

A Cardiff Capital Region Metro:

Impact Study: Regeneration and The Metro

October 2013



Regeneration & the Metro

Transit Led Regeneration Opportunities

October 2013



Collaboration by design

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Contents Page

1.0	Introduction	p.6
2.0	Regeneration Framework	
	Welsh Government Regeneration Policy	p.9
	Connectivity to Employment	p.9
	Twenty first century business practice	p.10
	Education, Skills and Young people	p.10
	A Sustainable Population	p.11
	Placemaking and Town Centre Vitality	p.11
	Housing Supply and Design	p.16
	Sustaining and Promoting Tourism	p.20
	Health	p.21
	Environment and Sustainability	p.21
	Summary: A Liveable Capital City Region	p.22
3.0	Metro Interventions Regeneration Overview	
	Making Better Use of the Existing Network	p.23
	Ebbw Vale to Newport	p.24
	North West Corridor	p.26
	Relief line from Cardiff Central to Newport & Llanwern	p.26
	Rapid Transit Cardiff	p.29
	Rapid Transit in Newport	p.29
	Newport to Abergavenny	p.30
	Regional Bus Rapid Transit	p.31
	Cardiff Airport	p.34
	Interchange Enhancements	p.34
4.0	Regeneration Opportunities	
	Central Cardiff and the Bay	p.35



North West Corridor	p.38
Barry and St.Athan	p.41
Bridgend	p.45
The Ystrad Mynach Corridor	p.47
Merthyr Tydfil	p.50
Ebbw Vale	p.55
Cwmbran and Pontypool	p.59
Newport	p.61
5.0 Conclusion and Recommendations	p.65
6.0 Bibliography	p.66



1.0 Introduction



Regeneration is about making places more resilient to change.

Regeneration activity in South East Wales in particular, has focused on addressing problems caused by structural economic change and the societal and environmental consequences of this shift.

In the most successful projects, regeneration has addressed these legacy issues, whilst simultaneously equipping a place to operate effectively in a new context. The regeneration of Cardiff Bay is a good example of this kind of transformation.

The proposed Metro system is a strategic opportunity to address weaknesses in the Capital City Region whilst equipping it with the infrastructure that it needs to become a successful twenty-first century city-region. The regeneration objective of the Metro is to make the Capital City Region a more successful and liveable city.

The Metro is a unique project because it has the potential to enable the region to become:

- More economically prosperous;
- Less reliant on fossil fuels;
- More socially equitable;
- Better connected and convenient;
- A high profile tourism destination;
- A recognisable place to invest; and
- Synonymous as a place with a high standard of living.

This paper sets out how the Metro can make a substantial contribution to the future wellbeing of the Capital City Region so that the most populated part of Wales is recognised as one of the most liveable and varied conurbations in the world.

Section 2 provides a thematic explanation of how the Metro will respond to key regeneration themes, Section 3 provides an overview of the regeneration opportunities associated with the Metro and Section 4 explores how the Metro will respond to the unique opportunities of different places throughout the Capital City Region.



About the Global Liveability Report

The Economist Intelligence Unit's liveability rating quantifies the challenges that might be presented to an individual's lifestyle in 140 cities worldwide. Each city is assigned a score for over 30 qualitative and quantitative factors across five broad categories:

- Stability
- Healthcare
- Culture and environment
- Education
- Infrastructure

The categories are compiled and weighted to provide an overall rating of 1–100, where 1 is considered intolerable and 100 is considered ideal. In 2013 the following cities were ranked as follows:

1. Melbourne
2. Vienna
3. Vancouver
4. Toronto
5. Calgary
6. Adelaide
7. Sydney
8. Helsinki
9. Perth
10. Auckland

Incidentally, eight of these cities have twenty-first century tram/light rail systems and two of the cities are currently planning such a system.





2.0 A Liveable Capital City Region



This section describes the impact of the Metro on key legacy issues and identifies how the Metro will create a liveable Capital City Region.

The section explores this through the following key themes:

- Contributing to existing regeneration priorities;
- Connectivity to employment (and consequent links to public health);
- Supporting 21st century business practices;
- Impact of increased mobility on young people;
- Redistribution of regional population patterns;
- Placemaking and town centre vitality;
- Housing supply and design;
- Tourism and image; and
- Welsh Government vision for a sustainable Wales.



Cardiff: a 21st Century liveable Capital City Region?



2.1 Welsh Government Regeneration Policy

Vibrant and Viable Places (2013) sets out a new national regeneration framework that seeks to establish a more integrated way of reversing economic, social and physical decline throughout Wales. In the framework an improved transport network is identified as “a key building block” of the new approach, since its “availability and accessibility influence where people live and work, their leisure options, and their opportunities to interact with friends family and the wider community”¹.

The Metro will increase connectivity throughout South East Wales and provide the infrastructure that is required to facilitate the investment necessary to enable the Capital City Region and its communities to develop, transform and regenerate. It therefore has an integral role to perform in delivering wider national regeneration aspirations.

2.2 Connectivity to Employment

The Metro will improve the frequency, image and geographic reach of the public transport network and increase the ease with which people from throughout the region can access employment opportunities.

Removing Barriers to Employment.

Improving public transport will remove one of the key barriers to employment: poor accessibility. By improving connectivity to places that currently receive limited rail services, the Metro will broaden the range of jobs that people can access and have a positive impact on economic activity levels in those settlements currently disconnected from the region’s public transport network².

For example, Merthyr Tydfil and Ebbw Vale currently receive half-hourly and hourly train services. However, following the implementation of the proposed Metro interventions both settlements will benefit from improved service frequency, which will provide residents with increased travel flexibility and improved door-to-door journey times to employment opportunities available not only in Cardiff, but in places like Newport, Pontypridd and Ystrad Mynach³.

In this respect the Metro will meet the demand for improved access to economic opportunities by public transport, which the reopening of the Ebbw Vale line in 2008 clearly demonstrates exists throughout the Capital City Region⁴.

Crucially, the Metro will also help to create a network of sustainable and prosperous communities throughout the Capital City Region through unlocking local development opportunities that enable key settlements to become vibrant sub-regional employment hubs. For instance, the Metro will increase the viability of redeveloping development sites like Pentrebach and The Works, and help to provide local employment opportunities that are immediately accessible to local people.

¹ Vibrant and Viable Places, 2013, p. 27

² Research undertaken by Welsh Government into the potential impact of electrifying the Valleys Line Network suggests that subject to affordability electrification could allow residents to access more employment opportunities in the wider network. Will the VLE Strategy Reduce the Barriers to Employment for the Economically Inactive Living in the Poorest Parts of the Valleys? Welsh Government Social Research, 2013, pp.51-52.

³ Following enhancement improvements Merthyr will receive four train services per hour. Ebbw Vale meanwhile will initially receive two trains per hour, which could be extended in the long term to three or four services per hour depending on the viability of undertaking the necessary engineering works.

⁴ In 2011 676,000 passengers used the Ebbw Vale line service. This exceeded estimated passenger usage by 69%. ATW SETA Update (March 2012).

This will build upon the work of the region's Communities First Clusters who collaborate with the most disadvantaged and deprived communities, and help to deliver the Tackling Poverty Action Plan (2012), which states that, the *"best route out of poverty is through employment"*⁵.

To ensure that the local labour market is equipped to take advantage of the opportunities that the Metro will help to deliver it will be necessary to engage with all regeneration bodies to identify how the Metro can respond to bespoke regeneration opportunities. Further work around skills and education will be necessary to ensure that the pathways to employment exist as well as the transport connections to economic activity.

2.3 Twenty First Century Business Practice

Just as the Metro will increase the ease with which people can access employment opportunities it will also help emerging entrepreneurs and small and medium sized businesses by providing the connectivity that will facilitate agglomerative economic activity and make it easier to develop and nurture business relationships across the region.

Connectivity and Innovation

The latter will be particularly helpful to 'start up' businesses and will respond directly to the increasingly flexible way that entrepreneurs are undertaking business. Business in the twenty-first century is likely to become more mobile and disaggregated and the speed of transport and fast Internet connections will become critical preconditions for a vibrant economy. In an economy defined by technological innovation, and where knowledge and creative thinking are increasingly important, many entrepreneurs require the flexibility that allows them to seek out and access business opportunities. In this sense, the rolling stock of the Metro has the potential to become a place where people can work whilst they are travelling to the office or meetings.

Flexible Working Patterns

In Wales companies such as Indycube represent the changing nature of entrepreneurial practice. Indycube is a Community Interest Company that rents out flexible office space to entrepreneurs and home workers who want adaptable access to high quality office facilities, but also the peer advice, support and networking and business opportunities that result from working in a shared environment. To date the company has a network of offices in Cardiff, Newport and Swansea, but as a result of demand is in the process of implementing an ambitious growth strategy that will result in the opening of a further 25 offices over the next 18 months throughout South Wales.

While the Metro has little opportunity to help the realisation of this ambitious short-term target, the lasting connectivity that it will deliver will help to secure the long-term future of companies such as Indycube, as entrepreneurs seek to grow and expand.

Increased connectivity and flexibility will also complement public sector led initiatives like the Welsh Centre for Innovation Excellence. This is based in Caerphilly Business Park and was set up in 2012 to provide a flexible and inventive facility for emerging entrepreneurs from throughout South East Wales to explore, test and develop their business ideas through collaboration with other entrepreneurs. The Metro will increase the accessibility of the centre to emerging entrepreneurs and help the centre to fulfil its ambition to create a growing community of entrepreneurs.

2.4 Education, Skills and Young People

The improved connectivity delivered by the Metro will make it easier for prospective students to access further education and vocational training centres throughout South East Wales by public transport. For example, a new

⁵ Tackling Poverty Action Plan, 2012 – 2016, 2012, p.3



Regeneration Framework

station at Gabalfa will increase the accessibility of the Cardiff Metropolitan Llandaf campus to students throughout the region, while the extension of the Aberdare railway line to Hirwaun will increase the connectivity of local students to post-16 education opportunities in Coleg Morgannwg's Aberdare campus. This improved connectivity throughout the region will encourage more individuals to enter into further education and vocational training, which will have a positive impact on the skill and knowledge levels of the regional labour market.

Although increased access to education and training opportunities will have a positive impact on people of all ages, it will have a particularly significant impact on young people, and will help to achieve Welsh Government's aspiration for all young people to have access to a "*comprehensive range of education and learning opportunities*"⁶.

Furthermore, the Metro will complement a number of public sector led initiatives such as Jobs Growth Wales, which are seeking to equip young people with the skills and experience to develop successful careers. Jobs Growth Wales itself was launched in 2012 to provide unemployed young people aged 16-24, who are job ready but who have struggled to secure employment, with a job opportunity for six months. As a result of the Metro the region will be better connected by public transport, and participants of the programme will have access to increased job opportunities across a wider geographical area.

The Metro will also improve general quality of life enjoyed by young people, through improving connectivity to cultural, sporting and leisure attractions throughout the Capital City Region. Together with improved education and training opportunities, the latter are key components of Welsh Government's seven core aims for young people⁷.

2.5 A Sustainable Population

The Metro will help to build sustainable communities where citizens can enjoy a high quality lifestyle supported by connectivity to local and regional employment, business, education and leisure opportunities. This will help to reverse the outward migration of young people from the region, and ensure that, instead of losing educated and skilled individuals to economic opportunities elsewhere in the UK, the Capital City Region is viewed as a fulfilling place to live and work.

2.6 Placemaking and Town Centre Vitality

Vibrant and Viable Places promotes a "*place-based approach*" to regeneration, and advocates that through targeted investment and improvements to town centres it will be possible to create a "*developmental hub*" that will have a "*wider economic impact as a place of employment, leisure activity and public services*"⁸. Town centres are therefore identified in the framework as key priorities for regeneration investment.

The Metro will help to facilitate this approach throughout South East Wales by establishing numerous town centres as the gateways to the regional transport network. This focus will stimulate footfall in each centre and potentially re-establish the regions town centres as highly connected places of employment. In many ways, this upgrade in connectivity could mean that town centres, instead of locations without good accessibility, become the preferred locations for investment in new jobs. The Metro will establish places like Pontypridd, Merthyr Tydfil and Ebbw Vale town centres as key hubs, and encourage higher footfall within these kinds of settlements (as people from surrounding areas commute through the centre to access the wider network), which can stimulate private sector investment.

⁶ <http://wales.gov.uk/topics/childreneyoungpeople/rights/sevencoreaims/?lang=en>

⁷ <http://wales.gov.uk/topics/childreneyoungpeople/rights/sevencoreaims/?lang=en>

⁸ Vibrant and Viable Places, p.20



Section 02

Regeneration Framework

Impact on Sense of Place

The implementation of Metro interventions provides the opportunity to enhance the sense of place of many of the regions town centres. For instance, an improved or new Metro station will create an opportunity to improve the sense of arrival and may even stimulate sufficient footfall to catalyse demand for new high density mixed use development. By designing these places to reflect local character and heritage the Metro can be knitted into the town centre and promote the regions distinctive identity. This process will substantially support the need to broaden the range of uses in town centres beyond retail by incorporating new places to work, opportunities for tourism as well as new homes.

In this respect the Metro will complement ongoing town centre regeneration initiatives such as the recommendations of the Business Rates Wales Review: Incentivising Growth (2012) and Business Improvement Districts ⁹.

In order to ensure that the Metro has a transformational impact on town centres, its implementation needs to be aligned as closely as possible to current town centre regeneration initiatives and the work of organisations like the Centre for Regeneration Excellence Wales (CREW). It is recommended that CREW should be a key consultee during future Metro works to ensure that all opportunities for collaboration with ongoing town centre regeneration initiatives are explored. Interaction with other Welsh Government departments and Local Authorities will also be important.

Maximising the regeneration potential of the Metro regarding town centre vitality will require any station improvements to be very carefully designed. It is essential that the brief for the development or improvement of stations incorporates some important principles and that these are considered at the inception of the project. These are:

- The spaces around the station are as important as the station itself;
- The needs of different transport modes need to be carefully managed;
- Creating a strong sense of arrival is important;
- Station security needs to be integrated in to the overall design, rather than be considered as an 'add on';
- Stations can be anchors of mixed use developments and the potential for interventions that could become more than just a station should be considered at the outset;
- Stations need to address changes in level carefully to ensure that they are effectively integrated into their surrounding townscape;
- Stations create opportunities to connect places either side of a railway track and cross line connectivity should be as important as controlling fare evasion;
- Station design needs to convey character of the region in a way which is integrated and meaningful, rather than superficial and tokenistic;
- Stations should be considered as the hub of other activities and therefore more than just a piece of functional transport infrastructure; and
- Multi-disciplinary collaboration is essential. Experience from other major infrastructure projects suggests that mono-disciplinary interpretation of the above principles will not result in successful schemes.

⁹ <http://wales.gov.uk/topics/businessandconomy/regeneration/business-improvement-districts/?lang=en>



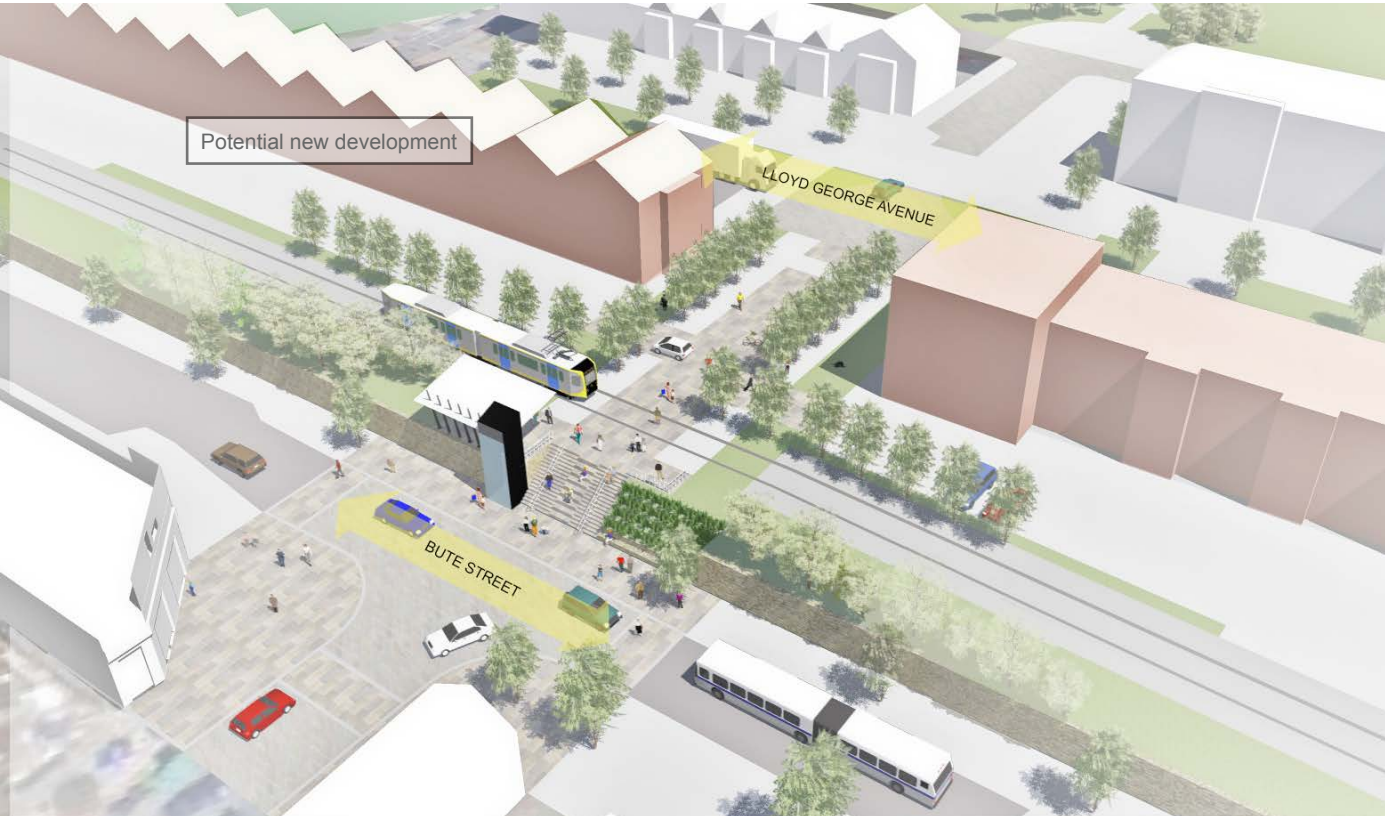
Regeneration Framework



The entrance to Clapham Junction station which combines an effective space in front of the main entrance that creates a meeting space as well as functional requirements for different modes of transport.



The new Reitlandpark railway station in a new district of Amsterdam demonstrates how a station separated by a change of level can be integrated into its surrounding urban context.



Initial design concept to demonstrate how a tram / train connection to Cardiff Bay can also overcome barriers between Butetown and its surroundings. This example demonstrates how Louden Square can be integrated into both the Metro, and the wider area.



Section 02

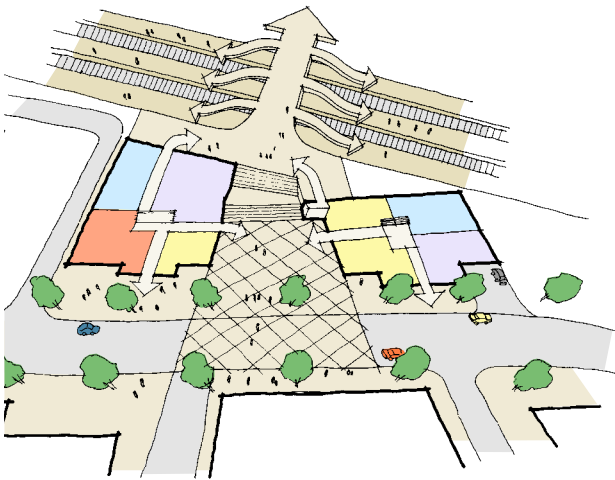
Regeneration Framework



Illustration which highlights how Ebbw Vale The Works Station might look and how this appearance has been informed by the palette of materials that are already adopted on other public buildings on The Works site. This image sets a strong precedent for how new stations throughout the network should deploy regional vernacular to emphasise sense of place and regional identity.



