

Transit Oriented Development Charette Working Note

November 2019

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Event held in collaboration with Mark Barry of Cardiff University and M&G Barry Consulting, Cardiff Capital Region, Design Circle, Tirion Homes, Community Housing Cymru.

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1. Introduction

Considerable public interest and enthusiasm has been generated by the South Wales Metro proposals and work towards realising them. A wide range of professionals across sectors continue to engage with the project and its potential for unlocking a variety of opportunities. With Metro evolving in the context of new place-led national planning policy and an emerging National Development Framework we and our partners are keen to ensure that we do not lose the expertise, good will or momentum.

A collaborative and broadly representative group including Mark Barry of Cardiff University and M&G Barry Consulting, Cardiff Capital Region, Community Housing Cymru and RSAW Design Circle, that regularly shares information and contributes to debates surrounding Metro's potential, organised and held a charette on 31st October 2019. The group elected that it should be organised and led by the Design Commission for Wales, facilitated by Jen Heal, Design Advisor at DCFW and enabled by shared contributions to the costs of preparation and delivery. The main purpose of the charette was to explore the opportunities created by Transit Oriented Development (TOD) and how this might feed into and inform upcoming Strategic Development Plans and Local Development Plan reviews, in the context of the development of the South Wales Metro.

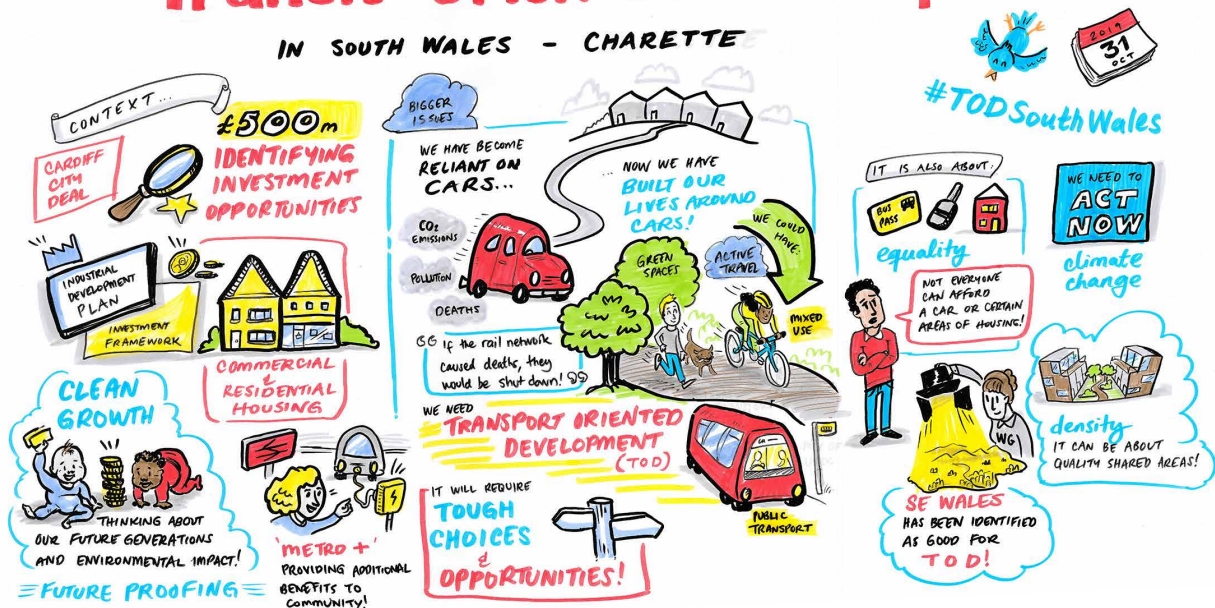
This working note summarises the key messages arising from the charette as well as an overview of the issues discussed on the day. The attendees engaged with the charette positively and contributed to discussions regarding the barriers and opportunities to delivering TOD in the region. This note is intended as a catalyst for further discussion on the outputs and next steps with attendees and to promote the case for TOD with a wider audience.



Source: itdp.org

Transit Oriented Development

IN SOUTH WALES - CHARETTE



What?

Transit Oriented Development (TOD) is a concept that integrates public transport investments and land-use planning and development in order to create more sustainable, walkable, diverse and inclusive places close to station/stop areas. TOD is typically centred on a public transport station/stop or within ten-minute walking distance of one and features relatively high-density mixed-use development. Although TOD includes mixed-use development, the focus was primarily on the potential for residential elements of development and how current housing challenges in the region might be addressed.

