Do Something' Traffic Flows		Comparison: 2018 DS vs 2033 DS	
		AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
<b>A: A4106 Newton Nottage Road</b>	Eastbound	914	830	487	734	-427	-96
	Westbound	670	740	535	765	-135	+25
	Overall	1584	1570	1022	1499	-562	-71
<b>C: New Road</b>	Eastbound	216	224	245	294	+29	+70

Site	Direction	2018 'Do Something' Traffic Flows		2033 'Do Something' Traffic Flows		Comparison: 2018 DS vs 2033 DS	
		AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
	Westbound	222	238	138	311	-84	+73
	Overall	438	462	382	605	-56	+143
<b>D: Eastern Promenade</b>	Northbound	448	523	141	212	-307	-311
	Southbound	436	401	100	233	-336	-168
	Overall	884	924	241	445	-643	-479
<b>E: The Portway</b>	Northbound	289	534	292	593	+3	+59
	Southbound	449	529	422	426	-27	-103
	Overall	738	1063	714	1018	-24	-45
<b>F: The Esplanade</b>	Eastbound	137	105	301	479	+164	+374
	Westbound	127	152	230	447	+103	+295
	Overall	264	257	531	927	+267	+670
<b>G: A4106 Dual Carriageway (Southbound)</b>	Southbound	824	923	705	961	-119	+38
<b>H: A4106 Dual Carriageway (Northbound)</b>	Northbound	795	771	671	959	-124	+188

Table 6-3 shows a number of significant differences, both positive and negative, in the predicted traffic along key routes within Porthcawl when comparing the past and present proposals. Each of these are dealt with below:

### A4106 Newton Nottage Road

For the most part flows along the A4-106 Newton Nottage Road in both the 2018 and 2033 scenarios are broadly comparable with only the AM Peak in the eastbound direction showing a large discrepancy of 427 less vehicles in 2033. Although different trip distribution assumptions have been used regarding trip generation for the previous and latest development proposals, a significant factor in the large difference between the 2018 and 2033 'Do Something' AM peak eastbound journeys here is the original baseline data. This is displayed clearly in Table 3-2 in which the 2019 ATC traffic surveys counted 306 less eastbound journeys during the AM peak compared to the estimated 2018 'Do Nothing' traffic flows which were based on 2006 baseline data. This was the highest difference noted between the 2019 ATC traffic surveys and the 2018 'Do Nothing' traffic flows. Therefore, much of this difference is attributable to lower baseline flows rather than the development itself.

### Eastern Promenade

Traffic flows along the Eastern Promenade show substantial decreases in the 2033 scenario when compared with 2018, this is common in both time periods. This is likely to be due to the trip distribution assumptions made regarding the 2033 trip generation. This assumes that the majority of traffic travelling to and from the leisure and commercial land uses of Phase 1 use The Portway rather than the Eastern Promenade due to the leisure, recreational and tourism land space being allocated towards the south of the Phase 1 area near the tip of the Porthcawl coastline. The only 2033 generated traffic assumed to use the Eastern Promenade are trips to and from the residential land use of Phase 1. Furthermore, the 2018 proposals featured the closure of the Portway with the

majority of traffic diverted towards the Eastern Promenade. With the retention of The Portway as a through route in the 2033 scenario it is inevitable that traffic will distribute between the two routes.

### **Esplanade**

Traffic flows along the Esplanade are higher in the 2033 scenario in both periods, although most significantly during the PM peak. This may be the result of trips related to the residential and commercial elements of the 2033 proposal which are destined for, or originate in Bridgend 018 MSOA presumed to be using the Esplanade as a result of trip generation assumptions. In reality, the routes used for journeys between the proposed development and the Bridgend 018 MSOA are likely to vary, and could travel along the Esplanade, through Porthcawl town centre via Lias Road, or along the A4106 dual carriageway.

