### **CONSULTATIVE DRAFT DOCUMENT**

# <u>Cardiff Capital Region City Deal:</u> Outline Transport Strategy to Connect the Cardiff Capital Region

### **Introduction**

The Cardiff Capital Region City Deal (CCRCD) and South Wales Metro present an opportunity to secure our future as an economic powerhouse and enhance well-being for future generations. The role of the Cardiff Capital Region Transport Authority (CCRTA) will be to lead the delivery of the transport vision for the region and this outline strategy represents a key step towards its realisation. Working in partnership with public, private and third sector organisations, the aspiration is to develop a world class, sustainable and fully connected transport system that supports and drives the prosperity of the Cardiff Capital Region.

#### Status

The contents of this consultation document is not intended:

- (I) to replace the individual Local Transport Plans approved in 2015 in respect of the authorities that comprise the CCRCD nor
- (II) should it be regarded as constituting any formal statutory consultation for the purpose of developing a Regional Transport Plan for the ten authorities.

Reference in this document to any scheme or proposal should not be read as meaning that any such scheme or proposal will be delivered by either the City Deal or any of the constituent authorities. Reference to any proposed programme or action must be read in conjunction with the CCRTA's role and responsibilities as outlined in the City-deal agreement and the CCR Joint Committee's Terms of Reference.

### Part 1 – Where are we now?

### **Cardiff Capital Region City Deal**

The Cardiff Capital Region City Deal provides a huge opportunity to transform the economic landscape of South East Wales. It will invest approximately £1.2bn in the city-region economy between now and 2036, and deliver projects to kick start wider investment and economic growth. Over its lifetime, the City Deal is expected to deliver up to 25,000 new jobs and bring forward an additional £4 billion of private sector investment.<sup>1</sup>

South East Wales is the economic powerhouse of Wales, generating more than half of the Gross Value Added (GVA) in Wales in 2012. However, it lags behind the rest of the

<sup>&</sup>lt;sup>1</sup> See Cardiff Capital Region City Deal Executive Summary

UK, generating only 80% of the UK average GVA per head. This means that the region is less productive on average than the rest of the UK.<sup>2</sup>

The report of the Growth and Competitiveness Commission has set out the potential that the City Deal offers the region. It has found that the Cardiff Capital Region can be more prosperous, more inclusive and more sustainable if the region becomes much better connected and inter-dependent. These priorities can only be achieved 'if investment in connectivity is used to drive changes in transport modes, new land uses, the fostering of a multi-centred economy and improved liveability for people at all levels of income'.<sup>3</sup>

### The importance of 'Connecting the Cardiff Capital Region'

In order to maximise the benefit of the City Deal investment, the region must be better connected. City Deal recognises the key role that transport will play in delivering the ambitions of the Cardiff Capital Region and turning the City Deal opportunity into a reality. A key priority for investment is the South Wales Metro, including the Valley Lines Electrification programme, and City Deal includes funding of £738m for its delivery. This outline strategy will support and build upon these transport improvements and make a significant contribution to improving transport connectivity across the region.

Such major improvements to transport are needed to enable the capacity and capability of the region to grow. Improved transport can facilitate economic growth and improve outcomes for people by *connecting communities, business, jobs, facilities and services.* For the Cardiff Capital Region's economy to prosper, it is crucial that people are connected to opportunities, businesses to their markets, entrepreneurs to ideas and capital and employers to talent and skills.

According to Stats Wales, around 40% of the jobs in Cardiff city centre are taken up by non-Cardiff residents. In 2016, this amounted to 89,600 residents commuting into the city each day from outside of the local authority boundary, with 27,800 travelling in the opposite direction to work across the city region. Currently the majority of in-commuting is done by car, which has a significant impact on the road network of the entire city-region.

Existing levels of traffic congestion have a significant negative impact on connectivity and the regional economy. It has been estimated that traffic congestion is costing Cardiff businesses approximately £9 million a year in lost productivity. It has also been found that business in Cardiff suffers the most from traffic through the working day than in any other UK city with 'congestion between the morning and evening peak periods, both in and out and within the city, occurring for 15% of the time on average. City Deal aspirations for economic growth and increased prosperity across the region will lead to increased demand for travel. It is fundamental that improvements to transport and connectivity aim to both address and future-proof against increasing levels of congestion.

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<sup>&</sup>lt;sup>2</sup> Powering the Welsh Economy (2015) Cardiff Capital Regional Advisory Board

<sup>&</sup>lt;sup>3</sup> Growth and Competitiveness Commission Report (p. 6)

<sup>&</sup>lt;sup>4</sup> Cardiff Capital Region City Deal objective (Section 3.4, p. 11 of Joint Working Agreement)

<sup>&</sup>lt;sup>5</sup> TomTom Traffic Index 2016

<sup>&</sup>lt;sup>6</sup> INRIX 2016 Traffic Scorecard

This Outline Strategy will set out the work needed to ensure transport and connectivity across the region helping to shape the landscape of economic development and growth. 'Connecting the Capital Region' is not about predicting what the future might hold and responding accordingly, it is about shaping and creating a successful, resilient city-region, ready to tackle the challenges and opportunities of the 21<sup>st</sup> century.

Collaboration is vital to the success of the City Deal and to the delivery of this Strategy. The CCRTA has been established to facilitate the City Deal by preparing regional strategies for approval and working with Welsh Government, Transport for Wales, user groups, industry and other stakeholders to coordinate transport planning across South East Wales. It is proposed that the CCRTA coordinates transport planning and investment across South East Wales, in partnership with the Welsh Government. This Outline Strategy is the first step in realising the combined vision and goals for transport across the region.

Regional collaboration in transport is only one piece of the jigsaw and it will be imperative for collaboration to take place across the wider aspects of City Deal. This will ensure that the City Deal's economic strategy and commitments to strategic land-use planning, regeneration and the delivery of sustainable communities are fully integrated with the future strategy for transport.

City Deal is not a short-term fix. It is a long-term programme of investment and opportunity that will act as a catalyst to economic growth and improve the lives of those within the region. This Outline Strategy provides the link and recognises that a long-term programme of investment is needed to develop a world-class transport system that meets the needs and aspirations of the region. This Outline Strategy sets out how the connections will be made to ensure the long-term success of City Deal and the Cardiff Capital Region.