A **charette** is a meeting or workshop devoted to a concerted effort to solve a problem or plan the design of something. From French charette, literally 'cart'; current sense dates from mid-20th century, possibly with reference to the use of a cart in 19th-century Paris to collect architecture students' work on the day of an exhibition. The charette context provides space for fresh thinking, full exploration of ideas, ambitions and opportunities as well as creative approaches to problem solving.

Who?

The charette was attended by people from a range of disciplines across the region. The group included Registered Social Landlords (RSLs), volume house builders, Welsh Government officials, Local Authorities, planners, urban designers and public bodies. The full list of attendees is provided in Appendix One.

2. Summary of Key Messages

The charette provided the opportunity for group discussion and feedback on a range of questions relating to the benefits, opportunities, initiation and roll out of TOD in the region. The following key messages emerged from this discussion with additional feedback from the breakout sessions provided in Sections 3 and 4 of this document. Suggestions for next steps, that arose from the workshop, are outlined in Section 5.

Key components

The fundamental requirement of TOD is the ability to access essential components of life on foot/bike locally, or the regional network via convenient public transport. This enables people to live without dependence on a private car and thus enables a different form of development with much lower parking requirements.

Key components that help to facilitate this include:

- Public transport stops that are a hub for a variety of modes including train, light rail, bus, bike, car hire, bike hire, taxi.
- Higher density development that helps to provide a critical mass of people and footfall to support a mix of uses. Greater intensification and/or higher density does not mean high rise. The height should be appropriate to the location as density can be delivered at a range of scales.
- A mix of uses that provide for daily needs without the need to drive.
- High quality communal and public spaces including parks, streets and squares that provides a pleasant and attractive setting for higher density development.
- Public services and employment opportunities as well as homes located close to public transport.



Understanding the theory



VISUAL BY: LAURA SORVALA.com - @_auralab

The benefits

There was consensus that there are numerous benefits of TOD with the potential for reduced environmental impact and improved social, health and wellbeing outcomes over the lower density, car-based development that is more prevalent. In the context of the Well-being of Future Generations Act and climate change emergency it is of greater importance than ever that more sustainable ways of developing and living are pursued.

Opportunities

The investment in the South Wales Metro provides a potential catalyst for TOD in the region. In locations where frequency and speed of train services on the network provide a convenient, reliable and faster travel option to the use of the car, and where sufficient local services are available on foot, there is the potential for TOD. This highlights a few locations for major early TOD interventions including Pontypridd, Merthyr, Caerphilly, Newport, and Bridgend as well as a need to review development opportunities at all scales in/around all the stations on the Metro network. Further investment in the network is needed to make TOD viable across the region and to support some of the major development already coming forward.

Public opinion and aspirations were identified as one of the significant barriers

to the implementation of TOD. However, heightened environmental concerns through recent climate change strikes and a growing concern with our impact on the environment suggests that this could be the opportune time to provide an alternative. The narrative of TOD as alternative aspiration to a large detached house with a driveway and private garden could appeal to a more environmentally conscious generation but should not be limited to the young – great family housing and potential for downsizing must also be included.

With the national planning policy position clear on placemaking and TOD, the regional and local level must set a clear, long-term vision for TOD. The Strategic Development Plan provides the opportunity to do this. The strategic decisions on what to develop and where should be established at this level with a clear commitment to the principles of TOD in the right locations.

The emergence of a Land Division established by Welsh Government provides the potential for coordination and vision for TOD, but this must be in the right locations not just any available public land. Further considerations on the role of this or any other agency are set out in Section 5 of this document.

Barriers

A key barrier for the delivery of TOD is the level of uncertainty and perceived risk of an untested model in this region. The prevalent suburban model of residential development by established house builders has a tried and tested investment model. Support and assistance are needed to establish a new model that is likely to have a greater element of build-to-rent, mix of uses and maintenance of shared spaces and which strengthens the role of housing as a critical social infrastructure.

TOD is reliant on public transport and active travel. Therefore, the network and availability of services needs to be in place from the outset to ensure that travel habits and reduced private car requirements are established from the beginning. There is a perception that this is not yet the case and there is cynicism around the proposed metro investment, and an assumption that it won't radically change or enhance travel in the region. This perception needs to be addressed and greater awareness raised of the opportunities that metro presents to do things differently. Aspirations and expectations need to be set high.

Public perception and the need for culture change was identified as an issue. There

remains a prevalent aspiration, or perceived aspiration, for lower density living with a large amount of private space and reliance on car travel. However, there are few alternatives available and the TOD way of living has not been fully tested as an alternative vision for the future.