## **6.5 Summary**

DS traffic flows predicted for the 2018 horizon year have been compared with those predicted for the DS 2033 scenario. The comparison found that in most cases traffic flows were comparable and that impacts of the two developments would likely be similar. In the cases of A4106 Newton Nottage Road, Eastern Promenade and the Esplanade larger differences between the two scenarios were predicted than at other locations. However, these are likely the result of changes in baseline flows, the retention of The Portway in 2033 network, and the use of an alternative trip distribution. It is considered that these changes should not present an issue for the viability of the development in traffic terms and that existing junctions and mitigation could accommodate any changes in flow if deemed necessary.

Furthermore, the analysis in this section should be considered alongside the robustness of the trip rate as set out in section 5.5. This determines that this note may have overestimated the trip generation in the interests of presenting a robust analysis. Therefore, resulting in higher traffic flows than may be experienced following development.

However, it should be noted that this is a somewhat basic analysis and is not meant to replace the capacity assessments that should be undertaken to inform the design of junctions or mitigation required by the 2033 proposals.

## 7. Development Parking

The proposed development is to provide parking levels as set out in BCBC SPG 17 (published in 2011, although based upon County Surveyors Society (CSS) Wales standards set out in 2008). These are:

- Any supermarket/retail development will provide non-operational parking at a level of one space per 14m<sup>2</sup> GFA with 6% of spaces being provided for disabled badge holders.
- For houses – one space per bedroom, to maximum of 3 spaces, with one space per 5 units for visitors.
- For apartments – one space per bedroom, to a maximum of 3 spaces, with one space per 5 units for visitors.
- For elderly persons dwellings – one space per 2 to 4 units, with one visitors' space per 4 units.

Applying these standards to the indicative land use proposals would result in the parking levels set out in **Table 7-1** below. These demonstrate the levels of parking that any developer taking forward the Porthcawl Waterfront regeneration would be expected to broadly provide.

**Table 7-1 – Development parking provision**

Land use	Extent	Parking rate	Number of spaces <sup>^</sup>	Number of spaces publicly available <sup>^</sup>
Food superstore	2,322m <sup>2</sup>	1 space per 14m <sup>2</sup>	166	166
Residential	1,500 units	1 space per bedroom, plus 1 per 5 unit for visitors	4,725**	300
Hotel	1.13ha	1 space per 3 non-resident staff & 1 space per bedroom	100***	100
Commercial (Salt Lake)	1.22ha	1 space per 60m <sup>2</sup> *	203	203
Commercial (Sandy Bay)	0.23ha	1 space per 40m <sup>2</sup> *	58	58
Open space	7.5ha	-	-	-
<b>Total</b>			<b>5,252</b>	<b>827</b>

\*assumes offices as most intensive land use

\*\*assumes UK average 2.95 bedrooms per dwelling/unit

\*\*\*assumes 90 bedrooms based upon typical national hotel chain average

<sup>^</sup> It should be noted that the above figures are estimates based on the information available at the time of this study. Actual parking requirement within the development may change as detailed land use proposals come forward.

**Table 7-1** indicates that the development will, in terms of provision for itself, offer a significant quantum of parking for the residential element compared with other, more recent, Local Authority standards, risking an environment dominated by the private car. This is likely a result of the application of historical standards set out in CCS Wales Parking Standards 2008 as per BCBCs SPG 17. Since the creation of these standards there has been a significant move towards creating more sustainable development which is less reliant on private car and is designed to maximise the use of sustainable travel modes. As a demonstration the 2011 census data records that of the 3,079



dwellings in Porthcawl 2,808 have two or less vehicles associated with them, thus would require only two parking spaces rather than the two to three (dependent on number of bedrooms) generally proposed by SPG17.

Also, having been adopted in 2011, SPG17 does not consider the needs of evolving policies surrounding ULEVs, home charging points and rapid charging facilities. This is particularly important when considering compliance with national policies on these matters.