Regeneration Framework



Example of mixed use development which benefits from high and constant footfall around a railway station.



High quality landscaping and planting at Kew Gardens station creates a sense of arrival that reflects its location.



Paris Tramway Station

Client > La Ratp

Lanoire & Courrian - Emmanuel Cairo Designer

Competition. Design of an innovative range of tram station



Luminaire

Poster

Bench

Sign

Trash can

Bench

Bench

Bench

Bench



Proposals for new Paris tram station which demonstrates how a range of simple, but carefully coordinated items can greatly contribute to the image of the Metro. It is recommended that a similar design exercise is carried out to coordinate the design of station elements. This will ensure that the appearance of the stations are coordinated and visually distinctive.

2.7 Housing Supply and Design

The improved regional connectivity delivered by the Metro will unlock opportunities for new housing development. Increased connectivity will reduce some of the barriers to viability on a range of sites throughout the region. This will help to meet local housing need and improve the quality of accommodation available throughout the region. The latter is particularly important within the context of the Capital City Region approach to economic development, since it will ensure that the region's housing stock is of sufficient size and quality to support a labour market with the critical mass required to attract investment and deliver economic growth.

Affordable Housing

The Metro will also help to facilitate the delivery of more affordable homes throughout South East Wales by helping to create an environment that makes it easier for Housing Associations to build new homes. Currently a number of affordable development programmes such as the RCT Homes led Pothcwlis initiative and the Welsh Housing Club Bond demonstrate that Registered Social Landlords (RSLs) are beginning to adopt a more innovative approach to delivering development ¹⁰.

Improved connectivity will increase the range of sites that can be viably developed, and make it easier for RSLs to find suitable development partners. This will help to assist the gradual change in approach of RSLs to enabling development, which both the Pothcwlis and Welsh Housing Club Bond programmes demonstrate is starting to take place, and contribute to the creation of thousands of new affordable homes that will address housing need throughout the South East Wales region.

RSLs will be a key development partner in realising this aim, since as a result of the Under Occupancy (Bedroom Tax) RSLs are increasingly seeking to build smaller units on sites that are connected by public transport to employment opportunities. Aside from this current Government policy and demographic changes suggest that there is a long-term trend for the creation of a greater number of smaller households. Neither the current housing supply nor the approach of mainstream residential developers will meet this demand.

In order to develop a co-ordinated approach to improving the interface between land uses and transport, increasing densities, facilitating placemaking and encouraging more SMEs to enter the market further consultation will be required with, Local Authorities, CREW and Community Housing Cymru. The latter in particular will be a key implementation partner, since the group represents over 70 not-for profit housing associations and is at the forefront of improving innovative social housing practice, as their role as co-ordinations of the Welsh Housing Club Bond programme demonstrates.

Metro Compliant Housing Density

In addition, where Metro infrastructure and new development opportunities are aligned there will be an opportunity to develop higher density residential development. This approach is in line with Planning Policy Wales (2012), which advises, “*higher density development, including residential development, should be encouraged near public transport nodes or near corridors well served by public transport*” ¹¹. Planning for Sustainable Travel advocates that depending on local context up to 50-100 dwellings per hectare can be achieved in many areas, and even “*100-200 dwellings per hectare around important public transport interchanges*” ¹².

¹⁰ http://www.rcthomes.co.uk/main.cfm?type=PORTHCWLIS&object_id=2745 and <http://www.insidehousing.co.uk/finance/first-welsh-'club'-bond-to-go-ahead/6527222.article>

¹¹ Planning Policy Wales, 2012, p.53

¹² http://www.plan4sustainabletravel.org/key_themes/density/

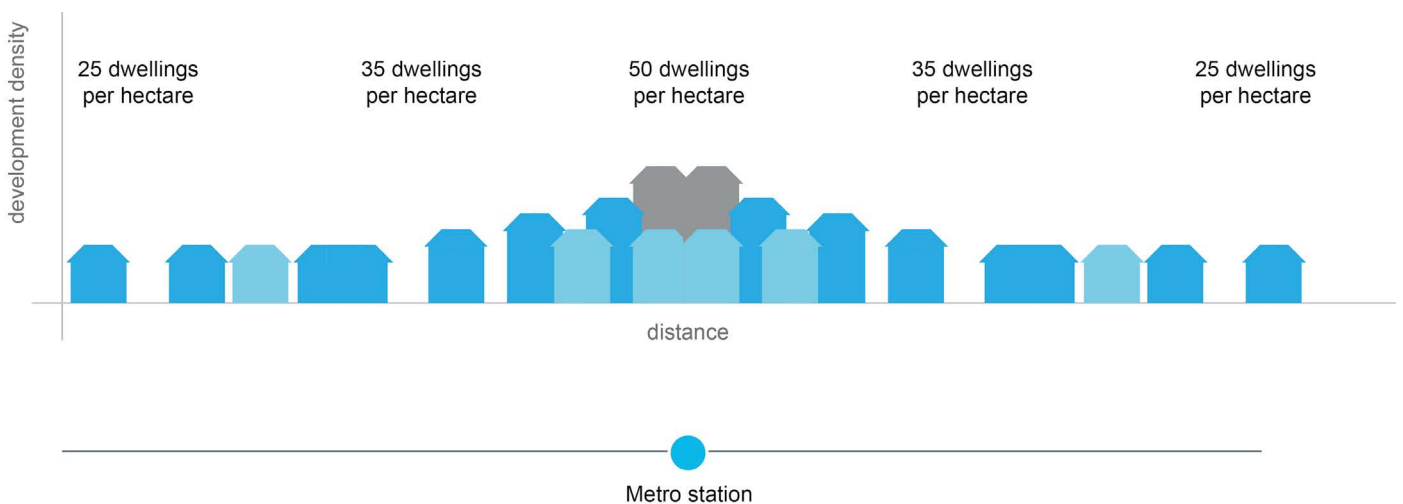


Regeneration Framework

While the latter will not be appropriate throughout the entire Cardiff City Region it is recommended that densities adjacent to key transport interchanges in the more urbanised areas of the region should be maximised. Further work is required to test the impact upon site viability of promoting such high densities, given that the housebuilding industry is geared towards developing sites at around 35-40 dwellings per hectare.

The promotion of housetypes that are suited to car based, suburban developments should not dictate the layout of new places that are developed adjacent to the Metro network. In areas where new places are being created alongside Metro initiatives then these places need to be developed using a mixture of housetypes and arranged in layouts that promote access by walking, cycling, the Metro and bus. Whilst car access will remain important (this paper is not advocating car free developments) the key selling point of new housing development located close to Metro stations will be Metro enabled connectivity. This connectivity can be undermined by poor quality urban design. Where necessary/applicable Local Planning Authorities should issue Supplementary Planning Guidance to establish a benchmark for the kind of development that will be supported adjacent to the Metro, and consequently the kind that will not.

Where the Metro does facilitate residential development (specifically higher density) it will be important that clear design principles are put in place to integrate new development into the transport network and crucially create a sense of place that reflects local distinctiveness and offers residents a place to live that is humane, vibrant and stimulating. The proposed North West Corridor Metro intervention provides the ideal opportunity to test the recommended principles and approach, since the surrounding area (Waterhall to Talbot Green) has been identified as the preferred location for in excess of 10,000 new homes.



Densities adjacent to key transport interchanges in more urbanised areas should be maximised.



Section 02

Regeneration Framework



Upton includes a blend and variety of architectural styles as well as kinds of tenure.



Upton is characterised by the density of units and public realm design that promotes walking and cycling over the private car.



Interesting mews streets link areas of open space.

Upton, Northampton

Upton in Northampton marks a radical departure from the typical cul-de-sac based suburban development which might be expected in a location such as this.

English Partnerships held Enquiry by Design workshops in 1999 and 2001 and created a masterplan and design code, controlling the quality of urbanism and ensuring strict environmental and building design standards.

Approximately 1,200 new residences will be provided in successive phases. Phase 1 was developed by Paul Newman New Homes, and this 3.7 hectare site includes just over 200 homes (55 dwellings per hectare) with a mix of higher density townhouses and apartments, as well as semi-detached and detached homes.

The second development area, developed by Cornhill Estates and Fairclough Homes uses a number of renewable technologies and won the prestigious Building Research Establishment (BRE) Eco-homes Award in 2007. Work is underway on Site D and a total of 600 new homes have been built.



Larger family housing is designed to fit into a high density layout and overlooks public open space.



Regeneration Framework



Upton includes a blend and variety of architectural styles as well as kinds of tenure.



Upton is characterised by the density of units and public realm design that promotes walking and cycling over the private car.



Interesting mews streets link areas of open space.

Staites Southbank, Gateshead

Staites, South Dunston was a collaboration between Hemmingway Design and George Wimpey Plc. This suburban development consists of 697 houses and apartments and 158 have been completed as part of phase one. The density of development is 43 dwellings per hectare.

The scheme boasts a very clear logical street layout which is very much geared to the pedestrian. Homes are arranged based on a grid which makes it easy to navigate and move around.

Car parking is arranged in a mixture of on street and parking courts and the public realm has been designed based upon homezone principles to promote active travel and humane environments.

Price levels at Staites Southbank are, in a national and regional context, affordable, prices started at below £70,000 and rising to £225,000. The whole development is aimed at private buyers as Gateshead Borough Council has no social housing requirement due to their considerable existing stock.



Larger family housing is designed to fit into a high density layout and overlooks public open space.

2.8 Sustaining and Promoting Regional Tourism

Tourism 2020 (2013) identifies that tourism makes a major contribution to the Welsh economy. However, it also states that competition is increasing, and destinations will be required to stand out through providing a bespoke tourism offer that is founded on world-class service. The strategy acknowledges that the current national tourism strategy has made “*good progress in taking forward the priorities and actions identified*”, but states that many of the “*strategic challenges identified in (the current strategy) are still current*”¹³.

To respond to the strategic challenges and ensure that Wales’s tourism offer stands out on the international stage, the strategy proposes to set a new direction for tourism that will “*grow tourism earning in Wales by at least 20% by 2020*”¹⁴. To achieve this the strategy advocates a policy of selective growth, which proposes to increase Wales’s share in the international and domestic market. Improving market share in the selected markets of Germany, US and Ireland is identified as essential to delivering the target.

To grow the share of the domestic and international tourism markets, the strategy identifies that focused investment will be required to improve the quality and range of the Welsh tourism offer. Improved accessibility is identified in the strategy as a focus for investment in its own right. The strategy states “*it is important that we make it easier for visitors to get to and to move around Wales by car or public transport*”¹⁵.

Within this context the Metro is essential to the success of tourism within South East Wales and is integral to the ambition to grow national tourism earnings by 20%. Specifically the Metro will ‘open up’ the South East Wales region so that all of its features can be enjoyed in a concentrated period - the coast, a city and a national park all in 48 hours; improve the experience of visitors travelling to attractions throughout South East Wales; and transform the first impression that all visitors (business and leisure) get when they arrive at key transport gateways such as Cardiff International Airport or Cardiff Central railway station.

Tourists are increasingly seeking out rich and distinctive experiences that are very much rooted in their locale and are identifiably linked to characteristics of the place, its culture, history and traditions. The Metro is an opportunity to provide visitors with more than just a way of moving between attractions because it also creates possibilities to communicate what makes the region distinctive. In this context the Metro itself needs to take care to represent the region through; the design of stations and their surroundings (section 2.6), the branding of the Metro, the quality of other information targeted at visitors and integration with major regional events.

In ‘opening up’ the region, great care should be taken to focus not only on the efficiency of the transport connections but also on the overall experience of using the network and the information that this conveys to visitors about our region.

To ensure the Metro helps to improve the regional tourism offer it will be necessary to integrate Capital Region Tourism and Visit Wales into future Metro planning stages. This will ensure that the Metro is equipped to respond to the needs of the regional tourism offer and help to facilitate the Tourism 2020 Framework Actions Plans.

¹³ Tourism 2020, 2013, p.2

¹⁴ Tourism 2020, p.5

¹⁵ Tourism 2020, p.17



2.9 Health

Our Healthy Future (2011) and Together for Health (2012) are based on the premise that most policy has some impact on health. Establishing healthier communities is therefore an integral component of the holistic approach to regeneration advocated in Vibrant and Viable Places¹⁶. The Metro will contribute to improving health levels through addressing deprivation by increasing connectivity to economic opportunities and education and training opportunities, and improving the quality of housing and the urban environment.

The Metro will support the active travel agenda represented in the Active Travel Bill, which was laid in the National Assembly for Wales in February 2013. One of the key requirements of the Bill is for local authorities to “*continuously improve facilities and routes for pedestrians and cyclists*”¹⁷. The Metro will support this action through encouraging sustainable travel to the network by providing appropriate cycle rental and storage facilities throughout the network. It will also act as the focal point for improving local pedestrian and cycle infrastructure through identifying areas where infrastructure upgrades should be undertaken. The provision of a new tram/train station, for example, will increase footfall through the areas leading to each transport hub and therefore frame routes where pedestrian and cycle infrastructure upgrades should be prioritised.



Example from Copenhagen of integration between transport modes.



The Metro has the potential to encourage active travel.

2.10 Environment and Sustainability

Sustainable Development is a key component of Welsh Government’s approach to governance, and the White Paper A Sustainable Wales Better Choices for a Better Future (2012) marks the next step in setting out a framework to enable the integration of sustainable development practice into all aspect of governance. Currently One Wales: One Planet (2009) sets out Welsh Government’s vision for a sustainable Wales. In the vision the public transport network has a key role to perform, providing “*fast, reliable (and) affordable*” connectivity between “*major settlements*”, and “*frequent, reliable mass transit services within cities and more heavily urbanised regions*”¹⁸.

¹⁶ Vibrant and Viable Places, p.29

¹⁷ <http://wales.gov.uk/about/cabinet/cabinetstatements/2013/Acttravbillintro/?lang=en>

¹⁸ One Wales One Planet, 2009, p.21



Section 02

Regeneration Framework

Within this context the Metro will perform an essential role through providing a level of connectivity between key settlements and the expanding urban hubs of Cardiff and Newport that discourages use of the private car. Improved local bus services to key Metro interchanges will further reduce car dependency, as will improvements to pedestrian and cycle infrastructure supporting key stations, which the implementation of Metro stations for example, will provide an opportunity to address.

This will contribute significantly to national carbon reduction targets, which are seeking to reduce greenhouse gas emissions by 3% per annum and to achieve at least a 40% reduction by 2020 compared to emission levels in 1990¹⁹. However, it is recommended that an independent Strategic Environmental Assessment should be undertaken to ensure that the Metro complies with Welsh Government's commitment to embedding sustainable development into all aspects of governance.

2.11 Summary: A Liveable Capital City Region

Regeneration has been a mainstream activity in South East Wales for generations. Yet problems persist and in some places, tragically, continue to intensify. The fact that much of the Capital City Region continues to qualify for highest tier of European Union funding demonstrates that bold new solutions are required. The Metro is one such solution that can address inequality on a regional scale whilst supporting existing local initiatives that have already been proven to succeed.

Problems of the past cannot be solved via a palliative prescription to regeneration that is retrospective. Turning back the clock is not an option. It is now essential to intervene in a way that enables the region to compete properly in a new context that is now dominated by mega-cities and globalisation. The Metro is a unique opportunity to physically and thematically link together varied regeneration interventions that are otherwise poorly connected and is a way of tackling need by exploiting opportunities on a regional scale. This has not existed before in South East Wales.

In summary, the Metro has the potential to transform the communities, settlements and economies of the Capital City Region by:

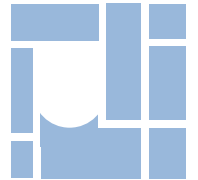
- Enabling the region to compete nationally, continentally and internationally for investment by responding to the societal and economic changes;
- Removing barriers to employment;
- Transforming perceptions that have previously inhibited development viability;
- Responding to changes in business practice that require greater flexibility, collaboration and innovation;
- Supporting the vitality and diversification of land uses in traditional town centres;
- Reinforcing regional character, culture and identity through sensitive design;
- Supporting tourism by celebrating regional distinctiveness and connecting regional visitor destinations;
- Considering new Metro stations as important civic buildings that are key parts of the town centre environment;
- Stimulating the development of new places to live and work that are designed in development patterns that promote the use of public transport; and

¹⁹ <http://wales.gov.uk/topics/environmentcountryside/climatechange/emissions/targets/?lang=en>



3.0 Metro Interventions Regeneration Overview

This section identifies the type of regeneration impact that each strategic Metro intervention could have on the Capital City Region.



3.1 Making Better Use of the Existing Network

New Railway stations

- New railway stations in places like Caerleon or Abertillery will provide communities that are currently disconnected from rail services with access to the network and the economic opportunities located throughout it.

New and Reopened Railway lines

- New Metro lines will increase the connectivity of communities that are currently totally disconnected from the railway line. For example, the reopening of the railway line between Aberdare and Hirwaun will provide the community of Hirwaun with rail access and provide rural communities in Powys with a point of access into the Metro.

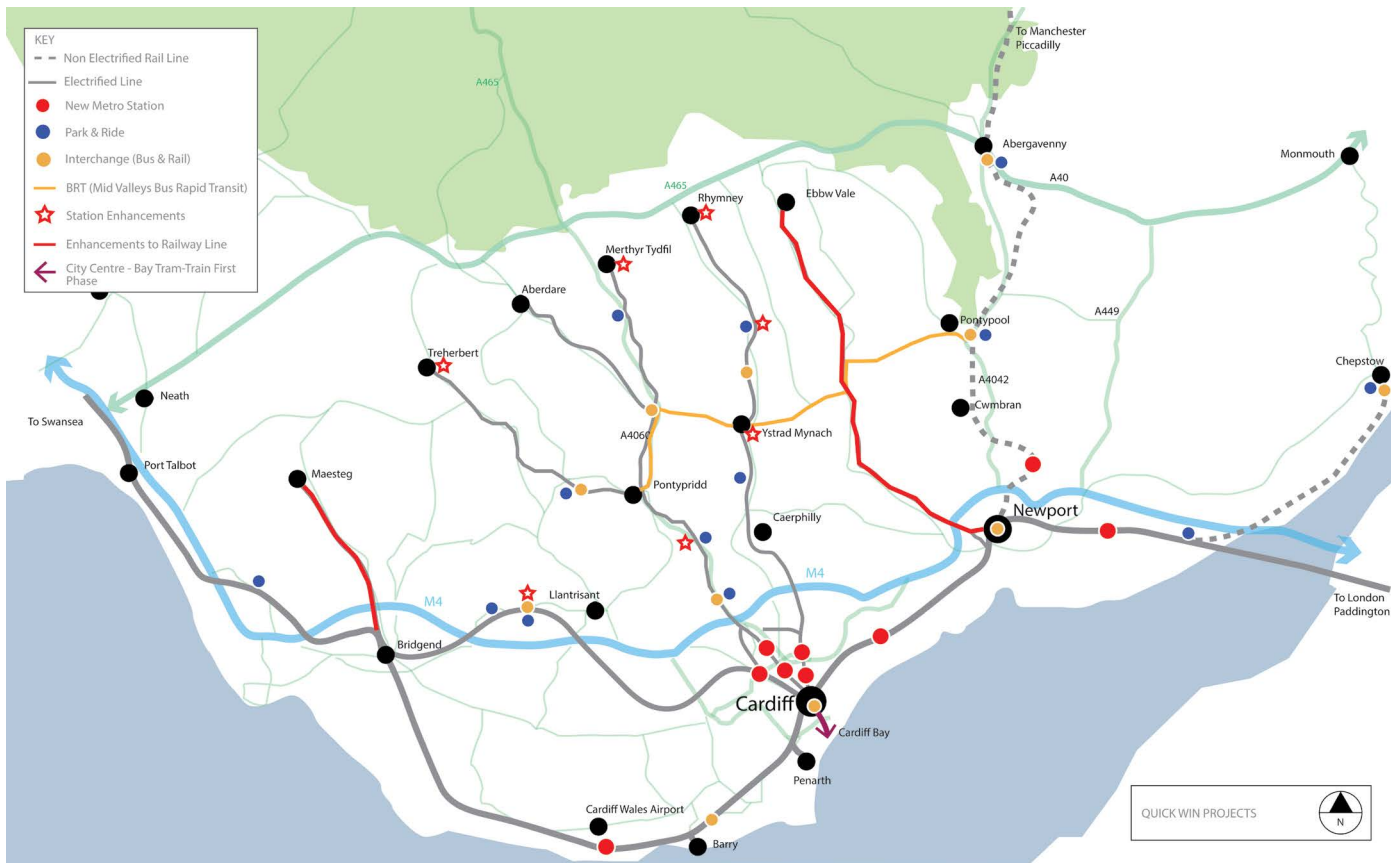
Service Enhancements

- Enhancements to service frequency will make it easier to travel throughout the rail network to access economic opportunities. This will have a particularly positive impact on places like Merthyr, Ebbw Vale and Maesteg, which are currently on the periphery of the region and subject to poor service frequency.