### Part 2 – Where are we going?

### A vision for 'Connecting the Cardiff Capital Region'

A well-connected Cardiff Capital Region requires a long-term vision. In support of the long-term goals of the City Deal, our vision for transport in the Cardiff Capital Region is:

A world-class, sustainable, accessible and fully integrated transport system that unlocks economic growth and improves the social, economic, environmental and cultural well-being of the Cardiff Capital Region.

# The vision's core elements – Economy, Inclusion and Sustainable Development<sup>7</sup>

The report of the Growth and Competitiveness Commission has set out the challenges and opportunities for the Cardiff Capital Region in terms of three aspects – Economy,

<sup>&</sup>lt;sup>7</sup> See also Economy, Inclusion and Sustainable Development findings in part 3 of the Growth and Competitiveness Commission report (p. 22-43).

Inclusion and Sustainable Development. These aspects are closely interlinked and a focus on all three will be critical to the future success of the Cardiff Capital Region. These aspects form the three core elements of our vision.

### Economy

The overarching goal of this City Deal is to improve the economic prosperity of the area. The result will be an economy where productivity is increased, employment rates are raised, businesses are nurtured and supported, innovation is fostered, economic benefits are cascaded across the region and opportunities are available to all.

Transport has a key role in delivering economic growth. It can open up development opportunities and improve outcomes for people by connecting communities, business, jobs, facilities and services. Existing transport infrastructure across the region restricts the potential for economic growth as there are significant congestion and transport capacity issues that need to be addressed.

The table below highlights that between 2014 and 2016 the total number of people working in Cardiff grew by over 15,000. Of this figure, 85% was as a result of an increase in net-in commuting into Cardiff from surrounding areas.

### Cardiff Jobs and Employment Growth

	Total number of working residents	Total number of people working in the authority	Net in-commuting
2014	164,900	213,300	48,400
2016	167,300	229,100	61,800
Change	+2,400	+15,800	+13,400

Source: Stats Wales

The City Deal provides an opportunity to tackle these barriers and deliver a better connected and more efficient and effective transport system, which will support economic growth by:

- Widening labour markets,
- Improving access to employment and training,
- Unlocking sites for development,
- Providing attractive centres for business location across the region,
- Encouraging private sector investment, and
- Reducing business costs by improving links between suppliers, producers and markets.

#### Inclusion

The quality of life of residents in the Cardiff Capital Region needs to be improved if the economic goals of City Deal are to be realised. The result will be a region with improved quality of life and quality of place and greater accessibility for all to the opportunities available. This will include both physical accessibility through the provision of improved infrastructure that supports liveable communities and through ensuring people have the skills they need to access the employment opportunities available.

Improved transport can support inclusion by:

- Improving connectivity between communities and opportunities,
- Improving access to services for people across the region, including the most deprived areas,
- Enabling people to access skills, education, training and employment,
- Offering viable and convenient transport alternatives for those without a car,
- Compliance with Persons with reduced mobility regulations,
- Reduce exclusion due to the cost of travel, and
- Improving the quality of life for residents.

### Sustainable Development

Sustainability and the consideration of future generations need to underpin all elements of the Cardiff Capital Region. Environmental considerations are central to the long-term success of the region, with the delivery of infrastructure and services needing to address challenges such as an ageing population and limited population growth in some areas. The result will be a region where the location and polycentric nature of development maximises benefits for all residents, carbon emissions are reduced and improvements in air quality are delivered.

Improved transport and connectivity can support sustainable development by:

- Deliver major mode shift to public transport and active travel,
- Unlocking potential development sites for both employment and housing,
- Improving access to employment and training opportunities,
- Improving access to services, leisure and tourism,
- Regeneration of key regional centres,
- Delivering a substantial contribution to carbon reduction,
- Addressing issues of congestion and air pollution,
- Protecting and enhancing the built and natural environment, and
- Improving the quality of life for residents.

### Transport Objectives for 'Connecting the Cardiff Capital Region'

Better transport and improved connectivity is critical for the future success of the Cardiff Capital Region. Our vision for 'Connecting the Cardiff Capital Region' is supported by ten strategic objectives, which provide direction and focus to where investment is needed in order to achieve the long-term vision. These are:

- 1. Improve connectivity between the Cardiff Capital Region and the rest of Wales, the UK and Europe.
- 2. Improve access across the Cardiff Capital Region, to and within Cardiff and other major centres, and to the region's enterprise zones, airport and main gateways.
- 3. Improve access for all to employment and training opportunities, services, healthcare, education, tourism and leisure facilities.
- 4. Improve the quality, attractiveness, efficiency, and reliability of the regional transport system.
- 5. Improve integration and interchange within and between modes of transport.

- 6. Increase the proportion of journeys made by sustainable modes of transport such as public transport and active travel.
- 7. Reduce the environmental impacts of transport, including greenhouse emissions, air pollution and noise.
- 8. Improve safety and security of the transport system.
- 9. Improve travel information to enable people to make informed, sustainable, healthy and active travel choices.
- 10. Reduce and balance travel demand by influencing the location of new development and enabling polycentric growth.

The objectives for 'Connecting the Cardiff Capital Region' support the ambitions of City Deal, wider Welsh Government strategies, such as those for transport, economic development, regeneration, tackling poverty and climate change<sup>8</sup>, and the goals of the Well-being of Future Generations (Wales) Act 2015. The vision and objectives set out in this Outline Strategy will require the region's challenges to be tackled and opportunities to be seized to develop a well-connected region that meets the needs and aspirations of all.

# <u>Part 3 – The Role of the Cardiff Capital Region Transport Authority in 'Connecting the Cardiff Capital Region'</u>

The CCRTA will work to develop the City Deal transport aspirations in partnership with the Welsh Government and Transport for Wales. The ten local authorities that form the CCRTA have extensive responsibilities for providing transport services across the region. They manage the largest asset group in the public sector; the highways and transportation network (gross replacement costs £16.5bn), and they plan and implement strategies and programmes to enhance the current transport offer and develop new ways of working.

### The assets extend to approximately:

- 9000 miles of the local and strategic road network, supporting over 13bn vehicle kilometres of travel every year,
- 10,000 miles of footways,
- 800 traffic signal controlled junctions and controlled pedestrian crossings,
- 170,000 street lights,
- 6,000 highways structures (bridges, retaining walls, culverts, etc),
- 24 rail and bus park & ride sites with nearly 2000 spaces
- 19 bus stations and almost 9,500 bus stops.