To this end Jacobs suggests that new SPG which addresses parking provision for the Porthcawl development is prepared and adopted. Along with proposing alternative parking standards, such a document is an opportunity to set out, in more detail, the desire for all public parking to be communal use, the need for improved bus services and frequencies to utilise the new bus interchange, and include provision for ULEVs.

## 8. Visitor Parking

### 8.1 Introduction

The 2007 study placed considerable importance on the provision of visitor parking in and around Porthcawl. It was discussed in Chapter 3, Part B of that report. Section 8 of this report considers the findings of the 2007 study and their relevance to the current regeneration proposals. It should be noted that for this study no new, bespoke surveys of parking demand have been undertaken.

### 8.2 2007 Study Conclusions

The key aims of the 2007 study, when considering visitor parking were:

- To estimate the likely demand for additional parking in Porthcawl over and above that which can be supplied within the regeneration area.
- To provide a comparative analysis of options to satisfy the excess demand generated by visitors and tourism, including the identification of appropriate sites for additional or temporary parking, traffic and parking management systems, access arrangements, construction, maintenance and operating costs.

It also noted that “there are peak visitor demands which occur on summer weekends and Bank Holidays and typically these total up to 10 days per year. To accommodate these occasions there are a number of car park facilities. In addition, the aspiration is that the resort, through quality regeneration initiatives, will become increasingly popular to visitors.”

The existing car parks surveyed to inform the 2007 study were:

- Hillsboro Place – a surfaced car park on the eastern edge of the town centre which also serves the adjacent Health Centre;
- Salt Lake – an open area in private control and having a part gravel/ part grass surface. It provides the main capacity for seasonal peak parking;
- Eastern Promenade – a wide single carriageway road to the west of Sandy bay that accommodates parallel parking on both sides;
- Cosy Corner – adjacent to the harbour at the junction of the Esplanade and Eastern Promenade. It has a small capacity for sea front/promenade parking; and
- Mackworth Road – parking facility at its southern end; adjacent to the eastern boundary of the fun fair.
- West Drive - on highway parking

Table 8-1 below sets out the capacity, average demand and peak demand as surveyed in 2007.

**Table 8-1 2007 Parking capacity, average demand and peak demand**

Car Park	Capacity	Average demand	Peak demand
Hillsboro	340	175	340
Salt Lake	1330*	100	1000**
Eastern Promenade, Cosy Corner	165	70	165
Mackworth Road	100	20	100
West Drive	170	100	170

## Comparison of 2007 and 2020 Development Proposals

<b>Total</b>	<b>2105</b>	<b>465</b>	<b>1775</b>
--------------	-------------	------------	-------------

Source: 2007 Porthcawl Transport and Access Strategy

\* The estimated capacity of Salt Lake is 1773 spaces if it were re-surfaced and formally marked. This has been reduced by 25% to 1330 spaces to account for ad hoc parking due to non-marking of spaces and gravel/grass surface.

\*\* Current peak use that occurs on up to 10 days/year suggested from survey by BCBC and data from site owners.

**Table 8-1** demonstrates that the 2007 study determined that Porthcawl had a 16% oversupply of parking when compared to the peak summer demand of 1,775. Generally, a 10% oversupply is considered to be a reasonable operating reserve, thus in the 2007 base year Porthcawl had sufficient parking to accommodate demand.

The 2007 regeneration scheme proposed a reduction in parking availability in Porthcawl in order to create a more attractive development offer, although a portion of this loss would be replaced within the development itself. Parking areas of Hillsboro, Salt Lake, and Mackworth would be lost while gains to offset this would be focussed around a new superstore, a new town centre car park, and new parking areas at the Seafront and Foreshore Park. **Table 8-2** below summarises the gains and losses in parking as a result of the 2007 proposals.