Park and Ride

- Strategic Park and Ride facilities throughout the network will encourage more people to use the rail network to access employment opportunities. This will reduce congestion on the highway network and help to achieve national green house gas emission targets.

Regeneration Overview



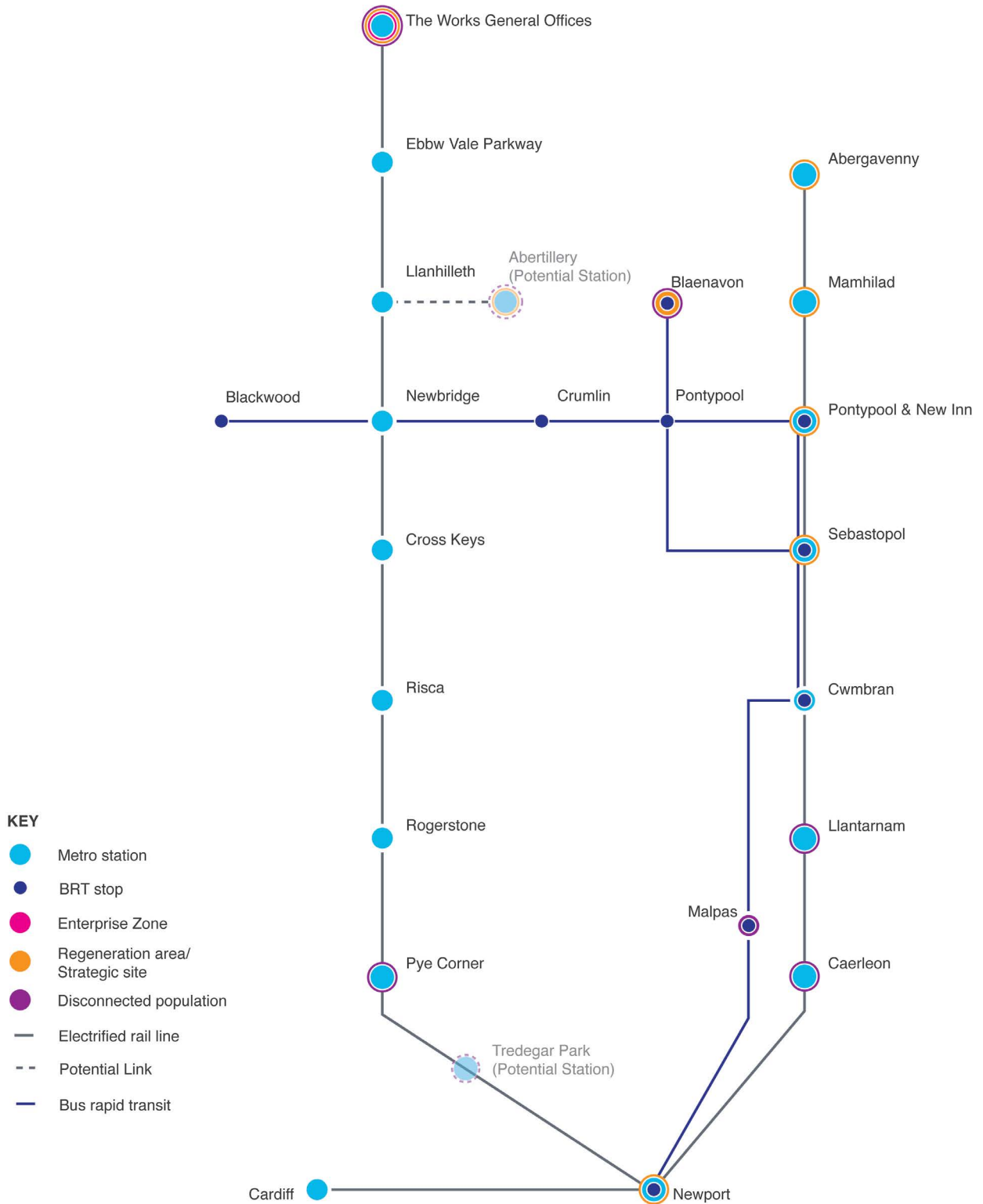
Map of the quick win Metro projects, which include new railway stations, park and ride facilities and service enhancements.

3.2 Ebbw Vale to Newport

- Rail connectivity between Newport and Ebbw Vale will increase visitor numbers to the city centre and encourage investment into the local economy that will stimulate regeneration and growth.
- Improved service frequency to Ebbw Vale will stimulate local regeneration initiatives, complement the Enterprise Zone designation and accelerate economic regeneration.
- Extension of railway line from Llanhilleth to Abertillery will reconnect a significant population currently disconnected from the rail network.



Regeneration Overview



Metro Interventions: Ebbw Vale to Newport and Abergavenny to Newport.



Section 03

Regeneration Overview

3.3 North West Corridor

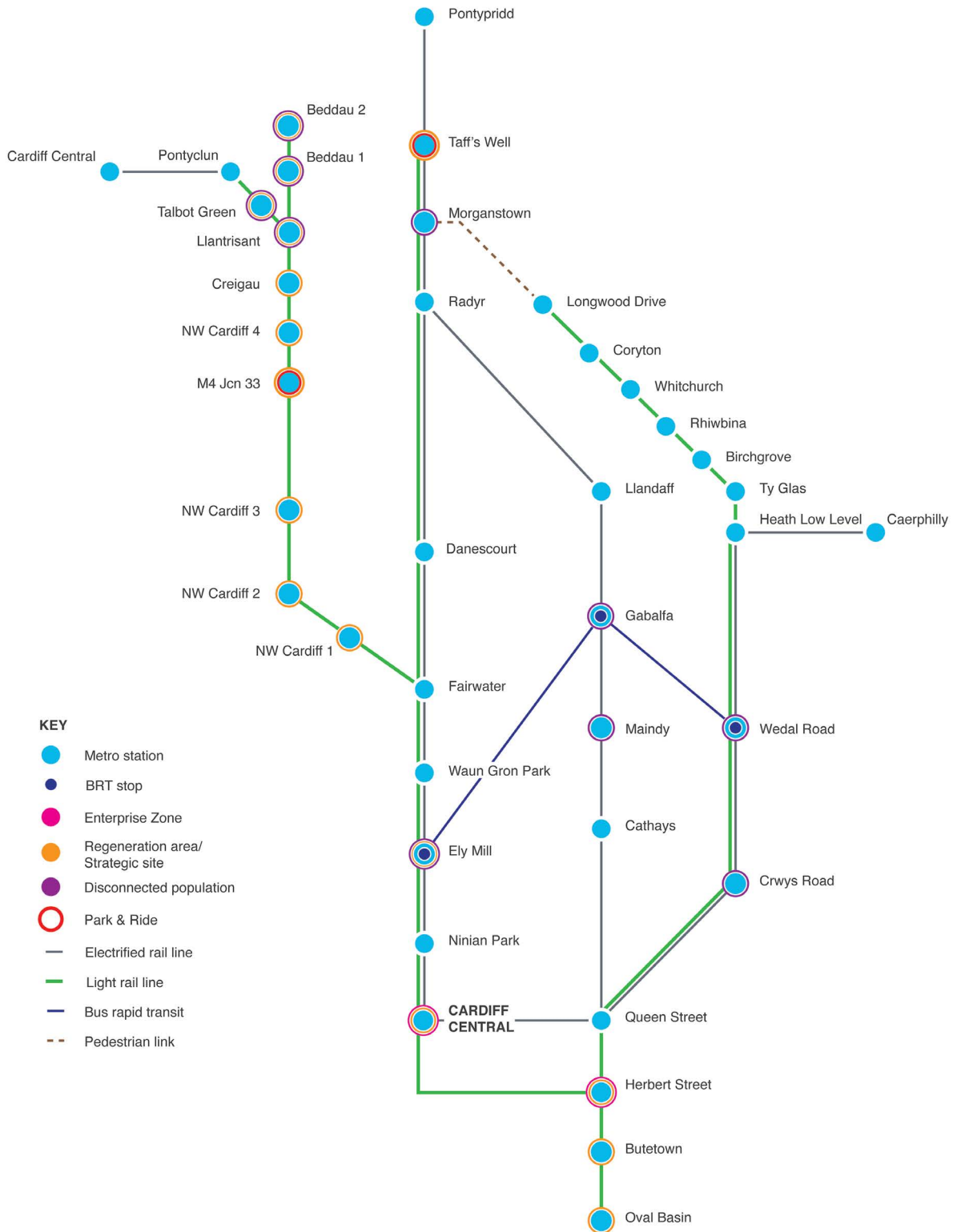
- The interventions will complement the Cardiff Enterprise Zone and ensure that Cardiff continues to attract sustained investment that secures its position as the region's primary economic hub.
- Rail connectivity through North West Corridor will help to deliver residential development that is integral to maintaining Cardiff's economic growth.
- New services through Beddau, Llantrisant, Talbot Green, Creigau and Morganstown will integrate communities currently disconnected from rail into the region's rail network.
- Treforest and Taff's Well industrial estates improved strategic location will result in increased investment that will stimulate their redevelopment.
- Light rail will address the perception of 'disconnection' between Central Cardiff and the Bay and provide the opportunity to improve the interface between both destinations and the traditional local communities.
- Light rail will help the Bay to establish itself as an international business destination.

3.4 Relief Line from Cardiff Central to Newport and Llanwern

- The light rail link between Cardiff and Newport will reinforce the image of a well-connected City Region and encourage investment into both cities that will help to deliver complementary economic growth.
 - The light rail link will improve the accessibility of a number of key employment hubs located between Cardiff and Newport (St Mellons, Coedkernew, Glan Lyn etc) and increase the likelihood of further investment into each of these hubs.
 - New services through Splott, Tremorfa, Pengam, Rumney St Mellons, West Newport Pillgwellny and East Newport will integrate communities currently disconnected from rail into the region's rail network and provide the opportunity to undertake community regeneration initiatives.
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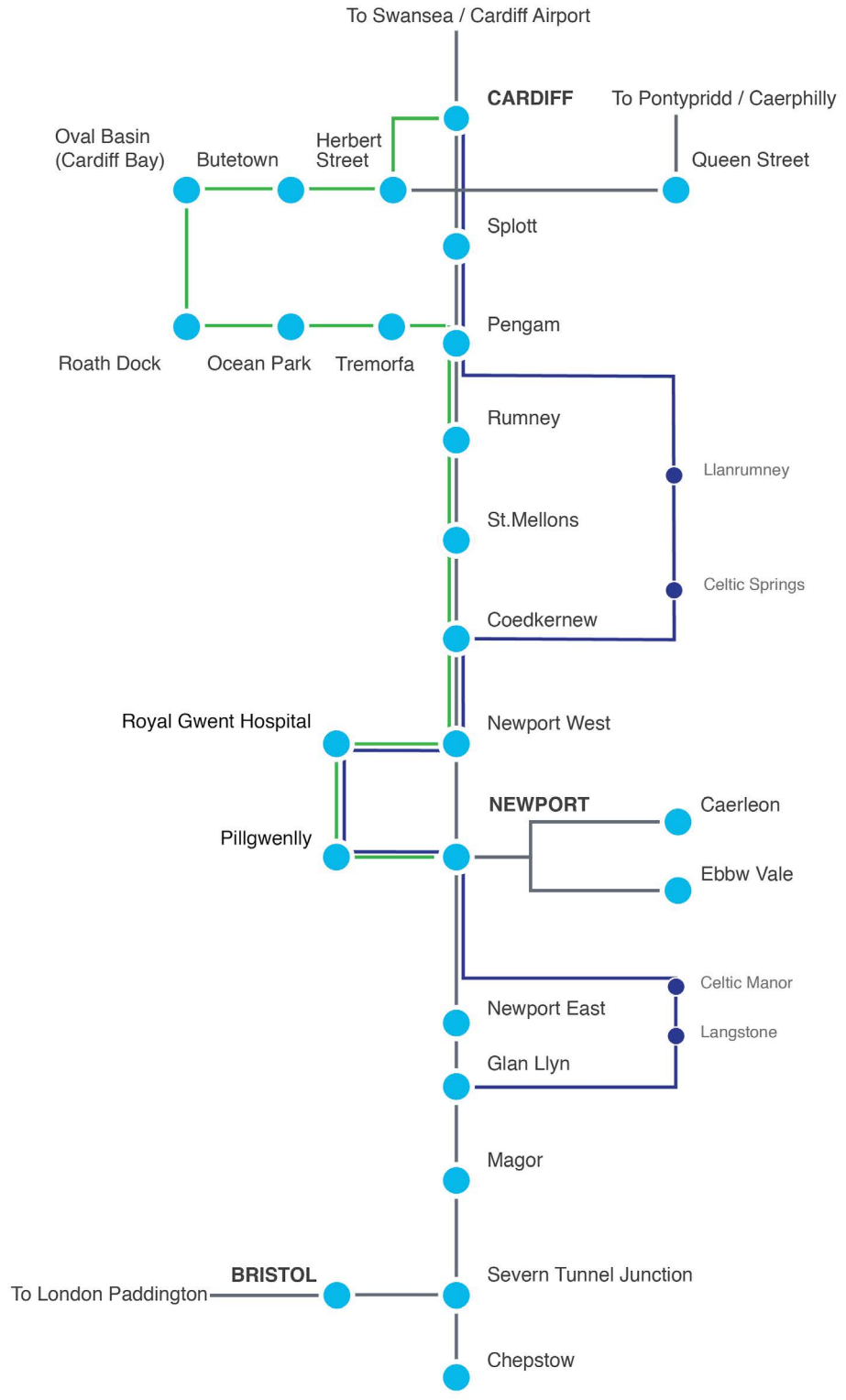
Regeneration Overview



Metro Intervention: North West Corridor.

Section 03

Regeneration Overview



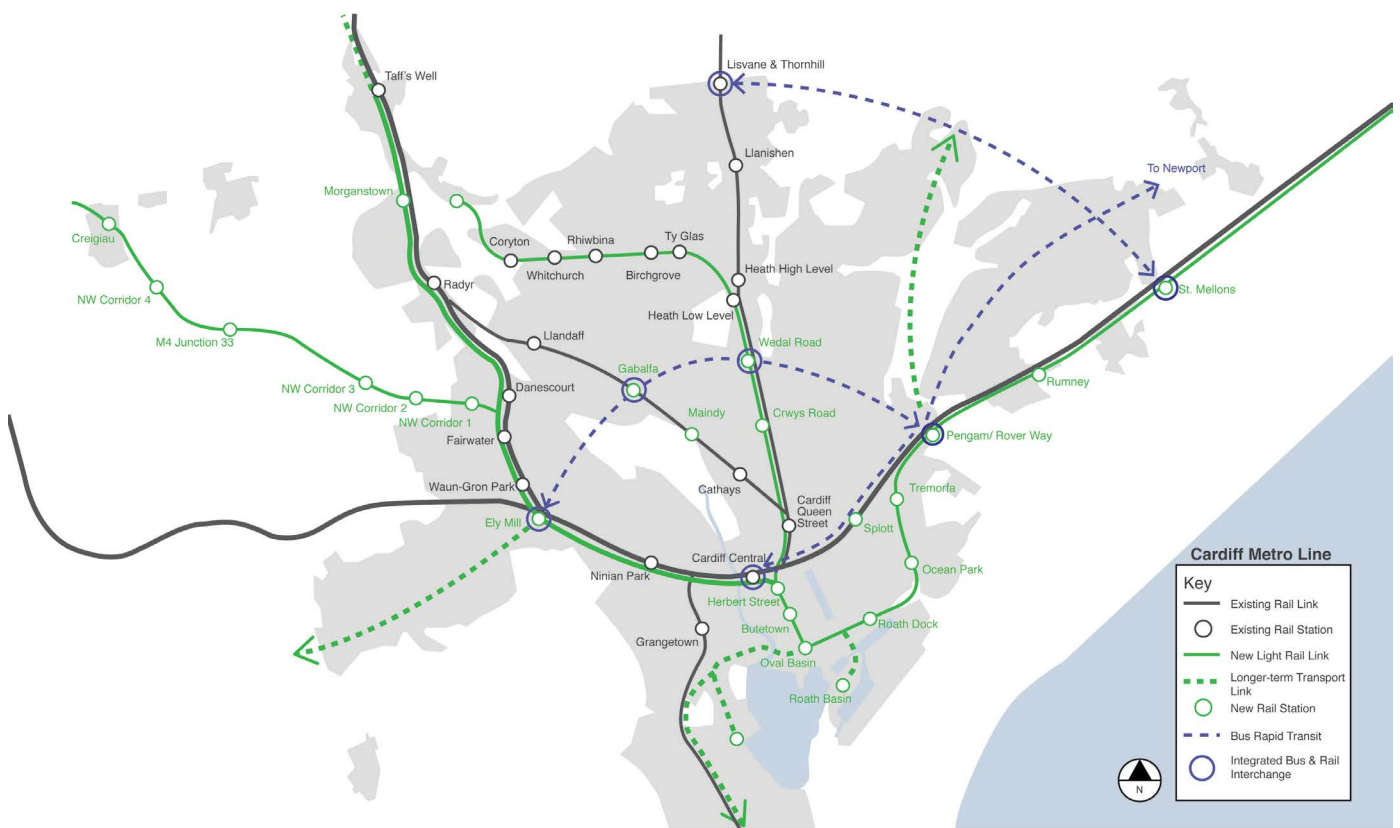
- KEY**
- Metro station
 - BRT stop
 - Electrified rail line
 - Light rail line
 - Bus rapid transit

Metro Intervention: Relief line from Cardiff Central to Newport and Llanwern.



3.5 Rapid Transit in Cardiff

- Rapid transit services (via Bus Rapid Transit or light rail) between the city centre and west and east Cardiff will complement improvements to the existing rail network and ensure that these areas benefit from good connectivity to economic opportunities located in the centre. The connections will also encourage investment into the established business destinations located in each area (Culverhouse Cross, St Mellons and Pontprennau).