Councils also procure hundreds of public bus service contracts; issue more than 320,000 concessionary bus passes, administer funding for concessionary bus schemes and bus services support, accounting for circa £60m of public funding.

<sup>&</sup>lt;sup>8</sup> (Wales Transport Strategy; Economic Renewal: A new direction (2010); Vibrant and Viable Places: A new regeneration framework (2013); Building Resilient Communities: Taking forward the tackling poverty action plan (2013); Climate Change Strategy for Wales (2010))

The CCRTA is able, with the agreement of individual authorities, to mobilise and coordinate the powers of the member councils, including;

- Plan and deliver new highways, public transport, park & ride, and active travel projects, including powers to compulsorily purchase land for transport schemes and to promote rail projects using Transport and Works Act powers,
- Establish Quality Bus Partnerships and quality contracts to deliver enhanced bus services,
- Set parking charges in public car parks across the region as a policy tool to influence travel choice and use any additional income to fund infrastructure,
- Enforce parking offences and moving traffic contraventions, to benefit bus and general traffic journey-time reliability, with the proceeds ring-fenced to highways and transportation improvements within the relevant authorities,
- Coordinate streetworks to reduce the impact on congestion and delays.

CCRTA authorities have a long-standing and successful record of joint-working and programme delivery, well-placed to take on the challenges and opportunities offered by City Deal and work together to deliver the priorities for the region.

Working with Welsh Government and the transport industry, we have established the Integration Alliance Board (IAB) to develop an integration initiative to align and coordinate all passenger transport services across the region, including fares and ticketing to support seamless movement across all modes.

As it develops, the CCRTA will be a key partner in the delivery of the South Wales Metro, in developing and delivering the transport aspects of the City Deal and in progressing wider regional transport objectives on a strategic basis.

### Part 4 – How will we get there?

### **4.1 Strategic Delivery Programme**

In order to achieve the vision for transport, an ambitious and long-term strategic delivery programme is required. This Outline Strategy is the first step in developing a wider Regional Transport Strategy that will set out in greater detail the projects and programmes that will be delivered over the next 20 years.

The future programme for transport is intended to focus on those key projects that will have the greatest impact across the region and the greatest benefit in improving connectivity for communities and businesses. The delivery programme will require a combination of projects that deliver investment in physical infrastructure on the ground and those that recognise the opportunities offered by technology. Both need to be delivered in tandem (within the limitations of the funding available) to ensure the potential offered by transport is realised.

Five types of travel have been identified:

### A globally connected city region

Cardiff Capital Region's international connections, including air; rail; road; and sea, are vital to enable us to compete effectively on the world stage. Excellent international connections will support inward investment and tourism.

The City Region's international connections include Cardiff Airport and three major ports. The Great Western Main Line, the M4 and the A465 Heads of the Valleys road, which are part of the Trans European Transport Network, link to other international airports and represents a major asset to global connectivity. Maximising the benefits of these assets is a significant economic opportunity.

The region is also already an important strategic location for freight movement via road, rail and sea. Our ports at Cardiff, Newport and Barry cover an area of 2,000 acres, handle over 3.5 million tonnes of commodities annually, and represent a significant regional asset. A targeted investment in developing air freight opportunities may also help us to further develop a strategic advantage.

Improvements in international connectivity will ensure the Cardiff Capital Region is globally connected, supporting inward investment and tourism. Improved access to Cardiff International airport and Cardiff Central interchange will be significant projects along with schemes to improve long-distance connectivity to other regions in Wales and across the border into England.

### City-to-City links

The electrification of the Cardiff to London main rail line by 2019, proposals for an M4 relief road and completion of the A465 Heads of the Valleys dualling by 2022 will significantly improve city to city links across Wales, to London, the Midlands and the South West of England. This will assist in reducing journey times and journey time variability on key road and rail corridors. Access to our key transport corridors and major transport interchanges will be improved for all modes and these locations will become focal points for economic growth and new development.

### Getting into and around the Regional centre

Cardiff City Centre is the economic hub of the city-region, as well as being an important residential growth area. Census data indicates almost one third of Intra-region travel to work journeys terminate in Cardiff. To prevent congestion from undermining economic growth across the region, there will need to be a major shift from car use to public transport, cycling and walking of at least 50:50.

Whilst the majority of commuting into Cardiff is done by car, data from the 2011 Census shows that 76% of people that travel to work in the city centre by train reside outside the Cardiff local authority boundary. Demand for rail travel is also increasing across the Cardiff Capital Region. Data from Stats Wales shows that between 2007/8 and 2015/16 rail passenger journeys in Blaenau Gwent increased by 550%, in Merthyr Tydfil rail use has increased by 99%, and in Torfaen by 53%. In total for the Cardiff Capital Region rail use has increased by 29% over the period.

Network Rail have predicted that growth in commuting into Cardiff by rail is expected to continue across the city-region. In their 2016 Wales Route Study it highlights that by 2043 the number of people commuting into Cardiff is expected to more than double, with growth in passenger numbers concentrated in Valleys areas. The table below, which has been taken from Network Rail's study, shows the passenger demand growth for commuting into Cardiff.

### Passenger demand growth for commuting into Cardiff

	Estimated	growth*
Corridor into Cardiff	2023	2043
Valley Lines	76%	153%
Vale of Glamorgan	80%	159%
Ebbw Vale Line	112%	205%
Swansea	56%	124%
GWML	46%	120%
The Marches	38%	96%
Total for all corridors	68%	144%
* based on the Prospering in Global S	tability scenario (PGS)	

Source: Network Rail

The Metro will support this by providing high-capacity, high quality public transport and cycling provision on more radial routes into the centre. This will give more people access to jobs and reduce congestion on our road network, improving journey times and more reliable for commuters and business operators. Better connectivity to Cardiff will ensure that all parts of the region share in its growth.

### Travel across the wider City Region

The Cardiff Capital Region has a network of town centres and major employment locations outside of the two city centres. Ensuring that trips to key destinations like town centres, employment areas, hospitals and colleges can be made easily, and Valley hub locations are joined up, is a challenge for our strategy.

Transport investment such as the Metro will assist the transformation of our regional town centres into attractive locations for employment with vibrant and more diverse economies, and more people living in and around them. Attractive streets and public spaces will help bring in new investment. We need to make sure that trips to our main town centres can be made by sustainable transport, using high quality public transport services and walking and cycling routes.