**Table 8-2 2007 Parking summary pre and post development**

CAR PARK	CURRENT			FUTURE			Shortfall
	Capacity	Average Demand	Peak Demand	Proposed Capacity	Average Demand	Peak Demand	
Hillsboro	340	175	340	-	-	-	
Salt Lake	1330*	100	1000**	-	-	-	
Eastern Promenade/ Cosy Corner	165	70	165	63	63	63	
Mackworth Road	100	20	100	-	-	-	
West Drive	170	100	170	170	100	170	
New Superstore	-	-	-	350	425	350	
New Town Centre Car Park	-	-	-	340		340	
Seafront	-	-	-	35	25	35	
Foreshore Park	-	-	-	51	33	51	
Existing Leisure Demand	-	-	-	-	100	1000	1000

## Comparison of 2007 and 2020 Development Proposals

New Leisure Demand	-	-	-	-	100***	250***	250
<b>TOTAL</b>	<b>2105</b>	<b>465</b>	<b>1775</b>	<b>1009</b>	<b>846</b>	<b>2259</b>	<b>1250</b>

Source: 2007 Porthcawl Transport and Access Strategy

\* The estimated capacity of Salt Lake is 1773 spaces if it were re-surfaced and formally marked. This has been reduced by 25% to 1330 spaces to account for ad hoc parking due to non-marking of spaces and gravel/grass surface.

\*\* Current peak use that occurs on up to 10 days/year suggested from survey by BCBC and data from site owners.

**Table 8-2** demonstrates that the 2007 proposed regeneration scheme had a shortfall in provision of 1,250 spaces during peak summer periods based upon the assumed demand.

The Transport and Access report offered solutions which consisted of several combination options, being:

**Table 8-3 2007 Parking options to provide for parking shortfall**

SITES	SPACES
Boulevard de St Sebastian sur Loire + Heol-y-Goedwig	1164
Boulevard de St Sebastian sur Loire + Newton Nottage South West + Heol-y-Goedwig Section A	1184
Newton Nottage North East + Newton Nottage South West	1175
Newton Nottage North East + Heol-y-Goedwig	1515
Newton Nottage South West + Heol-y-Goedwig	1320

Should use of an expanded facility at Rest Bay be progressed then the following combinations would provide the capacity required:

**Table 8.4 – 2007 Parking options to provide for short fall which include Rest Bay expansion**

SITES	SPACES
Rest Bay + Boulevard de St Sebastian sur Loire + Heol-y-Goedwig Section A	1184
Rest Bay + Boulevard de St Sebastian sur Loire + Newton Nottage South West	1314
Rest Bay + Newton Nottage North East	1175
Rest Bay + Newton Nottage South West + Heol-y-Goedwig Section A	1340
Rest Bay + Heol-y-Goedwig B	960

It concluded that “a visitor parking facility based on a combination of the Newton Nottage North East, South West and Heol-y-Goedwig sites should be investigated further” to accommodate the peak demand for the 10 days during summer weekends.

### 8.3 2019 Baseline

The 2019 parking baseline is broadly similar to that of 2007 with no significant changes in parking provision in the area. Thus, it is assumed that the car park capacities set out in **Table 8-1** remain current.

### 8.4 2033 Future Development Visitor Parking Proposals

The new proposals for Porthcawl recognised that it is not practical to provide parking at the levels necessary to accommodate peak summer demands. To do so would result in a development which, due the overprovision of parking for most of the year, is car dominant and unsustainable in transport terms. The proposals envisage that public parking provision is shared between the three land uses within the site (retail and commercial, tourism and residential) to maximise its flexibility. This approach provides a balance of provision corresponding to the needs of users so that in periods of peak summer demand, when typical users of the retail and commercial elements would avoid the area, the parking for these elements are available for tourists. Similarly, for the majority of the year ample parking for the day to day operation of the development would be provided without losing beneficial, developable land to car parking. This should be captured and formalised within a parking SPD for the Porthcawl development.