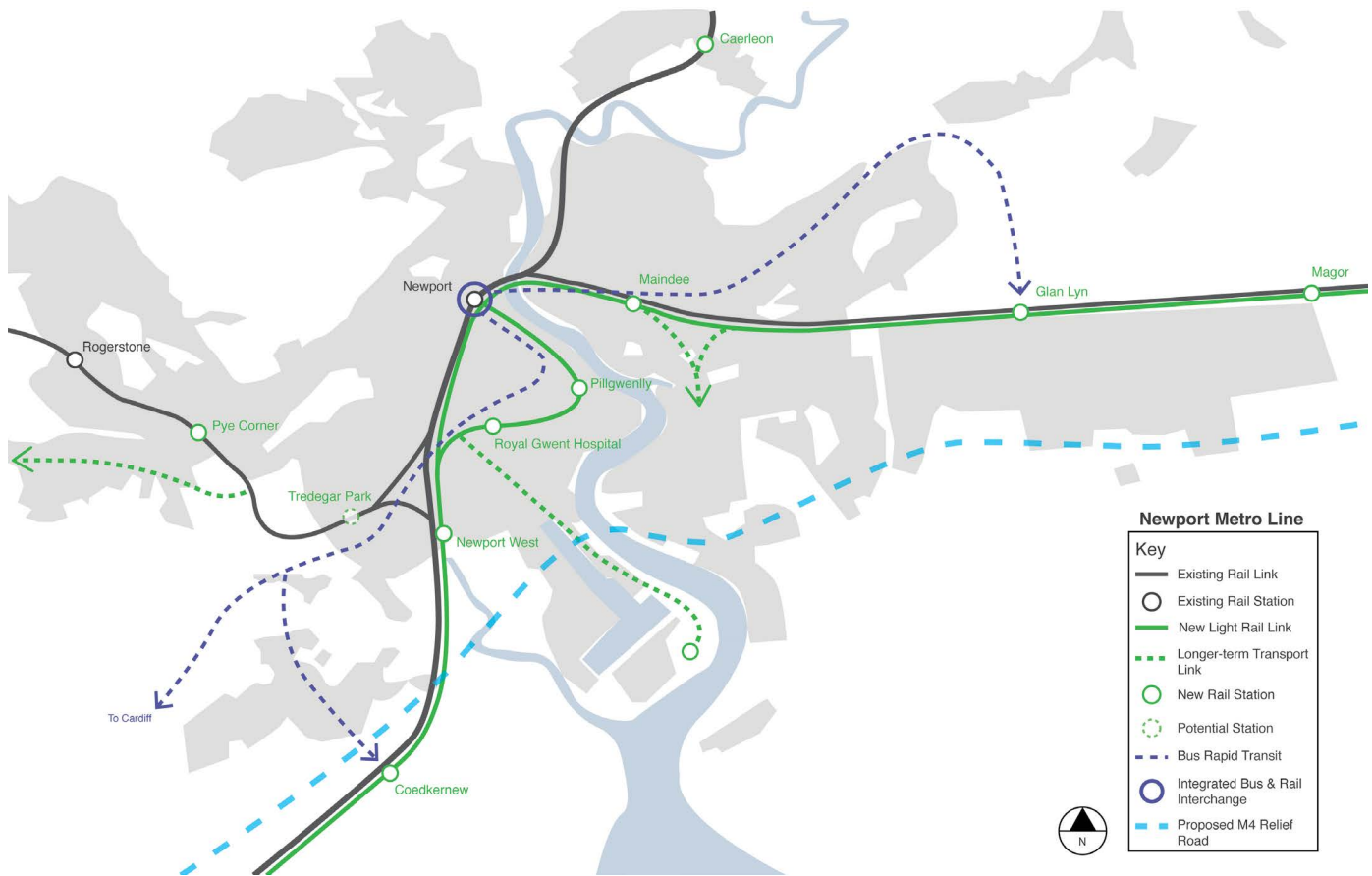
The Cardiff Metro network, including Bus Rapid Transit.

3.6 Rapid Transit in Newport

- A rapid transit service (via Bus rapid Transit or light rail) between Newport and Cardiff will complement the proposed light rail connection between the two cities and ensure that communities like Llanrumney or Duffryn, which do not benefit from access to the railway line, are served by a strategic transport connection that provides access to the railway line and economic opportunities in Cardiff and Newport.

Section 03

Regeneration Overview



The Newport Metro network, including Bus Rapid Transit.

3.7 Newport to Abergavenny

- New railway stations at Sebastapol and Mamhilad will help to stimulate local development opportunities.
- A new railway station in Caerleon will reconnect a significant population currently disconnected from the rail network.
- The provision of a bus and rail interchange to link the proposed regional Bus Rapid Transits (refer to intervention) to the Abergavenny railway line will assist in the ongoing regeneration of Pontypool town centre.
- The park and ride at Pontypool and New Inn station will provide rural communities in Monmouthshire with a hub from which they can access the regional rail network.



3.8 Regional Bus Rapid Transit

Mid Valleys (Pontypridd to Pontypool)

- The transit will provide an essential west - east connection through the mid valleys that will complement the north - south connectivity provided by the key railway lines and enable communities in the Valleys to travel west or east (to access economic opportunities) without having to travel south to transfer in Cardiff.
- The transit will complement Pontypridd's location on the periphery of the North West Corridor and establish the town as a key hub within the regional network. This will help the town to become a significant employment, leisure and retail centre.
- The transit will establish mid Caerphilly valleys (Nelson, Ystrad Mynach and Newbridge) as a key transport corridor. This will encourage continued investment, which will help the corridor to become a strong sub-regional hub.

Heads of the Valleys (Aberdare to Abergavenny)

- The transit will provide a west - east connection that will complement north - south travel connectivity provided by the railway lines, and provide residents of these communities with direct access to economic opportunities located in the Heads of the Valleys corridor.
- The transit will have a particularly positive impact on Tredegar, which is currently disconnected from the railway line through connecting the town to rail links in Ebbw Vale, Rhymney and Merthyr.
- The transit will provide access to natural tourism opportunities in the Valleys Regional Park, Brecon Beacons Park (via one of the Heads of the Valleys settlements) and Monmouthshire.

Blaenavon to Newport

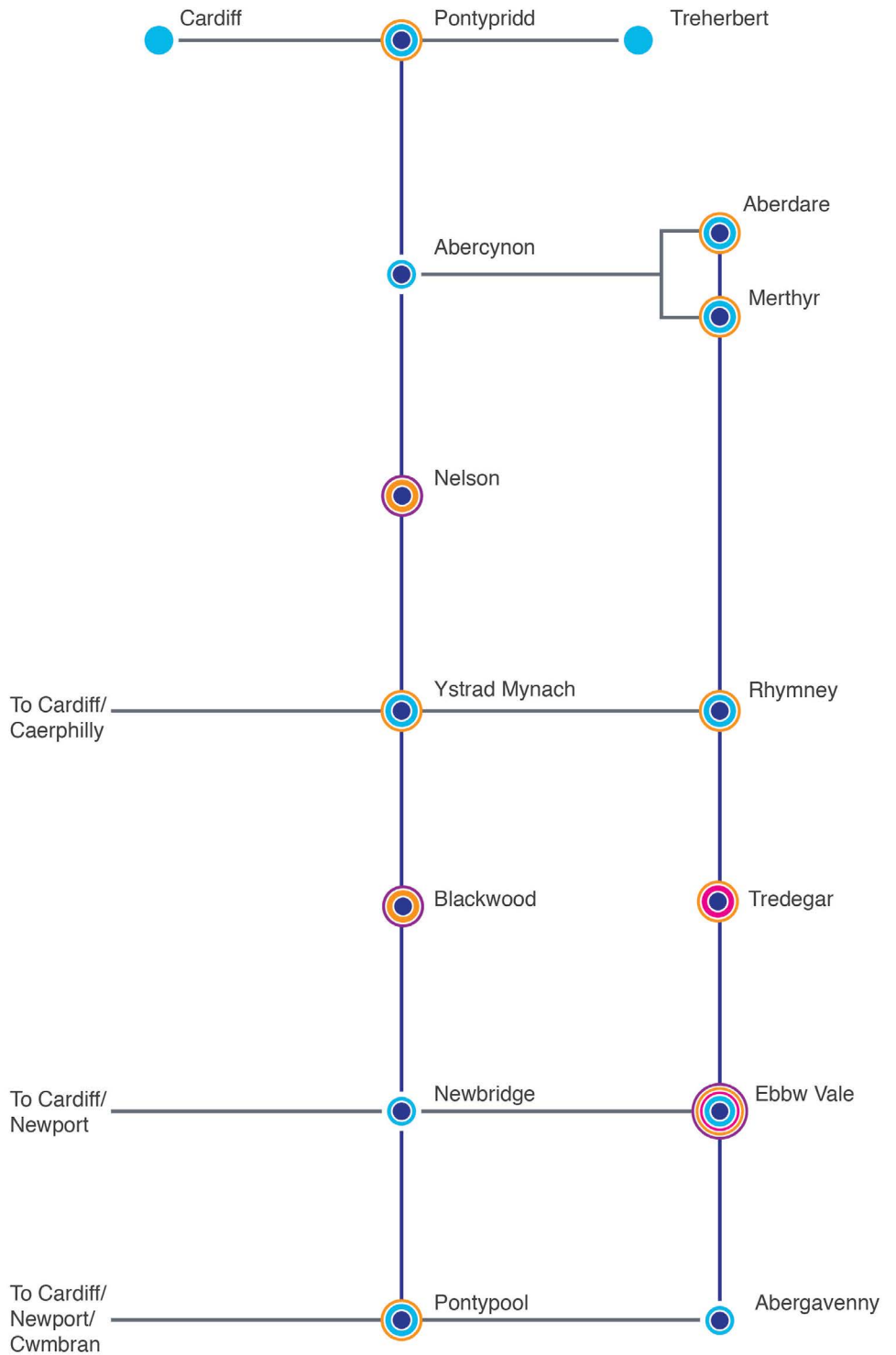
- The transit will connect Blaenavon to the railway line and provide direct access to Newport, both of which will help to complement ongoing regeneration initiatives.
- The transit will integrate Blaenavon's heritage tourism attractions into the regional public transport network.
- Combined with the Mid Valleys transit the intervention will establish Pontypool as an essential hub in the regional transit network. This will stimulate the town centre's ongoing regeneration.

Bridgend to Porthcawl

- The transit will connect communities in west Bridgend and Porthcawl to the regional rail network.
- Porthcawl's improved connectivity will increase the visitor number and investment, which will improve the tourism economy and stimulate the town's ongoing regeneration.

Section 03

Regeneration Overview



KEY

- Metro station
- BRT stop
- Enterprise Zone
- Regeneration area/ Strategic site
- Disconnected population
- Electrified rail line
- Bus rapid transit



Regeneration Overview



- KEY**
- Metro station
 - BRT stop
 - Regeneration area/ Strategic site
 - Disconnected population
 - Electrified rail line
 - Bus rapid transit
 - Light rail line

Metro Intervention: Bridged to Porthcawl Bus Rapid Transit.



Section 03

Regeneration Overview

3.9 Cardiff Airport

- A new railway station on the Vale of Glamorgan line, or alternatively a new rail connection will integrate the airport into the Capital City Region network and provide a level of connectivity that enables the airport to evolve into an international transport and business hub.

3.10 Interchange Enhancements

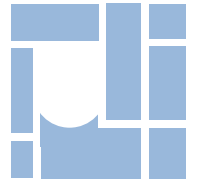
- Interchange enhancements at key stations throughout the rail network will link the regional network to local bus services and in some instances the Bus Rapid Transit services. Interchanges will provide the opportunity to create 'gateway' spaces to a centre, and should be subject to a strong set of design principles to ensure that they contribute to the local 'sense of place'.





4.0 Place Specific Opportunities

This section explores the regeneration opportunities that will be facilitated by the Metro in a series of places throughout the Capital City Region. The impact that Metro will have on each place is identified through considering the proposed Metro interventions within the context of the unique local development opportunities available.



4.1 Central Cardiff and the Bay

Central Cardiff, the Bay and the Metro

Central Cardiff and the Bay are integral to the economic growth of the Capital City Region, and the Metro is integral to facilitating and sustaining the area's long-term growth through providing the connectivity to the wider region. This will attract the long-term investment required to establish Cardiff Central and the Bay as a 'world-class' tourism and business destination.

Metro Interventions

The following Metro Interventions will have an impact on Central Cardiff and the Bay:

- Make better use of existing network following the Valleys Lines Electrification and the Cardiff Area Signalling and Renewal Project
- North West Corridor: Rapid Transit / Tram-train line from Cardiff Bay to RCT
- Relief Line from Cardiff Central to Newport and Llanwern
- Other Rapid Transit in Cardiff
- Interchange Enhancements

Regeneration Context

The local regeneration context that the Metro needs to be considered within is summarised below:

- The Bay is a key tourism asset but requires a 'step change' to progress into a sophisticated cultural, tourism and business destination;
- The bay is currently accessible by bus and rail, and has cycling and pedestrian connections to the city centre, but it is perceived as 'disconnected';
- The perception of 'disconnection' weakens Cardiff's tourism and business offer, which is part based on Cardiff as a waterside city – in reality there is currently little connection with the water from the city centre;
- Butetown is isolated from the redeveloped areas of the bay, and the local community feel fragmented from the initial benefits of the Bay's regeneration;

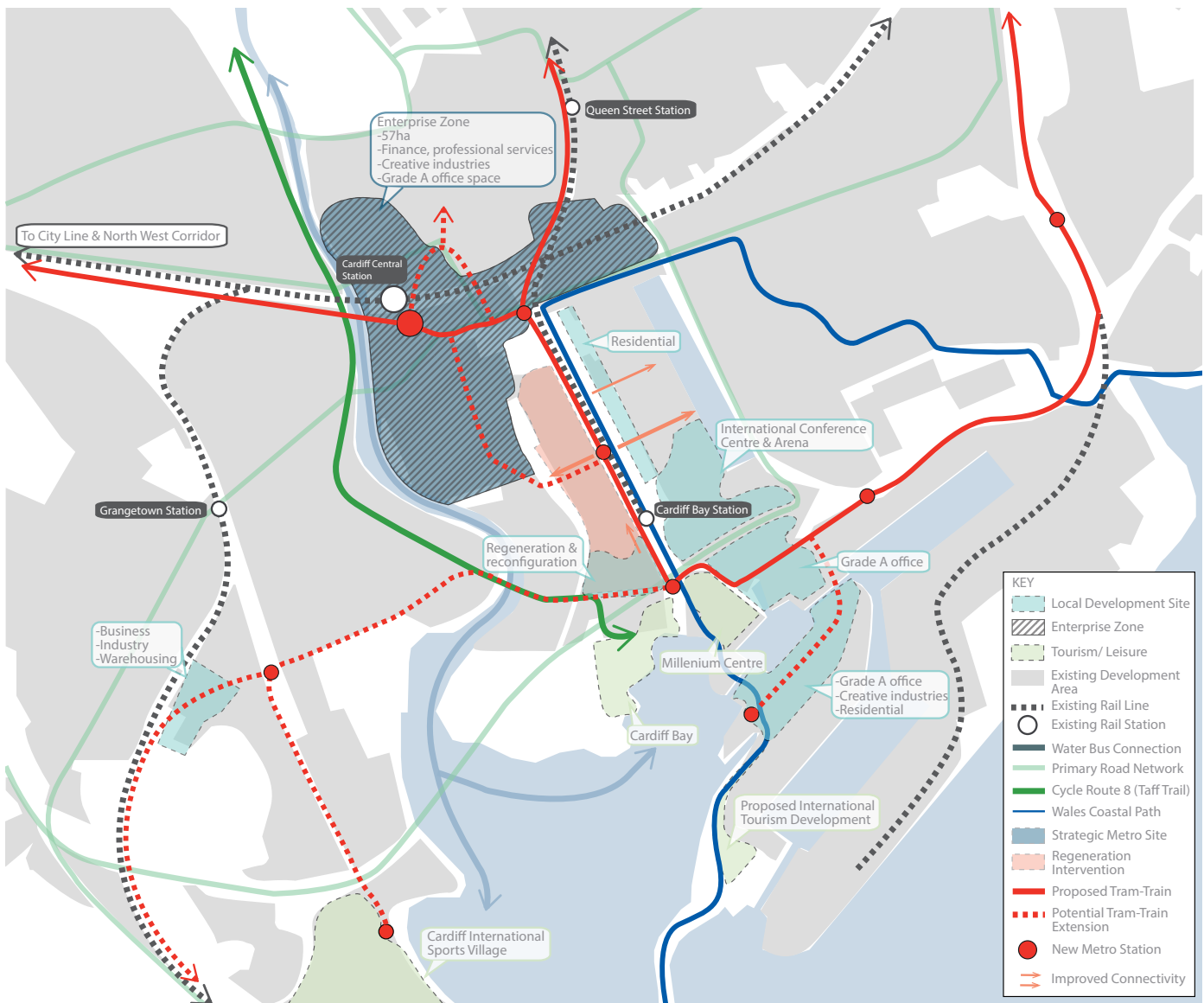
Section 04

Regeneration Opportunities

- The designation of the Enterprise Zone around Cardiff Central station provides an opportunity to redesign the station and surrounding environment to improve connectivity to Butetown and the Bay by a range of sustainable transport modes; and
- Rebuilding Momentum identifies a development vision to deliver further economic growth to the Bay; implementation of the vision will provide the opportunity to implement a series of design interventions that can deliver a more inclusive and vibrant environment.

Regeneration Opportunities

The regeneration opportunities associated with the recommended interventions are visualised and described below:



Spatial analysis of regeneration opportunities in Central Cardiff and Cardiff Bay.



Regeneration Opportunities

Connectivity to Employment and Business Opportunities

- Although Central Cardiff and the Bay are serviced by frequent bus services, the proposed light rail and light rail link to the existing rail network on Rover Way will make travelling between the city centre, the Bay and the wider south Cardiff area more convenient, and increase the ease with which residents throughout the south Cardiff network can access employment and business opportunities in Central Cardiff, the Bay and wider Capital City Region. This will have a particularly positive impact on economic activity levels in south Cardiff, which has traditionally been one of the most economically deprived areas ²⁰.

Unlock Employment and Housing Opportunities

- Implementation of the proposed Metro interventions to the wider South East Wales public transport network will ensure that the Capital City Region is serviced by a skilled, knowledgeable and connected labour force. This will be viewed as a key strength by prospective investors and help to establish Cardiff as an international business destination. The increased connectivity of the labour market will complement the Enterprise Zone designation and have a particularly positive impact on ambitions to establish a Central Business District around Cardiff Central station. Delivering the district will develop 57ha of land that will create thousands of jobs in the financial and professional services and creative industries, delivering a major boost to the regional economy.
- The improved connectivity provided by the light rail will help to facilitate the investment required to deliver the development opportunities promoted in Rebuilding Momentum. Implementation of the vision promoted in the document will provide an International Conference Centre and Indoor Arena, deliver approximately 7,000 new dwellings (including those in the consented Porth Teigr scheme) and deliver thousands of job opportunities in the professional services and creative industries ²¹. In this respect, the Metro will perform an integral role in transforming the Bay and reinvigorating Cardiff's economic performance.

Placemaking and Vitality

- The improved connectivity delivered by the Metro throughout south Cardiff will increase economic activity throughout the area, which will in turn increase the expenditure that local people can afford to invest into their local communities. It will also increase visitors to the city centre and the Bay. Combined this will have a positive impact on all the vitality of existing settlements and contribute to their ongoing regeneration.
- The proposed Metro interventions will deliver improved connectivity to communities in Butetown and Grangetown and will 'reconnect' communities in Tremorfa, Splott and Adamsdown to the railway line. It is recommended that a design strategy should be prepared for each physical Metro intervention (for example a new station) to ensure that each intervention reflects and enhances the local sense of place, responds to the vision set out in Rebuilding Momentum and contributes to the ongoing regeneration of each community. An example of how this could be achieved in South Loudon Place, where a new tram station is proposed is illustrated on p13.

Tourism

- Cardiff City Council is currently undertaking a study to identify the actions required to enable the Bay to make a 'step change' and transform itself into an international tourism destination. The increased sophistication of the public transport links delivered between the city centre and the Bay by the Metro will have a key role to perform in attracting the investment and 'world class' developments required to enable this transformation.