Improvements in regional connectivity will be an important aspect in realisation of the ambitions of the Cardiff Capital Region. It is intended that strategic transport projects will be delivered to better connect communities, businesses, jobs, facilities and services. Projects may include large-scale improvements to the public transport and highway network to improve access for residents and businesses to key destinations for employment, education, health, retail and leisure, supporting economic development across the Cardiff Capital Region and opening up development opportunities enabling multiple locations of growth.

### Connected neighbourhoods

People need attractive and affordable access to jobs, schools, shops and other facilities. Good local connections are the foundation of an effective transport network, as links to public transport stations and stops, both train and bus, are an essential part of longer trips. We will seek to make neighbourhoods and town centres pedestrian and cycle friendly, with slower traffic speeds and safe routes. At the same time, we need to maintain access for deliveries and public transport.

Improvements in local connectivity will link communities with wider opportunities and provide people with options to make active, healthy and sustainable travel choices. Active travel investment will provide direct links to the wider public transport system. Such improvements support the City Deal objectives of creating regenerated, vibrant and liveable communities that will improve the quality of place and quality of life for residents.

### 4.2 Strategic Priority Interventions for 'Connecting the Cardiff Capital Region'

National, regional and local travel in the Cardiff Capital Region will be targeted through strategic priority interventions that:

- a. Support the delivery of a transformative South Wales Metro and its wider regeneration and place-making opportunities.
- b. Improve access to International and national gateways, such as ports, the airport, regional and national rail, the Trans European Transport Network and Cardiff Central Station.
- c. Improve sustainable transport links and facilities to Cardiff City Centre and other key regional centres that encourage mode shift and active travel.
- d. Improve strategic transport corridors through both public transport and highway improvements.
- e. Improve access to and quality of key public transport interchanges, for example through improvements to rail and bus stations, delivery of strategic park and ride facilities and active travel links to communities.
- f. Connect key developments, open up access to strategic sites for housing, commercial and mixed-use development and improve access to Enterprise Zones, ports and the airport.
- g. Improve and simplify the customer experience, through better integration of transport modes, simplified ticketing and better information.

The above priorities provide focus for the long-term, strategic delivery programme for transport. By being clear about our priorities, means we can realise them more effectively. Work will be undertaken over the coming years to take forward the strategic priorities and develop a detailed future programme of schemes. It is proposed that the programme will initially prioritise a small number of strategic projects that will have a significant and positive impact irrespective of how other factors play out. Appendix 1 details the initial work required to progress each of the strategic priorities. The results of this work is intended to form part of a wider Regional Transport Strategy that will set out in detail how the priorities can be delivered.

In developing the delivery programme, the proposed schemes will be assessed against the strategic objectives of 'Connecting the Cardiff Capital Region' and the City Deal assurance framework and prioritised accordingly, focussing on schemes that deliver the greatest benefit and maximum impact for the city-region. The initial long-term programme of schemes to be assessed for inclusion in the delivery programme is included within Appendix 2. Further detail about the process of prioritisation and the programme of schemes will be included in a supporting document to 'Connecting the Capital Region', which will be developed over the next 12 months.

The importance of collaboration to the success of City Deal is no more evident than in developing the future City Deal programme for transport. The delivery programme for transport investment will be developed in partnership with the Welsh Government and Transport for Wales and will complement wider City-Deal investments.

The prioritised programme cannot be developed in isolation if the potential success of the Cardiff Capital Region is to be realised, it will be informed by the emerging City Deal strategies for economic development and spatial planning to produce a single allencompassing delivery programme for the region. This will ensure a strategic approach to transport, housing, regeneration and economic growth to create an accessible, liveable, 'work-life integrated' and highly connected Cardiff Capital Region.9

The successful development and delivery of the future programme of schemes is dependent upon long-term funding becoming available through a range of sources including both the current and potential future rounds of City Deal funding. The initial City Deal investment is the first step in taking forward the strategic priorities for 'Connecting the Capital Region'. Only through committed, stable and long-term funding arrangements for transport, beyond the lifetime of the current City Deal, will the objectives and vision of the region be fully realised. Appendix 3 shows how the Strategic Priority Interventions support the Transport Objectives.

<sup>&</sup>lt;sup>9</sup> Wording of City Deal objective for Housing, Development and Regeneration (Section 3.4, p. 11 of City Deal Joint Working Agreement)

### **Appendix 1 – Short-term actions to progress the Strategic Priority Interventions**

The table below provides a snapshot of the work required in the short-term to progress the strategic priorities of 'Connecting the Cardiff Capital Region'. At this stage, there are a number of unknowns in the development of City Deal and the South Wales Metro. The actions outlined below will be strongly influenced by work undertaken in other areas of City Deal, such as the future strategies and implementation programmes for economic development and spatial planning.

The table below gives an initial indication of schemes that have the potential to be progressed in the short-term, but these again will be influenced by the development and direction of City Deal, the South Wales Metro and the scheme prioritisation work that will be undertaken. As such, the actions detailed below and potential schemes highlighted may change as further development of City Deal, the South Wales Metro and the prioritisation work takes place. The requirements of future funding opportunities may also influence which schemes are progressed, in order to ensure those schemes that have the greatest likelihood of obtaining funding are prioritised.

A funding allocation of £360k has been allocated to the CCRTA to progress work in 2017/18. Further funding will be required from 2018/19 onwards to progress the work detailed below and to enable the development and delivery of the prioritised schemes.

Strategic Priority Intervention	Transport Planning Actions
a. Support the delivery of a transformative South Wales Metro and its wider regeneration and place-making opportunities.	The CCRTA will work closely in partnership with key stakeholders including Transport for Wales (TfW), the Welsh Government (WG) and the appointed Operator and Development Partner (ODP) to progress delivery of the South Wales Metro. The CCRTA will in particular support the planning and development of projects that require local authority involvement, including identification of further investment opportunities, new interchanges, line extensions/conversions, on-street running, station enhancements, park & ride and access proposals which may offer exceptional value if timed to coincide with other committed Metro enhancement works.
b. Improve access to International and national gateways, such as ports, the airport, regional and national rail, Trans European Road network and Cardiff Central Interchange.	Airport Link: New direct access from the M4 to Cardiff Airport, together with Strategic Transport Hub at J34 (mainline station, P+R. Bus hub).  Metro Central: Improvements to Cardiff Central: Improvements to railway station, access and bus-rail interchange
c. Improve sustainable transport links and facilities to Cardiff City Centre and other key regional centres that encourage mode shift and active travel. d. Improve strategic transport corridors through both public transport and highway improvements.	Enhance regional bus corridors with bus priority measures and infrastructure matched by operator investment in improved services under a Quality Bus Partnership to encourage model shift to sustainable transport on congested routes. Strategic transport corridors that could be highlighted as initial priorities for development could include Cardiff to Newport and the A470.  Progress work to identify, prioritise and develop key highway improvements on strategic transport corridors.