The parking levels for the overall development are set out in **Table 7-1** which illustrates that approximately 827 publicly available parking spaces will be provided in the 2020 scheme in addition to those existing, for a total of 1060 spaces. This compares with 1009 public parking spaces, as set out in **Table 8-2**, proposed by the 2007 scheme. **Table 8-5** provides a comparison of the publicly available parking in both the 2007 and 2020 schemes.

**Table 8-5 2007 vs 2020 Visitor parking availability**

Car park	2007 Scheme capacity	2020 Scheme capacity
Eastern Promenade/ Cosy Corner	63	63
West Drive	170	170
New Superstore	350	166
New Town Centre Car Park	340	-
Seafront	35	-
Foreshore Park	51	-
Residential (visitor)		300
Hotel		100
Commercial (Salt Lake)		203
Commercial (Sandy Bay)		58
<b>TOTAL</b>	<b>1009</b>	<b>1060</b>

Therefore, it is clear that the 2020 proposals offer more visitor parking in and around Porthcawl than those of 2007. Thus, the new proposals offer not only additional spaces over the previous scheme but also more flexibility, in terms of visitors, to cater for both weekday operation of the development and weekends due to the shared nature of the publicly available parking.

## **8.5 2033 Future Development Visitor Parking Proposals**

Due to the lack of suitable base data we have been unable to estimate the future parking demand during peak periods. We propose that a Parking SPG specifically for the Porthcawl Regeneration development could address this issue in more detail.

## **8.6 Visitor Parking Summary**

The 2007 proposals noted that there was a shortfall in visitor parking when accounting for peak visitor demand during the summer period and that this would likely occur on 10 separate days per year. The study offered a number of solutions for this shortfall which could be implemented to accommodate this peak. It concluded that "a visitor parking facility based on a combination of the Newton Nottage North East, South West and Heol-y-Goedwig sites should be investigated further".

The 2020 proposals have potential to offer more visitor parking within the development on the assumption that all public parking within the development is communal and can be used by all. However, due to a lack of sufficient base data we have been unable to estimate the peak demand of the 2033 scenario relative to that of 2018.

Jacobs suggests that a Parking SPG is developed specifically for the Porthcawl Regeneration development which would enable:

- A refresh the requirements of SPG17 to ensure that residential parking is offered at a sustainable rate and reflects car ownership in Porthcawl.
- Solidification of proposals to ensure that public parking associated with the various elements of the development is communal and available for use by all visitors.
- Investigation of the need, and if required, investigation of opportunities to provide parking for the limited peak periods which occur during the tourist season.

## 9. Conclusion

Considering planning policy the comparison highlighted the 2007 proposals did not include a policy review. Rather, the strategies associated with the 2007 proposals were informed by relevant policies at the time of writing. The status of previous policies informing the strategies were reviewed and it has been established that the majority have been superseded. A high level review of current policies demonstrated the new, 2033, proposals are in line with those related to transport in promoting active and public transport and as a consequence healthy places. To further ensure compliance with policy, particularly TAN 18, a robust transport assessment evaluating the impacts of the scheme with a TIS, is required.

In terms of modal split, comparison between 2001 and 2011 census data highlighted that the travel patterns to work are broadly comparable. Driving to work remains the most common mode of transport comprising 69% of trip in 2011, followed by walking (18%) and car passenger (6%). Notably since 2011, there has been an increase in the proportion of people within Porthcawl cycling to work; census data demonstrated 0% of residents cycled in 2001 compared with 2% in 2011. Between 2001 and 2011 a marginal decrease in bus passengers is observed. It is considered that the provision of a new bus terminus and active modes infrastructure in the 2033 proposal will increase opportunities to travel by public transport and active modes, therefore reducing trips by private car.

This report offers a summary and comparison of the trip generation of the two development proposals, 2007 and 2018. It provides a robust trip generation for the 2018 proposals which:

- Considers 'privately owned dwellings' only and offer no reductions for the inclusion of affordable homes or flats;
- Does not offer any reductions for trip internalisation;
- Does not offer any reductions for linked trips;
- Considers the most intensive land use for the commercial elements of the development; and
- Provides an analysis for 1,500 dwellings rather than the 1,033 currently proposed.