²⁰ Background Technical Paper No1 Initial Sustainability Appraisal Report, Appendix B, Baseline Information to the Cardiff Local Development Plan, October 2012, p.3

²¹ Green Paper, Rebuilding Momentum, March 2013, pp.16-17

Regeneration Opportunities

- The light rail will improve connectivity to the Bay from key public transport hubs in the city centre (Cardiff Central and Queen Street station). Improved connectivity through such modes of transport will help to address the issue of 'disconnection' between the Bay and city centre, and provide a key marketing tool for the city's tourism strategy. It is recommended that the light rail and new stations should be integrated into the redesign of Cardiff Central station and the wider environment so that they enhance the experience for visitors arriving in Cardiff.
- The integration of an improved water connection into the redesign of Cardiff Central station will immediately demonstrate to visitors that Cardiff is actually a waterside city. The provision of a service that takes visitors directly to tourism and leisure facilities in the Bay will also create the opportunity to provide a 'unique' visitor experience. Both will help to strengthen the city's tourism offer.
- The proposed extension of the light rail from the Oval Basin provides the opportunity to connect the leisure tourism offer in the Bay with the activities based appeal of the Cardiff International Sports Village. This will enable visitors to access both destinations in a single trip, which will help to diversify Cardiff's tourism offer ²².

4.2 The North West Corridor

The North West Corridor and the Metro

In other areas of the region the Metro is a catalyst to stimulate development in challenged markets. However, in the North West Corridor there is a growth agenda that is constrained by poor connectivity and limited capacity on the highway network. The Metro therefore has the potential to overcome strategic constraints and deliver investment that will contribute to the economic growth of Cardiff, Rhondda Cynon Taf and the wider Capital City region.

Metro Interventions

- Make better use of existing network following the Valleys Lines Electrification and the Cardiff Area Signalling and Renewal Project
- North West Corridor: Rapid Transit / Tram-train line from Cardiff Bay to RCT
- Other Rapid Transit in Cardiff
- Interchange Enhancements

Regeneration Context

The local regeneration context that the Metro needs to be considered within is summarised below:

- The North West Corridor is a major growth zone within the sub region, with approximately 10,000 new homes, 20ha of employment space and new retail and community facilities proposed;
- In Rhondda Cynon Taf the proposed growth is focused on Talbot Green, Llantrisant, Beddau, Llantwit Fadre and Church Village;
- In Cardiff the proposed growth is located to the west of Pentreban, north of the M4 Junction 33 and south of Creigau;
- Pontypridd Town Centre (located in the north of the corridor) is a sub regional retail centre that is subject to ongoing public sector investment to enable it to perform its function as regionally important retail and service centre;

²² Alternatively improved public transport connections to the Cardiff International Sports Village could be delivered through the provision of a bus service from a bus and rail interchange at Cogan railway station.

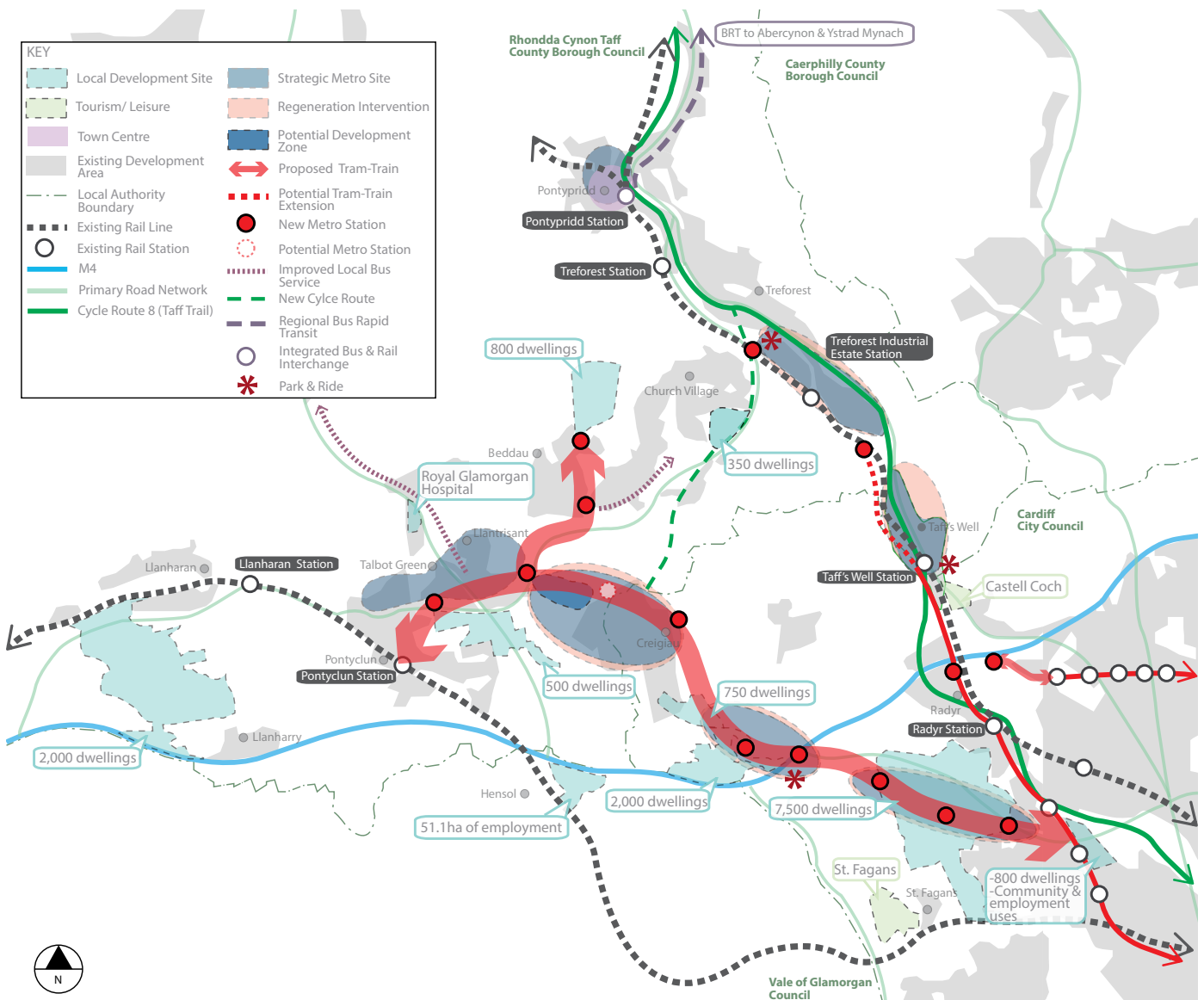


Regeneration Opportunities

- The University of South Wales has a strong presence within the corridor;
- The area is the location of the Royal Glamorgan, which is currently a regional important health facility; and
- Castell Coch and the Museum of Welsh Life at St Fagans, which are regionally important tourist attractions, are located within the corridor.

Regeneration Opportunities

The regeneration opportunities associated with the recommended interventions are visualised and described below:



Spatial analysis of regeneration opportunities in the North West Corridor.

Regeneration Opportunities

Connectivity to Employment and Business Opportunities

- Improvements to established services and the provision of the proposed Creigau and Beddau railway lines will improve connectivity between the North West Corridor and enable more people (many of which are currently disconnected from rail services) to access employment and business opportunities located in Central Cardiff via public transport. This will have a positive impact on economic activity and strengthen local economies within the corridor. However, it will also have a positive impact on Cardiff's economy and enable it to fulfil its function as the main economic driver within the Capital City Region. Specifically the Metro will encourage more individuals to commute into the city, which will help to provide the critical mass of labour that the city requires to maintain its economic growth, and will also increase the presence of higher value industries and employment opportunities within Cardiff.
- Connecting the proposed Beddau railway line to the London Paddington rail via Pontyclun railway station will provide the opportunity to run a circular service through the corridor. This will provide residents with a choice on how to access Cardiff, and will also increase accessibility to economic opportunities located to the west in Bridgend and Swansea.
- The extension and connection of the Coryton line to the City line (via a pedestrian connection across the river Taff) will complement improved accessibility between central Cardiff and the surrounding North West Corridor through improving west-east connectivity within Cardiff. This will increase the ease with which commuters travelling north and south on the City line can access existing major employment locations situated out of central Cardiff in areas such as Llanishen (HMRC Offices) and the Heath (University of Wales Hospital).

Unlock Employment and Housing Opportunities

- The proposed new rail connections will improve connectivity to and therefore increase the viability of developing a number of prominent residential schemes in both Cardiff and Rhondda Cynon Taf. The Creigau line, for example, will increase connectivity through North West Cardiff where approximately 10,250 dwellings have been proposed. Meanwhile the Beddau line will increase connectivity between Pontyclun and Beddau where 1,100 dwellings are allocated. Delivering these dwellings will help to address local housing need and improve the choice and quality of local housing available in both Cardiff and Rhondda Cynon Taf. With respect to Cardiff, the dwellings will also make a significant contribution to ensuring that Cardiff will be able to accommodate the projected population growth and continue to fulfil its economic function as a capital city.
- The extension of the Creigau line to the Beddau line will provide the opportunity to deliver further development along the proposed new rail corridor (subject to local environmental constraints).
- Delivering the proposed Creigau line will ensure that the Welsh Government owned land near junction 33 of the M4 is connected to the wider Capital City region by both the public transport and the national motorway network. In particular the line will connect the site and the M4 directly to the Cardiff Enterprise Zone. This provides an opportunity for the site to perform a supplementary function to the Enterprise Zone through accommodating complementary investment that cannot be accommodated in the zone itself. It is therefore recommended that a mixture of employment uses should be considered for inclusion within the south of the proposed development site.
- Improved connectivity and increased residential development throughout the corridor will increase the likelihood of renewed investment into significant existing employment centres. The strategic Metro sites of Treforest and Taff's Well Industrial Estate, for example, will benefit from heightened investment interest due to their rail connections, and it is recommended that a development brief is required for the sites to ensure that investment contributes to their regeneration. At this stage it is envisaged that the brief should promote a mix of uses that will enable the estates to accommodate contemporary employment premises, and facilitate improved connectivity between the regional rail and highway network.



Regeneration Opportunities

Placemaking and Town Centre Vitality

- The improved economic activity levels delivered throughout the North West Corridor by the Metro will increase the expenditure that individuals are able to invest into the local economy. This will have a positive impact on the vitality of all established retail centres adjacent to railway lines (Fairwater, Radyr, Taff's Well, Llantrisant and Talbot Green) but notably Pontypridd Town Centre, which will benefit from the combination of improved rail connectivity and the Bus Rapid Transit to Pontypool. This will establish Pontypridd as a key hub within the South East Wales Metro network and will increase visits to the town centre. This will help to diversify and improve the retail economy, enhance the town centre's sense of place and improve its potential to act as sub-regional employment centre.
- The implementation of the interchange in Pontypridd Town Centre has the capacity to complement increased expenditure, through providing the opportunity to improve the design of Pontypridd railway station and its interface with the town centre. This will improve the quality of experience that visitors have when arriving in Pontypridd and encourage return visits.
- Similarly the provision of new rail infrastructure in Beddau, Llantrisant and Talbot Green provides the opportunity for the Metro to create 'gateway' spaces to each centre that are bespoke to the local area and enhance each centre's sense of place.

Tourism

- Increased connectivity to Taff's Well provides the opportunity to establish it as potential tourism hub for accessing the Taff Trail and exploring the southern Taff Valley that includes the regional tourism attraction of Castell Coch. To enable Taff's Well to perform this function it is recommended that cycle rental facilities should be provided in the railway station and that the pedestrian and cycle links to the surrounding environment, in particular to the Taff Trail, should be improved. The latter could be further explored in the development brief recommended for the area.

4.3 Barry and St.Athan

The Barry and St Athan Corridor is an area of significant economic opportunity. However, in order to fulfil this potential it must attract economic investment, deliver effective regeneration and strengthen its tourism offer. The Metro can help to address all of these issues and establish the area as an attractive and vibrant hub within the wider Capital City Region.

Metro Interventions

- Make better use of existing network following the Valleys Lines Electrification and the Cardiff Area Signalling and Renewal Project
- Other Rapid Transit in Cardiff
- Cardiff Airport
- Interchange Enhancements

Regeneration Context

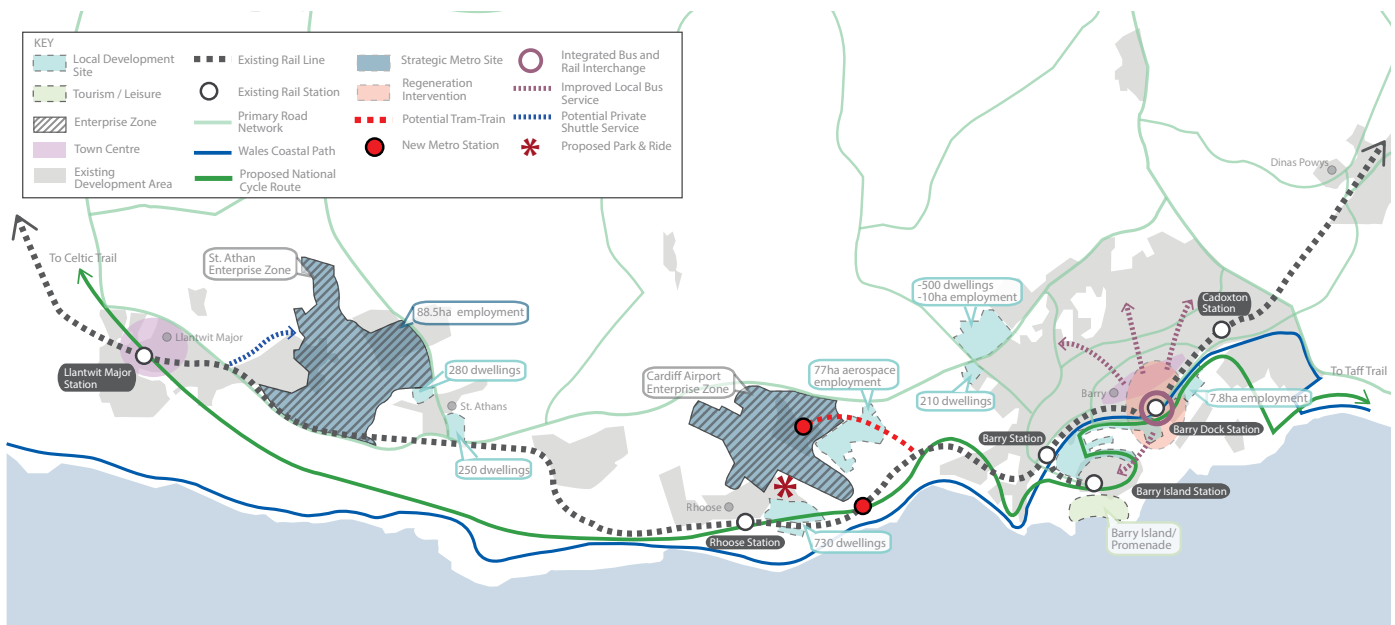
Regeneration Opportunities

The local regeneration context that the Metro needs to be considered within is summarised below:

- Cardiff Airport and St Athan are key economic drivers for the area and are designated as an Enterprise Zone for the aerospace and defence sectors;
- Cardiff Airport is subject to ongoing investment and design intervention to enable it to fulfil its potential as a key driver in the South East Wales economy;
- Barry Waterfront is a key regeneration zone that is subject to ongoing investment;
- Barry Town Centre is an established retail centre but requires further investment and regeneration;
- A design intervention is required to improve connectivity between Barry Waterfront and Barry Town Centre;
- Barry Island is a key regional tourism destination that is currently subject to ongoing regeneration and investment; and
- The wider Barry area is well connected by rail with stations at Cadoxton, Barry Docks, Barry and Barry Island.

Regeneration Opportunities

The regeneration opportunities associated with the recommended interventions are visualised and described below:



Spatial analysis of regeneration opportunities in Barry and the wider Vale rail corridor.



Focussed spatial analysis of regeneration opportunities in Barry.

Connectivity to Employment and Business Opportunities

- Due to capacity constraints on the Vale of Glamorgan line, electrification will not improve service times between the Barry area and Cardiff. However, the provision of an integrated bus and rail hub at Barry Docks that provides high frequency local bus services will improve the ease with which local people can access the railway line and employment opportunities in Cardiff and eventually Cardiff Airport. This will have a positive impact on local employment levels, and improve the business environment.

Unlock Employment and Housing Opportunities

- Increased connectivity to Cardiff Airport will decrease journey times from the airport to Cardiff City Centre and build upon the Cardiff Airport Express, which was launched in August 2013. This is essential to attract private sector investment and to diversify and increase the destinations that can be accessed from the airport. Increased connectivity can be provided through the provision of a new rail connection from the existing Vale of Glamorgan line or alternatively through the provision of a new 'Cardiff Airport' railway station on the existing Vale of Glamorgan railway line that provides passengers with a quick and easy transfer to the airport²³. Both interventions will significantly increase the accessibility of the airport and contribute (alongside the Enterprise Zone incentives) to the creation of increased employment opportunities in the airport itself and on adjacent land where 77ha of aerospace related business use is proposed. This would have a significant impact on the local economy.

²³ Two Metro interventions have been considered for accessing Cardiff Airport to accommodate future changes to the layout of the airport.

Regeneration Opportunities

- The St Athan Enterprise Zone is located approximately 1.5 miles from Llantwit Major railway station. Due to constraints on the existing line and the nature of the site no Metro intervention is proposed. However, it is proposed that a private 'shuttle' service from Llantwit Major railway station to the site could be implemented as the latter matures into a business centres so that existing and emerging employment opportunities can be accessed by rail ²⁴.
- The Barry Waterfront regeneration area is well connected by rail and the provision of a bus and rail interchange in Barry Docks will increase connectivity of the regeneration area and be a key marketing tool for attracting buyers and future investment that will enable the area's ongoing regeneration ²⁵.
- The provision of a bus and rail interchange at Barry Docks will also increase the connectivity of the development assets allocated within the wider Barry settlement. Delivering these sites will provide up to 700 new dwellings and 18.8ha of employment space, which will further strengthen the local economy.

Placemaking and Town Centre Vitality

- The Metro will increase connectivity to key local and regional employment opportunities and help to unlock existing development assets. This will increase economic performance in the area and ensure that local people have more expenditure to invest in the local economy. This will in turn have a positive impact on the vitality of Barry Town Centre.
- Provision of a bus and rail interchange at Barry Docks will increase transient use of Barry Town Centre, which will increase the expenditure retained by the centre. In order to maximise use of the centre it is recommended that a wider design intervention should be implemented around the interchange to improve links between the railway line and the town centre, and to ensure that the interchange improves connectivity between the town centre and emerging Barry Waterside regeneration area. The intervention will enhance the design quality of the centre and also ensure that it will benefit from the expenditure of residents in the Waterside, both of which will contribute to enhancing Barry Town Centre's 'sense of place'.

Tourism

- Barry Island is highly accessible by rail from Cardiff and remains a prominent tourism attraction in the Vale of Glamorgan. The Island is currently subject to an ongoing regeneration programme that is seeking to diversify the tourism offer provided by the Island. The integrated bus and rail interchange operating from Barry Docks station has the capacity to contribute to the diversification process as it will improve connectivity between the town centre and Barry Island, enabling visitors to either destination to access the other.
- The interface that the railway line has with the Wales Coastal Path and cycle routes is another key tourism asset for the Vale of Glamorgan. All of Barry's railway stations are easily accessible from both the Coastal Path and the proposed national cycle route, and the provision of appropriate facilities at these stations will help to establish Barry as a key hub from which to explore the South East Wales coastline by bike and foot. Such an offer will complement the traditional tourism offer based in Barry Island and help to diversify the local tourism offer.

²⁴ Although providing a station to service St Athan is not considered to be a short term option it could be considered in the long term if demand / land use dictates.

²⁵ Planning permission for a further 2,000 dwellings has already been secured.