e. Improve access to and quality of key public transport interchanges, for example through improvements to rail and	Cardiff City Centre Transport Upgrade development including upgrade of bus priority and stops, and walking an cycling facilities in and around the city centre  Strategic Park and Ride: Improve access to rail network and shift car users off the most congested highway routes by providing a minimum of 5000 park & ride spaces to relieve congestion on the A470 corridor, the A4042/A472 corridor, the
bus stations, delivery of strategic park and ride facilities and active travel links to communities.	M4/A48 corridor to the east of Newport and the M4/A48 corridor
	Interchange: Progress work to identify, prioritise and develop improvements to key public transport interchanges, including Cardiff City Interchange and Merthyr Tydfil interchange redevelopment (to create state of the art interchange and promote regeneration of the town centre)
	Active Travel Access to Stations: On the basis of Integrated Network Maps, develop new and improved links to key stations and from stations to key destinations to expand effective station catchment area and release parking capacity.
f. Connect key developments, open up access to strategic sites for housing, commercial and mixed-use development and improve access to Enterprise Zones, ports and the airport.	Work with Strategic Land Use Planners and Economic Development to establish a Strategic Improvement Plan that aligns development with existing or enhanced transport improvements and services.
g. Improve and simplify the customer experience, through better integration of transport modes, simplified ticketing and better information.	Working with WG, TfW, operators and other key stakeholders through the Integration Alliance Board Work to develop integration initiatives that lie with the local authority remit e.g. improvements to passenger information, infrastructure improvements, Bus Quality Partnership Agreements etc.

NB – the City-deal and Welsh Government Metro proposals. The proposals in the process will be subject to peer review and a stage-gated approach, to ensure delivery and alignment of outcomes with table indicate a commitment to initial funding to develop the feasibility of the proposals and to inform the regional cabinet whether investment in the next stage of scheme development is justified.

## Appendix 2 - Transport schemes draft pipeline

The CCRTA is in the process of developing a prioritised and fully appraised long-term multi-modal capital programme. As a first step existing rail, bus, highway, park & ride and access proposals have been gathered. These will be reviewed and evaluated against City-Deal and Welsh Government targets. The draft pipeline is shown below:

Draft proposal name	Description	Area
Rail extension to CDF Airport	New spur into terminal	VOG
Rail extension Fairwater /	Cardiff North-West Corridor	CDF/
Llandaff - Creigiau - Llantrisant		RCT
Rail extension Pontyclun /	Spur / Reuse of former alignment	RCT
Miskin - Llantrisant - Beddau		
Rail extension Aberdare -	Existing freight line	RCT
Hirwaun		
Rail extension Ystrad Mynach -	Existing freight line plus new section	CPY/
Trelewis - Dowlais	3 3 1	MT
Rail extension Hengoed -	via Maesycwmmer viaduct plus street running route to be	CPY
Blackwood	confirmed	
Rail extension Llanhilleth -	Reuse of former alignment	BG
Abertillery		
Rail extension Newport -	Existing freight line plus street running	NWP/
Caerphilly		CPY
Rail extension to CDF Sports	From Penarth line through Grangetown	CDF
Village		
Rail extension Llanishen -		CDF
Cardiff Gate		
New station Cardiff Airport	VOG line, nearer to airport	VOG
New station St. Athan	VOG line	VOG
New station Bridgend College	VOG line	BRI
New station St. Fagan's	SWML (west of Cardiff)	CDF
New station Miskin/J34	SWML (west of Cardiff)	VOG/
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New station Brackla	SWML (west of Cardiff)	BRI
New station Sarn Park	Maesteg line	BRI
New station Victoria Park	City line, Lansdowne Rd crossing	CDF
New station Maindy	Taff line	CDF
New station Gabalfa	Taff line, at retail park south of A48	CDF
New station Nantgarw	Taff line, at lower end of Trefforest Ind Estate, Nantgarw	RCT
ron station rangarti	college, etc. (including P&R)	
New station Upper Boat	Taff line, at Tonteg Road crossing	RCT
New station Hopkinstown	Treherbert line, just west of Pontypridd	RCT
New station Pontypridd	Taff line, next to existing bus station	RCT
Interchange	Tan inte, now to oxioting sac station	
New station Glyncoch	Taff line, north of Pontypridd	RCT
New Station Ynysboeth	Aberdare line	RCT
New station Cwmbach North	Aberdare line	RCT
New station Merthyr Hoover	Taff line	MT
New station Crwys Road	Rhymney line	CDF
New station Wedal Road	Rhymney line	CDF
New Station Llanbradach new	Rhymney line, new location required if new P+R is being	CPY
location	built	OF I
	SWML (CDF-NWP), site of old Road station	CDF
New station Splott	SVVIVIL (ODF-INVVE), SILE OF OIG ROAG STATION	LODE