Despite this robust analysis, which likely overestimates the number of trips generated by the revised 2020 proposals, there does not appear to be an increase in trips which would materially impact on the highway. The AM peak period shows an increase of 188 trips between the two proposals which, when dissipated around the highway network is unlikely to create any capacity issues. The PM peak shows a sharp reduction in trips when compared to the 2007 proposals. This appears to be the result of a reduction in both the size of food store proposed and a change in shopping habits since 2007 which generates fewer peak period trips.

Do Something (DS) traffic flows predicted for the 2018 proposal have been compared with those predicted for the DS 2033 scenario. The comparison found that in most cases traffic flows were comparable and that impacts of the two developments would likely be similar. In the cases of A4106 Newton Nottage Road, Eastern Promenade and the Esplanade larger differences between the two scenarios were predicted than at other locations. However, these are likely the result of changes in baseline flows, arising from the fact that in the 2033 Plan the Portway will not be closed, and an alternative trip distribution respectively. In Jacobs' opinion these changes should not present an issue for the viability of the development in traffic terms and that junctions and minimal? mitigation could accommodate any changes in flow. However, it should be noted that this is a basic analysis and is not meant to replace the capacity assessments that should be undertaken to inform the design of junctions or the mitigation required by the 2033 proposals.

Operational parking for the development is currently proposed to comply with BCBC SPG17 which would result in a total of 5,252 spaces, 827 of which would be open to the public. The remaining 4,425 would be allocated for the residential portion of the development. In the current climate of a move towards a more sustainable travel habits this could be considered an overprovision and result in a development dominated by private car. Census data demonstrates that car ownership per household in Porthcawl is generally below the level of residential parking provision required by SPG17.

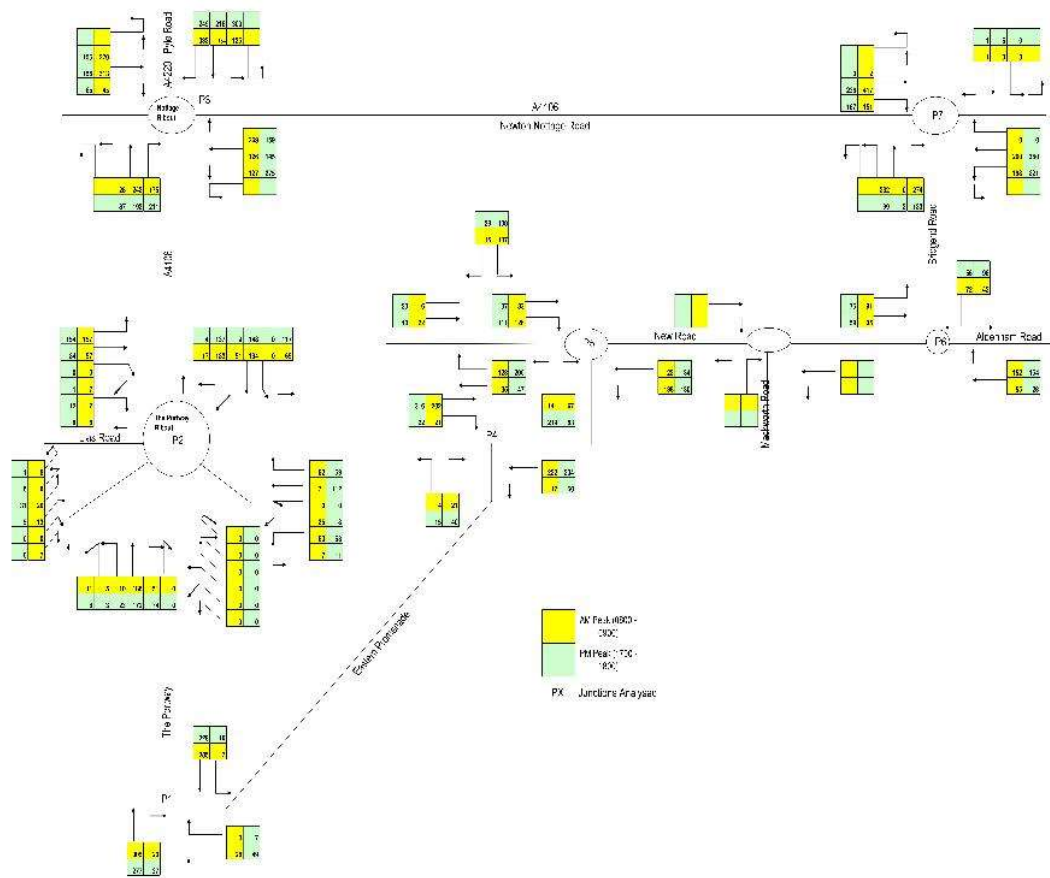
In terms of visitor parking the 2033 proposals offer additional spaces (827) over that proposed for 2018 (1,009) which when combined with those existing spaces to be retained results in total of 1,060 available visitor spaces in 2033. However, due to the lack of a sufficiently detailed data set Jacobs have been unable to estimate the potential future demand in the 2033 horizon year. Jacobs propose that this could also be considered within a specific Porthcawl Parking SPG, which BCBC are currently pursuing.