4.4 Bridgend

Bridgend's strategic location on the London Paddington line is a key strength for the local area, and is an integral part of its economic growth strategy, which is based on residents enjoying connectivity to employment opportunities in Cardiff and Swansea. The Metro will provide increased connectivity that will help to implement the local growth strategy, but will also increase the level of investment into the local area so that Bridgend becomes a sustainable sub-regional economic centre.

Metro Interventions

- Make better use of existing network following the Valleys Lines Electrification and the Cardiff Area Signalling and Renewal Project
- Regional Bus Rapid Transit
- Interchange Enhancements

Regeneration Context

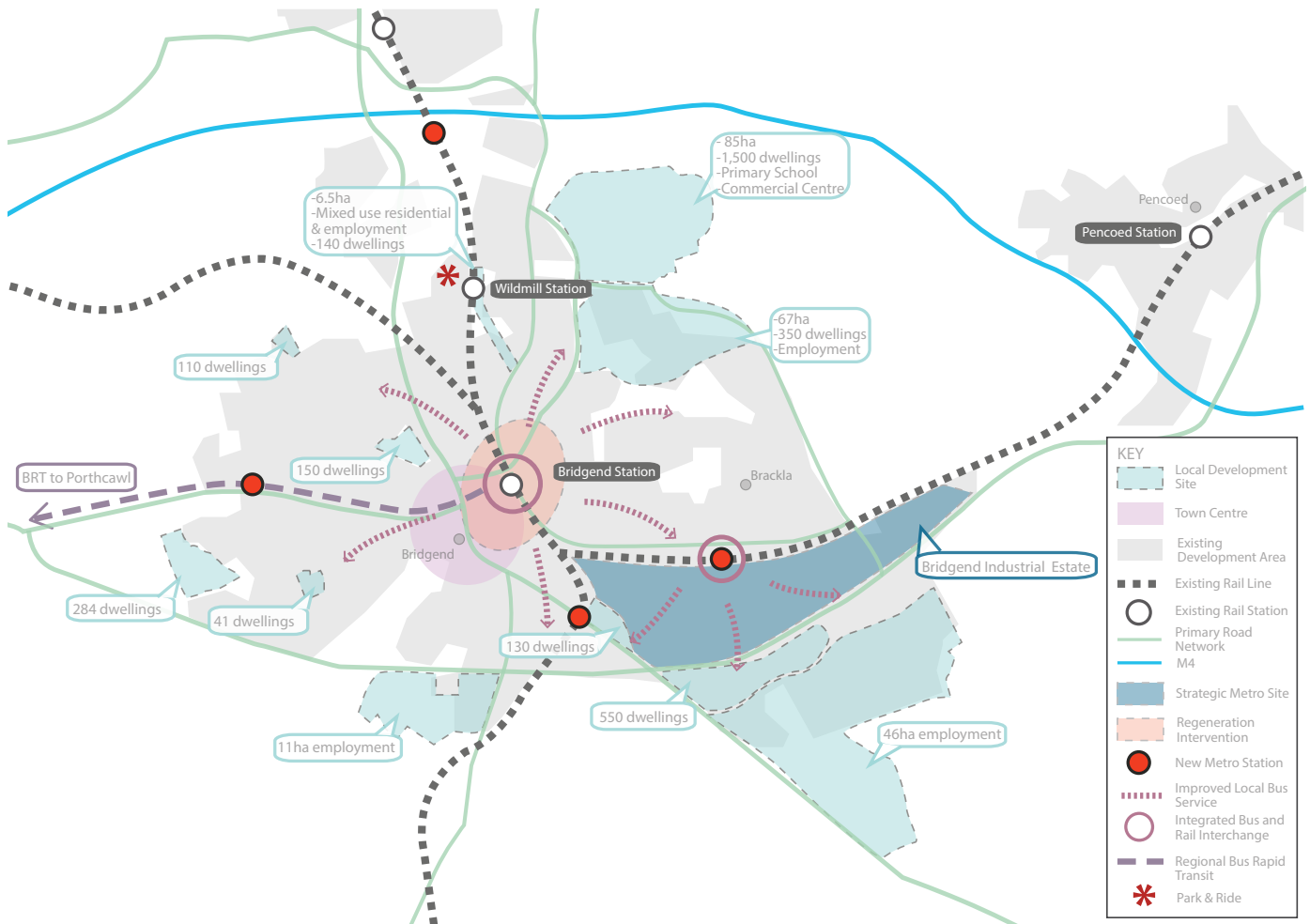
The local regeneration context that the Metro needs to be considered within is summarised below:

- The growth strategy for Bridgend is based on the settlement optimising and promoting its strategic location on the London Paddington railway line and its subsequent connectivity to employment opportunities in Cardiff and Swansea;
- Bridgend Town Centre is an established retail centre that serves a significant urban population, but the retail offer needs to improve and adapt in order to meet local demand;
- Although Bridgend Town Centre has a bus station that connects the town centre to the wider County Borough, connectivity and legibility to the train station is poor and does not encourage integrated use of the public transport system;
- Bridgend Industrial Estate is a significant existing employment centre that is located adjacent to the London Paddington and Vale of Glamorgan railway lines, but is poorly served by public transport; and
- A number of allocated strategic employment, regeneration and residential opportunities exist within the wider Bridgend area, but most are currently disconnected from the existing rail network and are best accessed by car.

Regeneration Opportunities

The regeneration opportunities associated with the recommended interventions are visualised and described below:

Regeneration Opportunities



Spatial analysis of regeneration opportunities in Bridgend.

Connectivity to Employment and Business Opportunities

- Electrification of the London Paddington line, improvements to service frequency and the establishment of a Bus Rapid Transit in Bridgend railway station which services Porthcawl will significantly improve connectivity between Bridgend (notably West Bridgend which is currently disconnected from the rail network) and Cardiff and Swansea. This will improve the ease with which residents can access employment and business opportunities in the wider region and help to facilitate the local growth strategy ²⁶.

Unlock Employment and Housing Opportunities

- The improvements to journey times and service frequency, combined with the provision of a new station at Brackla will increase the connectivity of Bridgend Industrial Estate, which is identified in the commercial analysis as a strategic site within the context of a future Metro. Improved connectivity of the estate will increase the likelihood of future investment into the Estate, which will have a positive impact on the local economy through creating new employment opportunities and helping existing businesses to develop.

²⁶ Bridgend Local Development Plan 2006-2021, June 2011, p.2



Regeneration Opportunities

- The new station at Bridgend College combined with an improved local bus service operating from the interchange at Bridgend railway station will increase the connectivity of both Island Farm and Brocastle allocated local strategic employment sites. Developing these sites will deliver 57ha of employment use, which will provide thousands of local employment opportunities and strengthen the local economy.
- Improved local services from the bus and rail interchange will also increase connectivity to a number of key allocated regeneration and residential sites. Combined these sites will provide further local employment opportunities, deliver 3,255 new dwellings and supply key community enterprise and education facilities. Delivering these proposals will improve the quality of life for local people through further diversifying the local economy, addressing local housing need targets and improving the choice and quality of local housing available.

Education and Skills

- The provision of a new railway station to service Bridgend College will increase the ease with which students throughout the wider County Borough can access further education and vocational training programmes. This will enhance the quality of the local labour market, which will encourage investment into Bridgend and help to strengthen the local economy.

Placemaking and Town Centre Vitality

- Improved connectivity to local and regional employment opportunities will have positive impact on economic activity levels throughout Bridgend and the wider County Borough, which will increase the expenditure that individuals are able to invest into the local economy. This will have a positive impact on the vitality of all established retail centres adjacent to the railway line (Maesteg and Pencoed), but notably Bridgend Town Centre, which will benefit from the provision of the bus and rail interchange. The latter will establish Bridgend as a key hub within the South East Wales Metro network and will increase visits to the town centre. This will help to diversify and improve the retail economy and enhance the town centre's sense of place.
- The implementation of the interchange itself also has the capacity to complement increased expenditure, through providing the opportunity to improve the design of Bridgend railway station and its interface with the town centre. This will improve the quality of experience that visitors have when arriving in Bridgend and encourage return visits.

4.5 The Ystrad Mynach Corridor

The Ystrad Mynach Corridor and the Metro

Ystrad Mynach is strategically located in the Mid Valleys, and as such faces different challenges to those settlements in the Coastal Corridor and the Heads of the Valleys. In recent years Ystrad Mynach and the wider corridor has attracted significant investment from both the public and private sector, but the area now needs to ensure that it continues to attract investment so that it can become a key sub-regional economic hub that is capable of supporting local communities, including those based in the more deprived Heads of the Valleys settlements.

Metro Intervention

- Make better use of existing network following the Valleys Lines Electrification and the Cardiff Area Signalling and Renewal Project
- Regional Bus Rapid Transit



Section 04

Regeneration Opportunities

Regeneration Context

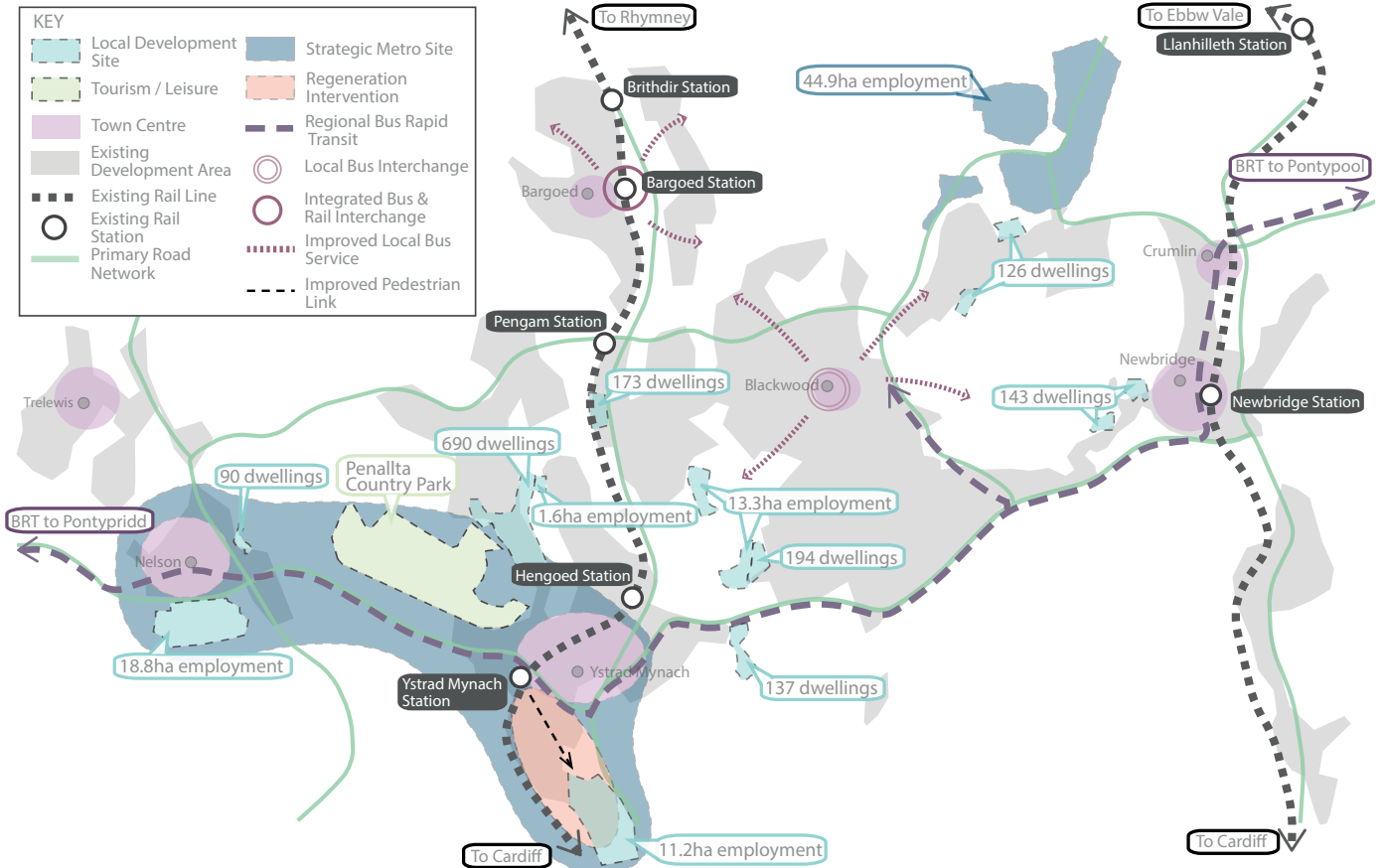
The local regeneration context that the Metro needs to be considered within is summarised below:

- The area is identified as an area of significant growth - 86% of Caerphilly County Borough Council's employment allocations are located in the Ystrad Mynach Corridor;
- Oakdale Business Park (one of the largest industrial plateaus in Wales) is located in the area but is inaccessible by rail;
- The corridor has a number of complementary 'urban hubs' – Ystrad Mynach (administrative, health and education), Blackwood (retail) and Newbridge, Nelson and Oakdale (employment);
- Ystrad Mynach is a particular area of growth and is the location of Caerphilly County Borough Council's headquarters, a further education college and new hospital;
- The corridor is serviced by the Rhymney and Ebbw Vale railway line with connections provided at Newbridge and Ystrad Mynach, Hengoed and Pengam); and,
- Blackwood is a key hub located in the centre of the corridor; its new bus station provides the opportunity to establish it as a key 'connector' within the corridor.

Regeneration Opportunities

The regeneration opportunities associated with the recommended interventions are visualised and described below:





Spatial analysis of regeneration opportunities in the Ystrad Mynach / Nelson corridor.

Connectivity to Employment and Business Opportunities

- The electrification of the Valley Lines and capacity improvements will increase the ease with which local people are able to access employment and business opportunities in Cardiff and other employment hubs throughout the region.
- The Bus Rapid Transit will reconnect a significant population (in Nelson, Blackwood and Crumlin) to the railway line and employment opportunities in the local area and wider region. This will complement enhancements to the existing network and contribute to improving the strength of the local economy.

Unlock Employment and Housing Opportunities

- The improved connectivity delivered through electrification and enhancements to capacity will have a positive impact on the ongoing development of Ystrad Mynach. Although the town is a key health, education and administrative hub, commercial analysis suggests that the town and wider corridor is located on the periphery of the South East Wales private sector investment zone. The improved rail connectivity will help to secure the position of Ystrad Mynach and the wider corridor within the primary investment zone, and ensure that sites such as Dyffryn Business Park (where 10.3ha of employment space is allocated) or Penallta Colliery (where 690 dwellings are allocated) receive the investment necessary to create local employment opportunities and improve the provision and quality of local housing.

Regeneration Opportunities

- The Bus Rapid Transit will increase connectivity to Ty Du Business Park where 18.8ha of employment use has been allocated. The latter is in the ownership of Welsh Government and its development will deliver further employment opportunities that will strengthen the local economy.
- The inclusion of Blackwood Bus Station within the Bus Rapid Transit between Pontypool and Pontypridd provides an opportunity to integrate Oakdale Business Park into the public transport network via local bus services. Oakdale is disconnected from the rail network but is the primary economic driver in Caerphilly County Borough and the location of a further 44.3ha of employment land allocations. The integration of Oakdale into the network will help to attract further investment to the park which will enable additional development and allow more people to access the existing and future employment opportunities.

Placemaking and Town Centre Vitality

- The Metro will increase connectivity to key local and regional employment opportunities and help to unlock existing development assets. This will increase economic performance in the area and ensure that local people have more expenditure to invest in the local economy. This will in turn have a positive impact on the vitality of all the town centres in the locality.
- The Bus Rapid Transit operating between Pontypridd and Pontypool will further enhance the vitality of Ystrad Mynach, Blackwood and Newbridge, as each centre will be a key 'connector' within a strategic transport route and will therefore benefit from increased visitor numbers and expenditure.
- The provision of an improved local bus service operating from the Blackwood bus station that interfaces with the Metro bus and rail interchanges will complement the improved economic activity levels and help the town centre to fulfil its role as the area's established retail hub.

Improved Access to Services

- The increased connectivity afforded by the Metro will ensure that the wider local population (including those located in the Heads of the Valleys Regeneration Area) benefit from improved access to the education, health, leisure and administrative services based in Ystrad Mynach. Currently pedestrian and cycle connections between these key services and the proposed Ystrad Mynach bus and rail interchange are poor, so improvements will be required to ensure that the local population views the Metro as a viable alternative to travelling by car.

4.6 Merthyr Tydfil

Merthyr Tydfil and the Metro

Merthyr Tydfil is one of the primary settlements in the Heads of the Valleys region. Although the town has been subject to significant public sector led regeneration initiatives over the past decade it faces ongoing socio-economic challenge and struggles to attract significant private sector investment. Part of the challenge facing Merthyr is its location on the periphery of the Capital City Region public transport network. The Metro has the capacity to help Merthyr to overcome this challenge by providing the town with a level of connectivity that will minimise perceptions of geographic remoteness and attract investment that will assist its ongoing regeneration and transformation.

Metro Interventions

- Make better use of existing network following the Valleys Lines Electrification and the Cardiff Area Signalling and Renewal Project



Regeneration Opportunities

- Regional Bus Rapid Transit
- Interchange Enhancements

Regeneration Context

The local regeneration context that the Metro needs to be considered within is summarised below:

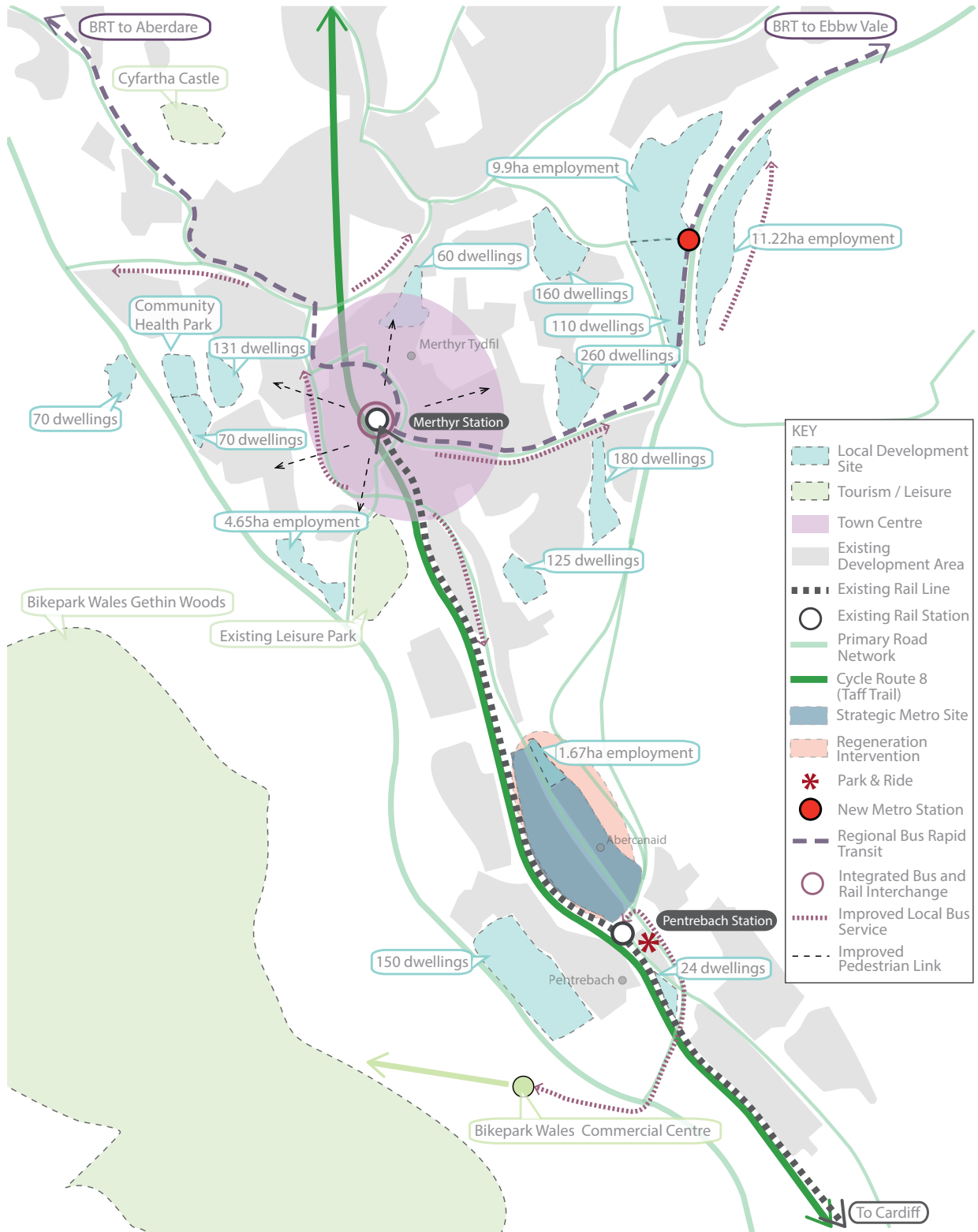
- Railway stations are located in Merthyr Town Centre and Pentrebach, but the rail service is considered to offer an unviable transport option to employment opportunities outside of the local area;
- There has been significant public sector investment in the area, but private sector investment is difficult to attract due to Merthyr's perceived geographic remoteness;
- Poor pedestrian permeability between Merthyr Town Centre and employment and leisure development to the west has prevented the town centre from benefitting from new development;
- Merthyr has a significant supply of brownfield development sites, but they appear disconnected from Merthyr Town Centre and difficult to access by public transport;
- Pentrebach is a prominent existing development site which has the potential to become an area of strategic transformation due to its direct access to the railway line; and
- Bikepark Wales (located in Gethin Woods) is an emerging national and international tourism attraction, which could be accessed from Pentrebach railway station.