Area CDF CDF CDF
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Draft proposal name	Description	Area
Bus priority - Bridgend to	Bus priority measures from Bridgend to Blaengarw via	BRI
Blaengarw	A4064	
Bus priority - Bridgend to Porth	Bus Priority Measures at pinch points along the Porth to Bridgend via Trebanog/Tonyrefail and Gilfach Goch corridor and upgrade of bus stops	BRI RCT
Bus priority - Bridgend to Llantrisant / Talbot Green	Bus Priority Measures pinch points along the Talbot Green to Bridgend via Llanharan corridor and upgrade of bus stops	BRI RCT
Bus priority - Tonypandy to Llantrisant / Talbot Green	Bus Priority Measures at pinch points along the Tonypandy to Cardiff via Tonyrefail and Talbot Green corridor and upgrade of bus stops, Potential BRT spur Llantrisant to Tonypandy via A4119	RCT
Bus Priority - Aberdare to Tonyrefail via Tonypandy	Bus Priority Measures at pinch points along the Aberdare to Tonyrefail via Tonypandy corridor and upgrade of bus stops, potential BRT Maerdy to Porth via A4233	RCT
Bus priority - Pontypridd to Llantrisant / Talbot Green	Bus Priority Measures pinch points along the Pontypridd to Talbot Green via Church Village corridor and upgrade of bus stops, Potential BRT Pontyclun to Church Village/Pontypridd via A473	RCT
Bus priority - Pontypridd to Porth	Possible schemes have been identified in Pontypridd, particularly in the vicinity of the Bridge Street and Sardis Road roundabouts. It is agreed that the corridor needs to be extended to Porth in order to enable the examination of the issues to the north of Pontypridd	RCT
Bus Priority - Pontypridd to Aberdare	Bus Priority Measures at pinch points along the Aberdare to Pontypridd via Mountain Ash corridor and upgrade of bus stops	RCT
Bus priority - Aberdare town centre	Improvements to all approaches to Aberdare bus station	RCT
Bus priority - Pontypridd to Merthyr	Potential integration of BRT Merthyr to Pontypridd, via Cardiff Rd	MT RCT
Bus priority - Heads of the Valleys	Bus priority / Potential BRT via A465 between Aberdare, Merthyr Tydfil and Abergavenny	BG CPY MON RCT
Bus priority - Mid Valleys	Potential BRT Pontypridd to Ystrad Mynach/Blackwood/Pontypool via A470 and A472, bus priority along cross-valleys corridor, bus stop enhancements Mid-Valleys area	CPY RCT, TOR
Bus priority - Caerphilly to Newport	Potential BRT Machen to Newport conversion of existing HR alignment (with extension from Machen to Caerphilly and use of Newport BRT alignment), bus priority measures Caerphilly - Newport corridor	
Bus priority - Blackwood/Brynmawr to Newport	Bus priority measure via Abertillery, Newbridge & Risca	BG CPY NWP
Bus priority - Newport City Centre	Key congestion issues within the city centre that need consideration, as they affect regional and local services	NWP
Bus priority - Newport to Blaenavon	Potential BRT Newport City Centre to Malpas via A4051. Potential BRT Newport City Centre to Cwmbran/Pontypool via A4051 and A472, Potential BRT Blaenavon to Pontypool via A4043. Bus priority measures including Park Road Pontypool, St David's Road/Edlogan Way	NWP TOR

Draft proposal name	Description	Area
	Roundabout Cwmbran, Stafford Road narrowing	
	Griffithstown, Glyndwr Road Cwmbran, A4043 Riverside	
	roundabout to Snatchwood, Abersychan corridor, New Inn	
	Roundabout, Woodlands Road, Llantarnam roundabout	
Bus priority - Newport to	Potential BRT Newport City Centre to Celtic Manor via	MON
Chepstow	B4237, Potential BRT Newport City Centre to Llanwern via	NWP
	A4042 and A48, Potential BRT Newport to Monmouth via	
	A449 to A40	
Bus corridor Traffic Order	Review of Traffic Orders along key bus corridors	all
review		
Bridgend bus/rail interchange	tbd	BRI
Pyle bus/rail interchange	New or relocated bus stops close to the junctions of Ffordd	
l ylo bao/raii intereriange	Yr Eglwys/Bryn Ye Osaf and/or on Beach Road close to	D. (.)
	the rail station access route	
Cardiff Bay bus/rail interchange		CDF
Cardiff Central bus/rail	New bus interchange at rail station	CDF
interchange	livew bus interchange at rail station	CDI
Cathays bus/rail interchange	see study	CDF
		CDF
Coryton bus/rail interchange	see study	
Heath bus/rail interchange	see study	CDF
Llandaff bus/rail interchange	see study	CDF
Radyr bus/rail interchange	see study	CDF
Newbridge bus/rail interchange	Bus Station Upgrade	CPY
Pengam bus/rail interchange	see study	CPY
Abergavenny bus/rail	New bus interchange at rail station	MON
interchange		
Chepstow bus/rail interchange	New bus interchange at rail station	MON
Monmouth bus station	Upgrade of existing bus station	MON
Severn Tunnel Junction bus/rail	New mini-interchange at rail station	MON
interchange		
Merthyr bus/rail interchange	New bus station near Merthyr Tydfil rail station	MT
Aberdare bus/rail interchange	see study	RCT
Abercynon bus/rail interchange	New bus stops closer to the junction of B4275 Ynysmeurig	RCT
	Road and Station Rd, which would be within 50m of the	
	station	
Porth Bus/Rail Interchange	New interchange near rail station	RCT
Aberdare bus station	Upgrade of existing bus station	RCT
Pontypridd bus station	Upgrade of existing bus station	RCT
Penarth bus/rail interchange	see study	VOG
Barry bus/rail interchange	see study	VOG
Barry Island bus/rail	see study	VOG
interchange		
Barry Docks bus/rail	Provide a bus stop directly at Barry Docks Railway Station	VOG
parry books bushall		
, ,	Ito integrate with rail services and the new P+R facility	<b></b>
interchange	to integrate with rail services and the new P+R facility  A series of walking and cycling improvement to increase	lali
interchange Active Travel access to rail	A series of walking and cycling improvement to increase	all
interchange Active Travel access to rail station	A series of walking and cycling improvement to increase the effective catchment area of key stations	
interchange Active Travel access to rail station Bridgend station P+R	A series of walking and cycling improvement to increase the effective catchment area of key stations tbd	BRI
interchange Active Travel access to rail station Bridgend station P+R Pyle station P+R	A series of walking and cycling improvement to increase the effective catchment area of key stations tbd	BRI BRI
interchange Active Travel access to rail station Bridgend station P+R Pyle station P+R Maesteg Ewenny Road station	A series of walking and cycling improvement to increase the effective catchment area of key stations tbd	BRI
interchange Active Travel access to rail station Bridgend station P+R Pyle station P+R	A series of walking and cycling improvement to increase the effective catchment area of key stations tbd	BRI BRI