Considering parking as whole, Jacobs suggest a Parking SPG is developed for the redevelopment of Porthcawl. Such a document would:

- Refresh the requirements of SPG17 to ensure that residential parking is offered at a sustainable rate and reflects car ownership in Porthcawl.
- Solidify proposals to ensure that public parking associated with the various elements of the development is communal and available for use by all visitors.
- Investigate the need, and if required, the opportunities to provide parking for the limited peak periods which occur during the tourist season.
- Consider the need to provide for ULEV and home and public electric vehicles charging infrastructure.



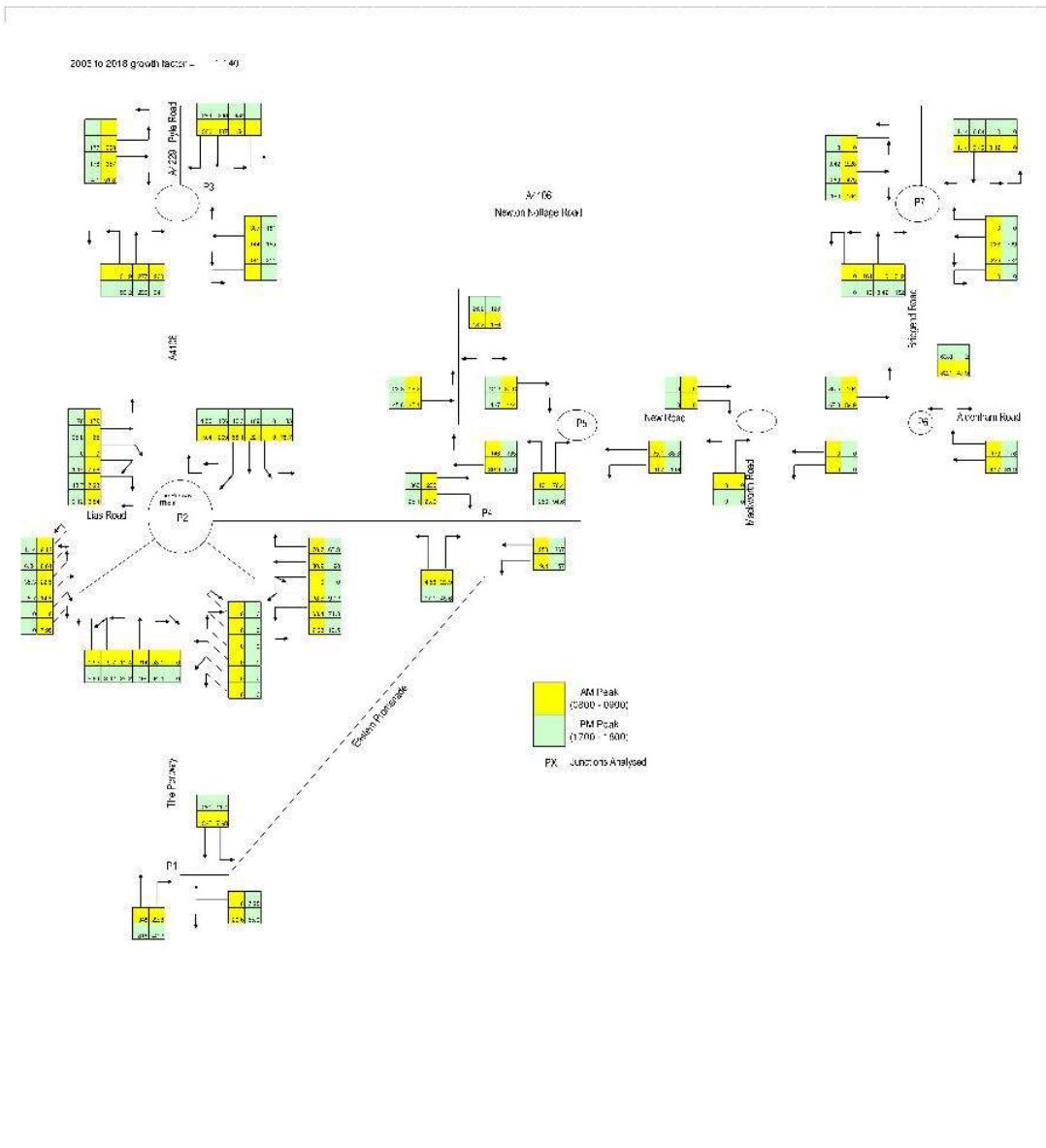
## Appendix A. 2007 Transport Assessment Traffic Flows



Porthcawl Regeneration Transport Assessment  
 2006 AM and PM Base Traffic Flows

Figure 2.1

2006 AM and PM Base Traffic Flows  
 2006 AM and PM Base Traffic Flows  
 2006 AM and PM Base Traffic Flows



Porthcawl Regeneration Transport Assessment  
2018 AM and PM Base Traffic Flows

Figure 2.3