Regeneration Opportunities

The regeneration opportunities associated with the proposed Metro interventions are visualised and described below:

Section 04

Regeneration Opportunities



Spatial analysis of regeneration opportunities in Merthyr Tydfil.



Regeneration Opportunities

Connectivity to Employment and Business Opportunities

- According to the Merthyr Local Development Plan “*insufficient public transport limits the ability and choice of the local labour force without access to a car to seek employment opportunities*”. Given that 26% of Merthyr’s working-age households are without a car (the highest in Wales) the capacity improvements to the Merthyr line to support four train services per hour will make a significant contribution to addressing connectivity and improving access to employment and business opportunities in the wider region²⁷. This will have a positive impact on local economic activity and will help Merthyr to address its standing as the most deprived Local Authority in Wales (25% of its LSOAs are in the most 10% deprived in Wales)²⁸.

Unlock Employment and Housing Opportunities

- The improvements to connectivity will address Merthyr’s perceived geographic remoteness and increase the likelihood of private sector investment. The commercial analysis identifies Pentrebach as a strategic Metro development site, and proposes that the Metro will provide the connectivity necessary to facilitate the delivery of a residential led mixed-use scheme. Such a scheme will create an exemplar sustainable mixed-use scheme in the Heads of the Valleys that will help to contribute to the Local Development Plan’s aspiration to deliver 3,000 dwellings, and provide a fresh opportunity to revitalise a traditional employment area where occupancy levels are poor²⁹. Better links to Cardiff will ensure that Pentrebach can support a range of employment sectors. It is recommended that a development brief should be prepared to set out a vision for the site.
- The Metro will also help to deliver allocated development sites. Strategic sites such as Goat Mill Road offer the opportunity to deliver new jobs and houses, but their geographic location and current proximity to the public transport network prevented their development even during the more prosperous times. Improved rail connectivity, the Bus Rapid Transit and an improved local bus service operating from Merthyr will help address these two factors and therefore enhance the viability of developing prominent local sites. However, it is recommended that immediate focus should be on the redevelopment of Pentrebach, since its location on the rail network means that it will deliver shorter-term investment to Merthyr.

Placemaking and Town Centre Vitality

- The strategic regeneration of Pentrebach will have a positive impact on the vitality of Merthyr Town Centre, since it will increase the number of residents living in close proximity to the centre, who can access the retail opportunities and services located in the town centre via a range of sustainable transport modes.
- The provision of an integrated bus and rail hub within the town centre will have a further positive impact on town centre vitality, since the bus services operating from the hub will complete the public transport network that will enable residents to travel from their homes to employment opportunities in Cardiff. As the town centre will be the key ‘connector’ within the network the number of visitors to the centre will increase, which will strengthen the retail offer.

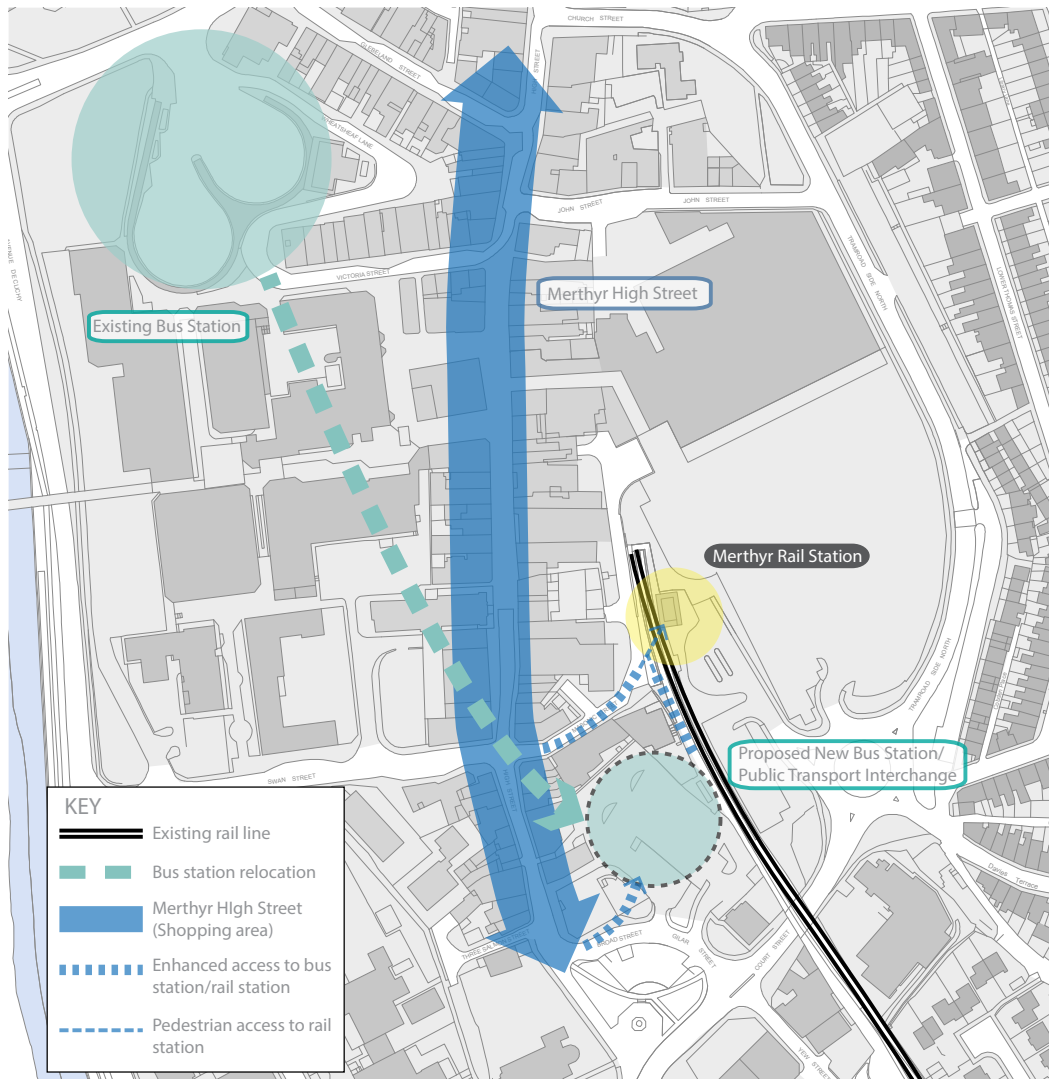
²⁷ Merthyr Local Development Plan, 2006-2021, 2011, p.16

²⁸ Welsh Indices of Multiple Deprivation 2011, Summary Report, p.15.

²⁹ Merthyr Tydfil Local Development Plan, 2011, p.50

Regeneration Opportunities

- The integrated hub will also improve the interface between the town centre and existing developments such as the Cyfartha Retail Park and Welsh Government offices. These developments are significant sources of employment but have been designed to enable convenient access by car and therefore have a poor interface with the town centre. Encouraging use of the town centre on route or during breaks will further enhance the centre's vitality. However, improvements to the pedestrian cycle infrastructure to encourage movement between the two areas will be required³⁰.
- In order to establish a truly integrated bus and rail hub it is proposed that as part of the ongoing strategy for the bus station, Merthyr Tydfil County Borough Council might consider relocating the bus station to Court Street, which is adjacent to the existing railway station. From this location the hub will benefit from strong connectivity to the rail and the local highway network, and will also improve legibility between the railway station and primary town centre retail area, which is currently poor due to its location behind the Tesco supermarket.



Potential relocation of bus station to create an integrated bus and rail hub.

³⁰ Merthyr Tydfil County Borough Council are considering proposals to redevelop the bus station, however in the short-term light repair works will be undertaken to the station and key approaches. The proposed permeability improvements could be included within an extended programme of works.



Regeneration Opportunities

Tourism

- Bike Park Wales is the first full-scale mountain bike park in the UK and will enhance Wales's world-class mountain bike offer. The park will host world championship downhill racing, but will also be available for leisure use by a range of other users of differing abilities. Although the nature of mountain biking means that many of the park's visitors will arrive by car, it is important that the facility can be accessed by public transport. The location of the park in the Gethin Woods, which is to the west of Pentrebach railway station provides an ideal opportunity, since Pentrebach railway station interfaces with the Taff Trail, which in turn provides access to the park's welcome centre. It is therefore proposed that the legibility of the cycle route between the station and the park should be improved, and appropriate marketing undertaken to promote the developments connectivity to the public transport network.

4.7 Ebbw Vale

Ebbw Vale and the Metro

Ebbw Vale's connectivity has improved considerably through the reopening of the Ebbw Vale railway line and will increase further when the line is extended to The Works General Offices and connected to Ebbw Vale town centre through a funicular railway line. Yet, in spite of these changes Ebbw Vale will remain on the periphery of the public transport network and residents will continue to experience poor connectivity to the wider region. The Metro will address this through providing enhancements that will make it easier for residents to travel to employment opportunities throughout the region, and also attract investment that will stimulate local development opportunities and regenerate the local economy.

Metro Interventions

- Make better use of existing network following the Valleys Lines Electrification and the Cardiff Area Signalling and Renewal Project
- Ebbw Vale to Newport Enhancements
- Regional Bus Rapid Transit
- Interchange Enhancements

Regeneration Context

The local regeneration context that the Metro needs to be considered within is summarised below:

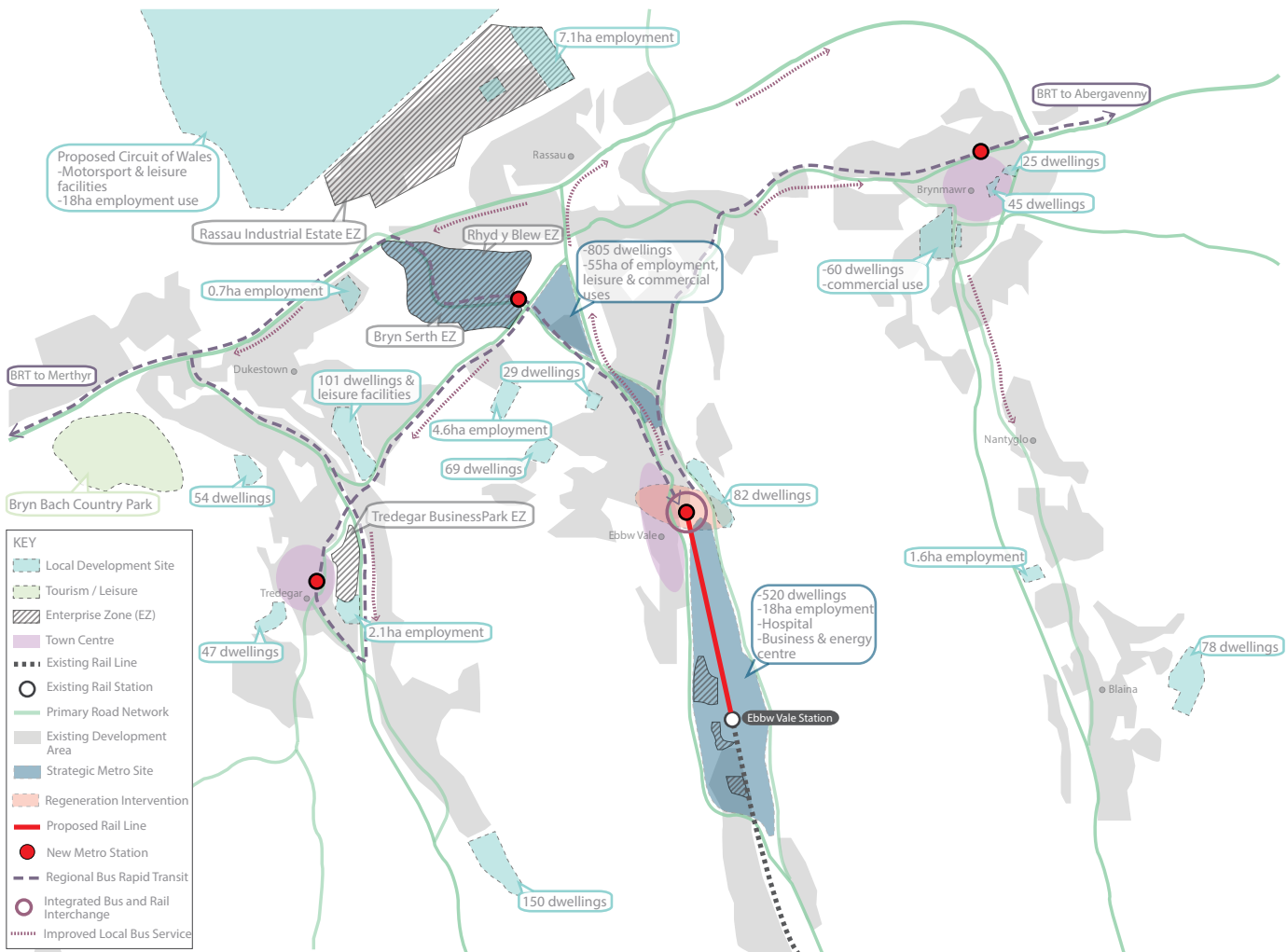
- Ebbw Vale's connectivity to the wider network will continue to improve through the extension of the Ebbw Vale line to The Works and the construction of a funicular railway line;
- Private sector investment is difficult to attract due to Ebbw Vale's geographic location;
- Connectivity to employment opportunities in Newport and Cardiff remains relatively poor;
- Ebbw Vale town centre is currently underperforming, but its location adjacent to a new railway line and two strategic development zones (The Works and Northern Corridor) provide a key regeneration opportunity;
- Key development sites (including parts of The Works and Northern Corridor have been designated as part of the Enterprise Zone; and

Regeneration Opportunities

- The proposed Circuit of Wales development site is located to the north of Ebbw Vale, and proposes to deliver a £400 million motorsport destination.

Regeneration Opportunities

The regeneration opportunities associated with the recommended Metro interventions are visualised and described below:



Spatial analysis of regeneration opportunities in Ebbw Vale.

Connectivity to Employment and Business Opportunities

- The electrification of the Valley Lines and the capacity improvements to support two and eventually three to four train services per hour will build upon the improved connectivity delivered by the reopening of the Ebbw Vale railway line and increase the ease with which local people are able to access employment and business opportunities in the wider region³¹. Furthermore, enabling access into Newport enable residents to access an employment and retail market from which they are currently 'disconnected' by rail. Combined,

³¹ Ebbw Vale will initially receive two trains per hour, which could be extended in the long term to three or four services per hour depending on the viability of undertaking the necessary engineering works.



Regeneration Opportunities

this will have a positive impact on local economic activity and will help Blaenau Gwent to address its standing as the second most deprived Local Authority in Wales (23.4% of its LSOAs are in the most 10% deprived in Wales)³².

Unlock Employment and Housing Opportunities

- The improved connectivity delivered by the Metro will help to overcome the areas perceived geographic remoteness and assist development of the Strategic Metro sites identified in the commercial analysis. The Works, in particular will benefit, since it will be directly accessible two and eventually four times per hour by rail services from Cardiff and Newport railway stations. Although the Northern Corridor sites will not be connected to the railway line, their accessibility will also be improved through the Bus Rapid Transit and local bus services operating from the town centre.
- Improved access to both of these sites will complement the Enterprise Zone designations and help to deliver 'specialist' employment opportunities in advanced manufacturing, which will diversify the local economy. It will also increase the viability of delivering the 1,300 dwellings that have been allocated across the sites, which will address local housing need and broaden the choice of housing available.
- The Metro will also help to deliver development opportunities outside of the immediate vicinity of the strategic sites and the rail corridor. The Circuit of Wales, for example, is a prominent proposed development that has the capacity to transform the local economy through delivering 6,000 jobs in motorsport and automotive industries. Its inclusion within the South East Wales public transport network will be a key marketing tool for the development and will help it fulfil its economic potential.

Placemaking and Town Centre Vitality

- The provision of the new railway station at The Works General Offices and the funicular railway line provides a key opportunity to continue the regeneration of Ebbw Vale town centre through the creation of a new 'gateway space' to the centre. The concept of creating an integrated bus and rail interchange at this location should be considered, since it will increase the number of visitors to the centre, and the subsequent increase in expenditure will improve the retail offer and enhance the vitality of the town centre. The provision of the hub will also provide the opportunity to implement the design principles identified in the regeneration framework, and encourage companies like Indycube to locate within the space.
- The station will also link the Ebbw Vale line to the wider Ebbw Vale and Heads of the Valley area. The latter will have a particularly positive impact on vitality of the nearby settlements of Tredegar and Brynmawr, neither of which currently benefit from rail access.

Tourism

- The Metro will provide Ebbw Vale and the surrounding settlements of Brynmawr and Tredegar with a level of connectivity to the wider Capital City Region that will enable the settlements to market themselves as hubs for exploring the Brecon Beacons National Park to the north and the Valleys Regional Park to the south.
- The proposed Circuit of Wales has the potential to become an international tourism destination (it proposes to attract 750,000 visitors per annum), and the improved Metro connectivity to Ebbw Vale will help it to market itself as such³³. However, the Metro will also help to integrate the circuit into the wider Capital City Region tourism offer and retain visitors to the circuit in the local and regional area. The Heads of the Valleys Bus Rapid Transit, for instance will provide access to traditional South Wales Valley communities and various Valleys Regional attractions while the rail links will provide direct access to the urban offer of Cardiff and Newport.

³² Welsh Indices of Multiple Deprivation 2011, p.15.

³³ Circuit of Wales Design and Access Statement, 2013, p.7

4.8 Cwmbran and Pontypool

Cwmbran, Pontypool and the Metro

Torfaen is a microcosm of the Capital City Region - the south attracts private sector investment while the north is characterised by economic inactivity and decline. The settlements of Cwmbran and Pontypool reflect this spatial contrast and the Metro will need to respond to the unique challenges facing each settlement so that it attracts continued investment to the area, whilst providing an opportunity to reconnect and transform communities that are currently fragmented from economic opportunities.