Draft proposal name	Description	Area
Pengam station P+R	tbd	CPY
Llanbradach station P+R	New P+R on old colliery site	CPY
Rhymney station P+R	tbd	CPY
Caerphilly station P+R	tbd	CPY
Energlyn station P+R	tbd	CPY
Newbridge station P+R	Small extension to existing P+R	CPY
Cardiff Central station P+R	tbd	CDF
M4 J33 P+R	New P+R with interchange facilities	CDF
Coryton station P+R	New P+R	CDF
Pentrebach station P+R	New P+R	MT
Merthyr Tydfil P+R	tbd	MT
	Additional P+R (200+ spaces) on south side of station	MON
Chepstow station P+R	Additional P+R (100+ spaces) on east side of station	MON
Abergavenny station P+R	Additional P+R (100+ spaces) on east side of station	MON
Newport station P+R	tbd	NWP
Wern Ind Estate P+R	tbd	NWP
Taffs Well station P+R	Additional P+R	RCT
Porth station P+R	Additional P+R (including Park and Share)	RCT
Pontyclun station P+R	Additional P+R	RCT
Aberdare station P+R	Additional P+R	RCT
Abercynon station P+R	Additional P+R	RCT
Trefforest station P+R	Additional P+R	RCT
Treherbert station P+R	New P+R	RCT
Ynyswen station P+R	New P+R	RCT
Treorchy station P+R	New P+R	RCT
Llwynypia station P+R	Additional spaces within existing car park at station	RCT
Trehafod station P+R	Enhance P+R, including signage and re-figuration of existing layout	RCT
Fernhill station P+R	New P+R	RCT
Pontypridd station P+R	Utilising parking bays within the existing car park	RCT
Llanharan station P+R	Provision of Park and Ride/Park and Share facilities at a number of locations in close proximity to and easily accessible, form the A470	RCT
A470 Northern Corridor bus P+R	Provision of Park and Ride/Park and Share facilities at a number of locations in close proximity to and easily accessible, form the A470	RCT
Pontypool & New Inn station P+R	Additional P+R on north side of station	TOR
Cogan station P+R	tbd	VOG
Barry Docks station P+R	Additional P+R	VOG
A465 Heads of the Valleys Improvements	Improvements to Gilwern to Brynmawr (Section 2) and A470 to Hirwaun (Section 6) and Dowlais Top to A470 (Section 5)	BG MT, MON RCT
A48/A473 Bridgend Corridor Improvements	Improve existing infrastructure, including potential dualling and new junction arrangements	BRI
M4 J35 MBU Improvements	Enhancements to capacity at Junction 35	BRI
M4 J36 MBU Improvements	Improve capacity of junction	BRI
A470 Cardiff Gabalfa - Coryton	Highway improvements between M4 J32 to A48 Gabalfa	CDF
MBU improvements	Interchange	

Draft proposal name	Description	Area
Cardiff Eastern Bay Link	Improvements to link between Queensgate to Ocean Way	CDF
Cardiff Strategic Junction	Improvements to 9 strategic junctions that will make a	CDF
Improvements MBU	contribution to managing network resilience, improve	
	access and road safety	
A4232 Improvements MBU	Improvements to A4232 Culverhouse Cross - Queen's	CDF
	Gate roundabout	VOG
A467 Newbridge to Crosskeys	Junction and on-line improvements along A467	CPY
improvements	Carlotteria and on-line improvements along A+or	01 1
•	Improvements to energtion of roundshout including	CPY
A468 Bedwas Bridge junction	Improvements to operation of roundabout, including	CPY
MBU	second river crossing.	00)(
A469 New Tredegar -	Improvements to the highway network north of Bargoed.	CPY
Pontlottyn improvements		
A472 Maesycwmmer	Improvements to the single carriageway A472 between	CPY
improvements	Crown Roundabout and Cwmdu Roundabout,	
A472 Ystrad Mynach - Nelson	Junction and on-line improvements along A472	CPY
improvements		
A472-A469 Maesycwmmer	A472/A469 cross valley route resilience	CPY
Traffic Relief	reate resilience	.
B4254 Pengam Road junction	Improve operation of the signalised junction.	CPY
MBU	improve operation of the signalised juriculon.	CFI
	Described at \$4,000/0,400 and the constraint of \$60 and till the	OD\/
Caerphilly Ring Road Penrhos	Dualling of A468/A469 north-western section of Caerphilly	CPY
- Pwllypant improvements	Ring Road	
Caerphilly Ring Road Pwllypant	Dualling of A468 north-eastern section of Caerphilly Ring	CPY
- Bedwas Bridge improvements	Road	
Caerphilly Ring Road South	Provision of a southern relief road to complete ring road	CPY
Eastern Extension	around town	
Caerphilly Town Centre	Efficiency enhancements at the junction to provide	CPY
Piccadilly Gyratory MBU	additional capacity - within an AQMA.	
Caerphilly Town Centre Tafwys	Signalisation of the junction to improve network efficiency	CPY
Walk MBU	originalisation of the junction to improve horizont emolecies	.
A40 Abergavenny Traffic relief	New link between A465 and A40 (west) and associated	MON
A Abergavering Traine Teller	road safety, environmental, active travel and PT	IVICIN
A 4O a a ation the name in	improvements on current A40 in Abergavenny town centre	NAONI
A40 section through	Traffic relief scheme to include new link west of	MON
Abergavenny MBU	Abergavenny	
A40/A466 Monmouth	Highway, road safety and active travel improvements to	MON
Wyebridge junction MBU	A40/A466 junction	
A4042 Goitre / Llanellen traffic	Local road safety / active travel improvements in	MON
relief	conjunction with proposed flooding work on A4042	
A472 Usk Traffic Relief	New link and associated road safety, environmental, active	MON
	travel and PT improvements on existing A472 in Usk town	
	centre	
A48/A466 Chepstow High	Highway improvement / road safety improvements to	MON
Beech junction MBU	, , ,	IVICIN
•	A48/A466 junction	NAONI
A48/A466 Chepstow traffic	New link between M48 J2 and A48 (east) and associated	MON
relief	road safety and environmental improvements on the	
	existing A48 in Chepstow town centre	
B4245 Magor traffic relief	Removal of B4245 from town centre and associated road	MON
	safety, active travel and PT improvements	
M4 toll removal impact		MON
•	of this change and minimise the negative impact on the	NWP
	local transport system.	
Abercanaid Hoover Highway	Development of an alternative road access which include	MT
, wordanala Houvel Highway	Development of an alternative road access which include	IVII