01/11/18  
02/11/18  
03/11/18

**Appendix B. TRICS Data**

**Dataset Version:** 72  
**Result Type:** Trip ends by time period  
**Base Year:** 2018  
**Future Year:** 2033  
**Trip Purpose Group:** All purposes  
**Time Period:** Average Day  
**Trip End Type:** Origin/Destination  
**Alternative Assumptions Applied:** No

**Growth Factor**

Area Description		All purposes	
Level	Name	Origin	Destination
Authority	Bridgend	1.1114	1.1114
W02000235	Bridgend 018	1.1345	1.1342
W02000236	Bridgend 019	1.1272	1.1268

**Future Year - Base Year**

Area Description		All purposes	
Level	Name	Origin	Destination
Authority	Bridgend	16,352	16,293
W02000235	Bridgend 018	1,201	1,196
W02000236	Bridgend 019	865	852

**Base Year**

Area Description		All purposes	
Level	Name	Origin	Destination
Authority	Bridgend	146,780	146,276
W02000235	Bridgend 018	8,928	8,907
W02000236	Bridgend 019	6,799	6,714

**Future Year**

Area Description		All purposes	
Level	Name	Origin	Destination
Authority	Bridgend	163,132	162,569
W02000235	Bridgend 018	10,129	10,103
W02000236	Bridgend 019	7,664	7,566