Metro Interventions

- Newport – Caerleon – Pontypool – Abergavenny Corridor
- Regional Bus Rapid Transit

Regeneration Context

The local regeneration context that the Metro needs to be considered within is summarised below:

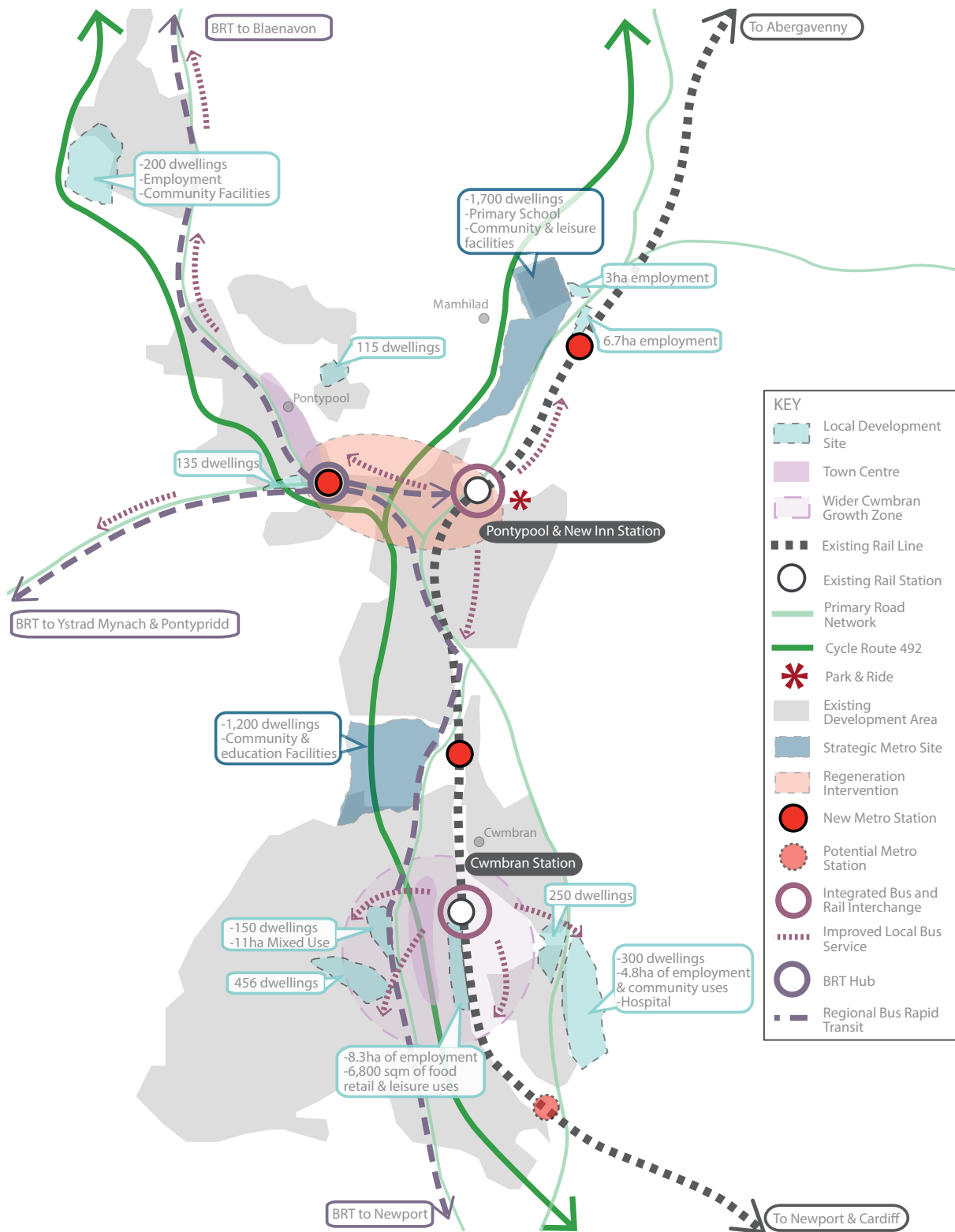
- Cwmbran is considered the main economic driver for the wider Torfaen area, - a number of adjacent development sites have been allocated as Strategic Action Areas for this purpose;
- Cwmbran is serviced by a new railway station that is in close proximity to a new bus station;
- Cwmbran Shopping is an established retail centre relying on 'convenience' and accessibility by car;
- Pontypool is viewed as a key 'connector', linking Cwmbran to the Heads of the Valleys Area, but also connecting Torfaen to the Mid Valleys;
- Pontypool is not directly accessible by rail – the nearest station is Pontypool and New Inn railway station which is located approximately 1.5 miles to the south east of the town centre;
- The Pontypool retail offer has been in decline for a number of years due to its geographic location and highway interventions;
- Sebastopol (located to the north of Cwmbran) and Mamhilad (located to the west of Pontypool) Strategic Action Areas are prominent local development sites that are accessible by rail (subject to provision of new station) and the national cycle network;
- The British Strategic Action Area is located to the north east of Pontypool in Abersychan and is viewed as a key catalyst for the regeneration of the local Heads of the Valleys area;
- The Brecon and Monmouthshire Canal bisects the area and provides links to natural and historic tourism opportunities;

Regeneration Opportunities

The regeneration opportunities associated with the recommended interventions are visualised and described below:



Regeneration Opportunities



Spatial analysis of regeneration opportunities in the Cwmbran / Pontypool Corridor.

Regeneration Opportunities

Connectivity to Employment and Business Opportunities

- The electrification of the Valley Lines and the capacity improvements will increase the ease with which local people are able to access employment and business opportunities in Cardiff, Newport and other employment hubs outside of the region. This will have a positive impact on local employment levels, and improve the business environment.

Unlock Employment and Housing Opportunities

- The improved connectivity delivered through electrification and enhancements to capacity will have a positive impact on the ongoing development of the strategic sites identified in the commercial analysis. Both the Sebastapol and Mamhilad development sites are located adjacent to the Abergavenny railway line and the provision of new stops adjacent to both sites will connect them directly to both Newport and Cardiff. This will further increase the viability of delivering the sites and help to provide 2,900 dwellings and community and education facilities.
- Aside from the identified strategic Metro sites, improved connectivity to the existing network will increase the viability of developing the local strategic sites allocated adjacent to Cwmbran town centre. Delivering these sites will provide a further 1,156 dwellings, 5ha of employment and retail, cultural, health and community uses, which will help Cwmbran to fulfil its role as the primary economic driver for the local area.
- The provision of the Bus Rapid Transit between Blaenavon and Newport (via Pontypool and Cwmbran) will increase the connectivity of the Heads of the Valleys area. This will increase the long-term viability of developing the British Strategic Action Area, and improve the likelihood of delivering 200 new dwellings and provide much needed employment opportunities. However, it must be recognised that the development of the site will require a long-term programme that will be dependent on full connectivity to the Metro and the establishment of the wider area as a viable investment prospect to the private sector.

Placemaking and Town Centre Vitality

- The Metro will improve connectivity to regional employment opportunities and facilitate local employment and residential development opportunities. This will improve economic activity levels and ensure that a larger local population with increased disposable income services the established retail centres of Cwmbran and Pontypool.
- The declining state of Pontypool town centre's retail offer and its strategic location within both the Pontypool to Pontypridd and Blaenavon to Newport Bus Rapid Transits means that the Metro will have a particularly significant impact on the vitality of Pontypool town centre. The transits will increase visitor numbers to the town centre and increase the likelihood of investment, which will help to prevent further decline and begin to improve the centre's sense of place.

Tourism

- The Torfaen tourism strategy is based on its connectivity to natural tourism opportunities in Monmouthshire and the Brecon Beacons National Park, and the Blaenavon World Heritage Site. The frequency enhancements will improve connectivity to Abergavenny, while the Bus Rapid Transit from Newport will improve connectivity to Blaenavon and the Brecon Beacons National Park.
- National cycle routes 49 and 492 provide accessibility to adjacent natural and heritage attractions. This is a distinctive element of the local tourism offer and is one that the Metro can complement through improving the interface between the rail network and the cycle routes. The provision of bike rental facilities at Cwmbran and Pontypool and New Inn Stations, for example, will establish the stations as hubs within a cycle network



Regeneration Opportunities

from which visitors can cycle or walk south to Newport or north to Blaenavon, the Brecon Beacons and Abergavenny. This will help to increase the strength of the local tourism offer and diversify the local economy.

4.9 Newport

Newport and the Metro

Newport is strategically located in the 'gateway' corridor to South Wales and therefore has a critical role to perform in contributing to the success of the Capital City Region. Although Newport has significant development potential it is currently struggling to attract the scale of investment that is required for the city to become a complementary economic base to Cardiff. One of the key inhibitors to the city's growth is its limited connectivity to the rail network - despite its vast rail network the city is only served by Newport station. The Metro will therefore provide the city with the connectivity required to attract investment, which will facilitate regeneration and economic growth, and integrate the city centre into the Capital City Region as a central economic centre.

Metro Intervention

- Make better use of existing network following the Valleys Lines Electrification and the Cardiff Area Signalling and Renewal Project
- Ebbw Vale to Newport Enhancements
- Relief Line from Cardiff Central to Newport and Llanwern
- Rapid Transit in Newport
- Newport to Abergavenny Corridor
- Regional Bus Rapid Transit
- Interchange Enhancements

Regeneration Context

The local regeneration context that the Metro needs to be considered within is summarised below:

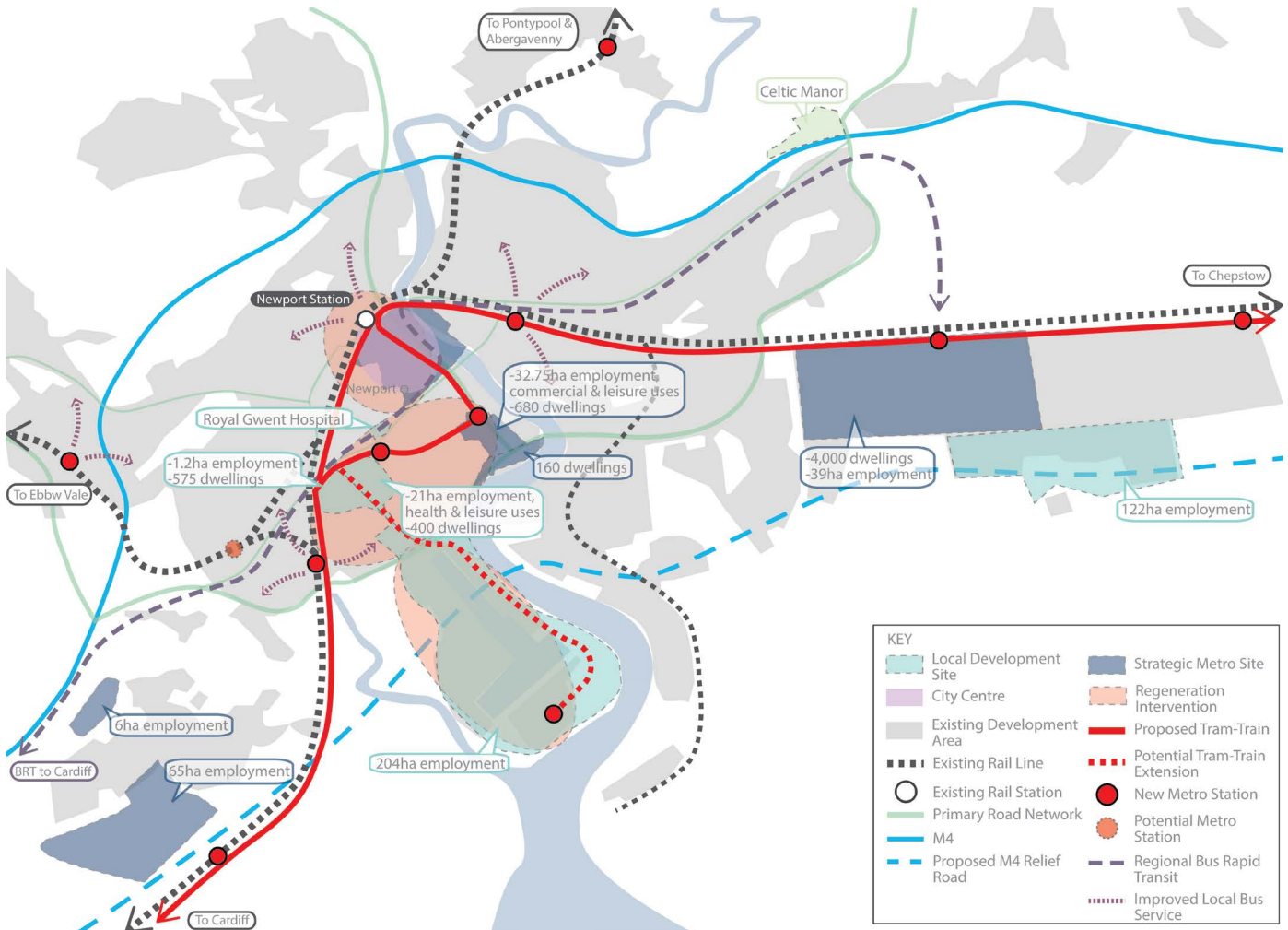
- Newport has a significant existing rail network but is only served by one railway station (Newport Station);
- Newport City Centre is subject to an ongoing regeneration programme that is aiming to increase the centre's vitality through improving the leisure and retail provision, diversifying the mix of employment and residential uses and raising the quality of the environment;
- There is a strong emphasis on focussing development on the riverfront to improve the interface between the River Usk and city centre; and
- Significant volumes of brownfield land have benefitted from substantial investment, and other brownfield sites provide considerable opportunity for further regeneration and development surrounding Newport City Centre.

Section 04

Regeneration Opportunities

Regeneration Opportunities

The regeneration opportunities associated with the recommended interventions are visualised and described below:



Spatial analysis of regeneration opportunities in Newport.

Connectivity to Employment and Business Opportunities

- Electrification of the London Paddington line and provision of the light rail connection to Cardiff will improve connectivity between Newport and Cardiff. This will make it easier for residents in both cities to access employment and business opportunities in the other, as well as enroute, in places like St Mellons and Celtic Springs Business Park.
- The Metro will also improve Newport's internal connectivity and ensure that residents living in the wider Newport area are able to access employment opportunities in the city itself. For example, in addition to improving the connectivity of communities in Blaenau Gwent and Caerphilly, the extension of the Ebbw Vale line into Newport station will also improve the connectivity of residents in North West Newport.



Regeneration Opportunities

Unlock Employment and Housing Opportunities

- The new stations on the existing London Paddington line will provide direct access to Celtic Springs Business Park and Celtic Business Park / Glan Lyn development area, and encourage further investment into each site. Specifically the Metro will help to deliver the 65ha of employment space that is proposed for allocation in Celtic Business Park and will facilitate the ongoing redevelopment of Glan Lyn. A masterplan for 4,250 residential units, 40ha of employment space and a district centre has been agreed for the latter, and St Modwen is currently on site delivering the first phase. The Metro will improve the connectivity of this new development and also help to unlock 122ha of proposed adjacent employment space.
- The proposed southern rail link from the London Paddington line will provide the Whitehead Works, Monmouthshire Bank Sidings and Newport Docks with rail access. This will transform how these locally important regeneration sites are perceived by the market and will increase the likelihood of further development, which is already underway on the Sidings where Redrow are currently constructing 575 dwellings. Should the remaining sites be delivered an additional 221ha of proposed employment space and 400 new dwellings will be delivered. Given that this area is currently characterised by poorly performing employment uses, it is recommended that an area wide development framework be prepared to ensure that future investment improves the existing environment and facilitates the growth of existing businesses.
- The proposed eastern rail link from the London Paddington line will increase the connectivity of the Old Town Dock / George Street / Penmaen Wharf regeneration areas. Old Town Dock in particular has received significant investment over the past decade, but the Metro will help to attract the additional investment required to deliver proposed allocations for 32.75ha of employment space and 840 dwellings in the surrounding areas.

Education and Skills

- The local and regional Metro interventions will increase the connectivity of the University of South Wales, Newport's city centre campus to the wider Capital City region. This will encourage more young people to study in Newport, which will enable the university to further invest in the city centre, increase the number of skilled and educated young people entering the local labour market and attract investment that delivers higher value industries to the centre.

Health

- The eastern light rail link will provide direct rail access to the Royal Gwent Hospital, therefore making it more convenient for residents to access essential health services.

Tourism

- The Bus Rapid Transit will provide direct access to the Celtic Manor Resort from both Cardiff and Newport City Centres. This will help to develop what is an already established leisure destination and increase the number of visitors to Newport and the wider Capital region.

Placemaking and Vitality

- The proposed eastern rail link from the London Paddington line and the Bus Rapid Transit from Cardiff will provide direct access through central Newport and the Pillgwenlly regeneration area. The latter has been subject to significant investment over the past decade and a regeneration framework was adopted in 2009 to integrate the area into surrounding development and growth areas, create new opportunities for people and businesses and improve the social and physical environment. The Metro has the capacity to support the delivery of the framework through connecting Pillgwenlly to surrounding growth areas, therefore increasing the likelihood of investment and providing the opportunity to implement design projects that will improve



Section 04

Regeneration Opportunities

the physical environment. It is recommended that the framework should be amended to identify focussed opportunities for the Metro to contribute to the ongoing regeneration of Pillgwenlly.

- Improved connectivity to local and regional employment opportunities will increase economic activity levels throughout Newport, which will raise the expenditure that individuals are able to invest into the city centre economy. It will also increase visitors to the city centre. Combined, this will help to address some of the key regeneration challenges facing the city centre and realise the ambitious renewal strategy set out in the Newport 2020 Masterplan. Specifically, increased expenditure will help to support new leisure and entertainment facilities, address currently high retail vacancy rates, revitalise the Victorian retail area through encouraging a range of alternative uses and improve the centre's physical environment.
- The eastern light rail link will improve the city centre's interface with the rail network, which is currently poor due to the B4591, which separates the city centre from Newport Station, and increase the likelihood of attracting private sector investment into the city centre. This will improve the mix and quality of uses in the city centre and has the potential to improve the centre's connectivity with the river. The link will also provide the opportunity to implement design interventions within the city centre which will improve the centre's sense of place. It is recommended that a design framework should be produced to ensure the Metro is effectively integrated into the city centre and the wider vision set out in Newport 2020.



5.0 Conclusion and Recommendations

This paper demonstrates that the Metro has the capacity to help the Capital City Region become a more successful and liveable city. However, it is equally clear that Metro infrastructure alone will not facilitate transformation. Coordinated and sustained effort from a wide variety of stakeholders will be required to ensure the regenerative impact of the Metro can be captured.



To ensure that regeneration becomes a cornerstone of the Metro the following key recommendations are proposed:

- Develop a set of guidelines, which should be applied to the development of a brief for a new Metro intervention to ensure that the wider benefits are captured. This will include guidance on design, permeability, scoping development potential, evaluating viability of mixed use developments etc
- Identify (with support of stakeholders) a pilot project which brings together:
 1. Transport planning and engineering;
 2. Placemaking;
 3. Active travel and health;
 4. Housing development;
 5. Employment development;
 6. Skills; and
 7. Tourism.

This pilot project could take place in conjunction with one of the quick win Metro interventions

- Determine potential development sites that would benefit from some form of supplementary planning guidance that would help deliver Metro compliant developments.
- Undertake further research to identify private and not for profit sector partners that could provide expertise and investment for Metro-led regeneration projects. These might include:
 1. Developers;
 2. Registered Social Landlords; and
 3. Certain commercial operators.
- Work with CREW, Welsh Government and the Welsh Local Government Association (and other relevant stakeholders) to develop mechanisms which could work alongside future Metro delivery organisations to ensure regional coordination of Metro-led regeneration to avoid duplication



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Supporting documents:

- Appendices to Main Report
- Metro Interventions Appraisal Report
- Metro Modal Study
- Metro Spatial Map
- Station Design Guidelines (Ebbw Vale)
- Metro Funding and Financing Independent Advice
- Metro Economic Impacts

Study led by Mark Barry of M&G Barry Consulting and included Capita, Powell Dobson Urbanists, Jones Lang LaSalle and Steer Davies Gleave