Draft proposal name	Description	Area
Improvements	repairs and maintenance to 'Brandy' bridge.	
Quakers Yard Pentwyn Road	Road widening improvements schemes that links Quakers	MT
Improvements	Yard to Nelson	
A468 Bassaleg Caerphilly	Provision of northbound dedicated right turn lane from	NWP
Road MBU Improvements	Caerphilly Road into Laurel Drive	
A48/A4810 Newport Retail	Provision of all movement signal controlled junction	NWP
Park/Queensway MBU		
Improvements		
B4591 Highcross MBU	Provision of northbound dedicated right turn lane from	NWP
Improvements	Highcross Road into Cefn Walk	
M4 J28 MBU Improvements	Junction improvements to the roundabout	NWP
A4058/A4061 Gelli/Treorchy	Construction of a new single carriageway providing a link	RCT
Traffic Relief	between the upper and mid Rhondda Fawr.	1.01
A4059 Aberdare Northern	Development of new road scheme in parallel with the	RCT
Cynon Gateway	dualling of the A465 Heads of the Valleys Road	IXCI
A4059 Corridor Junction	Junction capacity improvements on the A4059 to improve	RCT
Capacity Improvements MBU	traffic flows at key identified junctions. Measures to	IXCI
Capacity improvements wibo	include lane widening to increase capacity, creation of	
	holding lane to the petrol station, and implementation of	
A4059 Mountain Ash Northern	filter lanes to reduce queue lengths	RCT
	A multi-span single carriageway bridge forming a cross	RCI
Cross Valley Link	valley link between the A4059 and B4275	DOT
A4059 Mountain Ash Southern	A multi-span single carriageway bridge forming a cross	RCT
Cross Valley Link	valley link between the A4059 and B4275	DOT
A4059/A465 Strategic	Implementation of measures to reduce delays and improve	RCI
Transport Corridor	traffic flows at key junctions on the highway network	
Management System		DOT
A4119 Castell Mynach junction	Implementation of measures to reduce delays and improve	RCT
MBU	traffic flows at key junctions on the highway network	
A4119 Coed Ely improvements	Dualling of the A4119 - 1km section known locally as 'Stink Pot Hill'	
A4119 Corridor Junction	Junction capacity improvements on the A4419 to improve	RCT
Capacity Improvements MBU	traffic flows at key identified junctions. Measures include	
	modification of junction layout, bus priority measures and	
	installation of new urban traffic control systems	
A4119/A473 Ynysmaerdy -	Construction of an alternative route between the Upper Ely	RCT
Talbot Green Traffic Relief	Valley and Talbot Green town centre	
A4233 Upper Rhondda Fach	Construction of a single carriageway road between	RCT
Traffic Relief	Pontygwaith and Maerdy as an extension of the existing	
	Lower Rhondda Fach relief road	
A473 Llanharan Traffic Relief	Construction of the eastern section of the Llanharan Relief	RCT
	Road. (Western section already constructed by	
	developers)	
A473 Talbot Green	Upgrade 3km of the existing Talbot Green By-pass to dual	RCT
improvements	carriageway standard	
A473 Trefforest Industrial	Construction of a cross-river link road from Tonteg Road to	RCT
Estate new link	A470 and the introduction of one-way system at Gwaelod-	
	y-Garth Rd/Tonteg Rd junction.	
M4 new J34A	Development of a new junction	RCT
Junction 34 to Cardiff Airport	Upgrade rural road from A48 junction to J34, including	RCT
	road widening, walking and cycling facilities that will link to	VOG
	Five Mile Lane and Cardiff Airport	
A4042 Pontypool	Signal control at Heron roundabout, Rechem roundabout,	TOR
	1 - g	. •

Draft proposal name	Description	Area
improvements	Jockey roundabout to Crown roundabout including A472 link to Pontypool roundabout	
A4042 Woodlands Roundabout Improvements MBU	Capacity and lane discipline improvements	TOR
A4043/B424 Abersychan improvements	Improvements to junctions and sections of highway from Pontypool to B4246 Lodge Road, including redesign of Lodge Road junction with possible signalisation	TOR
A4043/B4248 Abersychan - Blaenavon - Brynmawr corridor improvements	On line improvements on A4043 Abersychan - Blaenavon including Abersychan relief road from St Lukes Road to north of Abersychan village, and on the B4246 Blaenavon to Brynmawr	TOR
St Athan Northern Access Road	Provide a new road around St Athan between Eglwys Brewis and Llanmaes to cater for the Enterprise Park and link to housing	VOG
Eastern Bay Link Phase 2	Route improvement to eastern corridor	CDF



Appendix 3 – Strategic Priority Interventions & Transport Objectives.

	1.Improve connectivity between the Cardiff Capital Region and the rest of Wales, the UK and Europe	2 Improve access across the CCR to and within Cardiff and other major centres, and to the region's enterprise zones, airport and main gateways.	3 Improve access for all to employment and training opportunities, services, healthcare, education, tourism and leisure facilities.	4 Improve the quality, attractiveness, efficiency, and reliability of the regional transport system.	5 Improve integration and interchange within and between modes of transport.	6 Increase the proportion of journeys made by sustainable modes of transport such as public transport and active travel.	7 Reduce the environmental impacts of transport, including greenhouse emissions, air pollution and noise.	8 Improve safety and security of the transport system.	9 Improve travel information to enable people to make informed, sustainable, healthy and active travel choices.	10 Reduce and balance travel demand by influencing the location of new development and enabling polycentric growth.
a. Support the delivery of a transformative SW Metro and its wider regeneration and place-making opportunities.		xxx	xxx	xxx	xxx	xxx	xx	х	Х	Х
b. Improve access to International and national gateways, such as ports, the airport regional and national rail, Trans European Road network and Cardiff Central Interchange.	xxx	xx						х		
c. Improve sustainable transport links and facilities to Cardiff City Centre and other key regional centres that encourage mode shift and active travel.		xxx	xxx	xx	X	xxx	XX	Х		Х
d. Improve strategic transport corridors through both public transport and highway improvements.		xx	xx	XX	Х	х	Х	Х		
e. Improve access to and quality of key public transport interchanges, for example through improvements to rail and bus stations, delivery of strategic P+R facilities and active travel links to communities.	х	xx	х	Х	xxx	xx	х	х	х	
f. Connect key developments, open up access to strategic sites for housing, commercial and mixed-use development and improve access to Enterprise Zones, ports and the airport.		xx	xx	Х	Х	X			Х	xx
g. Improve and simplify the customer experience, through better integration of transport modes, simplified ticketing and better information.	Х	XX	х	XX	xxx	XX	Х	х	xxx	Х