The potential for TOD in the region is recognised in the draft consultation National Development Framework and the value of placemaking, which is closely related to TOD, is evident in Planning Policy Wales 10. This provides the basis for a more joined up approach, but higher-level coordination is required for a TOD approach to residential development to be successful. For example, access to local services such as primary schools and primary health care within walking distance was identified as important to enable people to live without a car. However, there is trend for these elements to be agglomerated and concentrated into fewer locations within each authority which will make them harder to access. A Public Service Board level understanding of the placemaking implications of these decisions is needed and, for TOD to be successfully delivered, there needs to be a commitment at all levels to informed strategic decision making in line with the vision for a more sustainable, non-car based way of living.



3. Benefits and Barriers

Potential benefits and opportunities

A range of potential benefits were identified in relation to Transit Oriented Development that help address the current context of a climate change emergency as well as the emphasis on placemaking in Planning Policy Wales 10 and support for TOD in the emerging NDF.

The advantages of TOD over non-TOD or more traditional suburban development include the following:

- More efficient use of land with higher density of development
- Lower energy use
- Less pollution and lower carbon emissions due to fewer private car journeys
- Well serviced places for all users including non-car drivers
- More viable shared mobility including public transport, car sharing/clubs, cycle hire
- Supports more social infrastructure as there is a greater critical mass of people
- Better transit choices for everyone
- More walkable environments
- More efficient infrastructure investment

The benefits have environmental, social, health and wellbeing impacts that could potentially be measured as part of the of the implementation of future TOD.

It was recognised that there are some benefits of non-TOD over TOD such as more potential for off-grid technologies, easier to deliver zero carbon homes, greater adaptability and lower risk. However, many of these can be overcome through good design and as TOD is tested and refined.

Current barriers and challenges

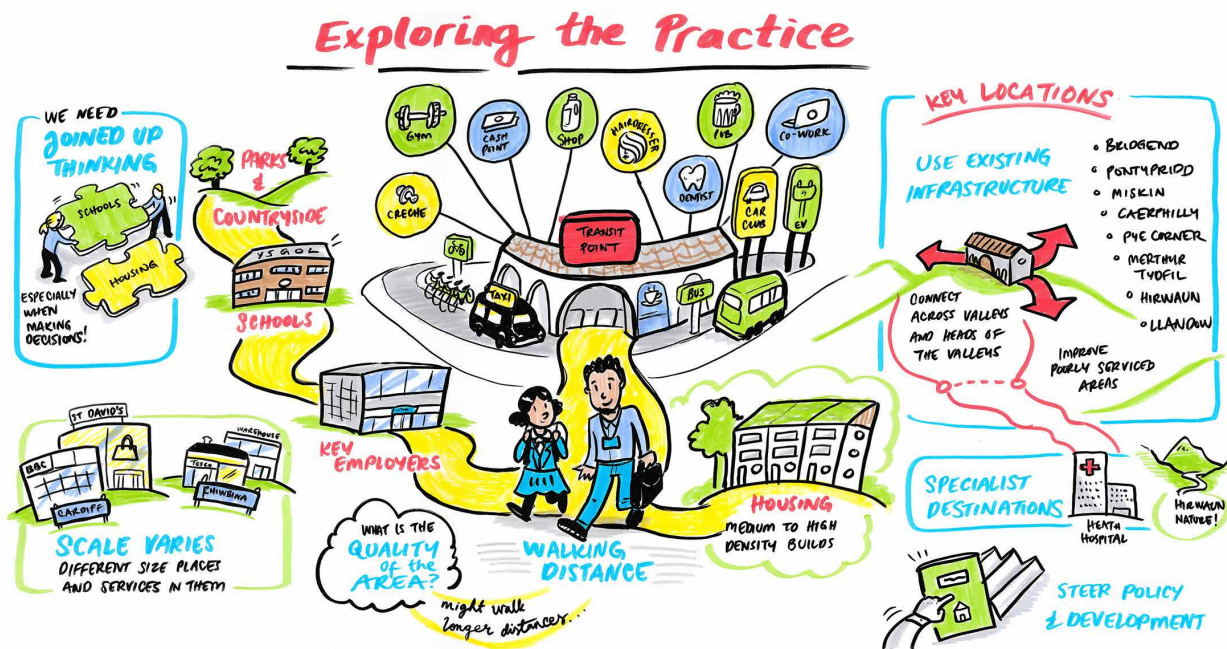
There are clearly barriers to the delivery of TOD in the region which the charette sought to explore. A range of issues were highlighted which need a coordinated response and leadership to overcome.

- The level of public transport provision to support viable TOD needs to be in place first or developed alongside the development to enable low car/no car living.
- Current public aspirations are, or are presumed to be, for large detached houses with private gardens and driveways. However, there is a lack of good quality alternatives that provide sufficient choice to test whether the density and amenity associated with TOD are appealing.
- Pace of life and expectations of what can or should be achieved within a day/week
- The current model of housing is a proven investment model and TOD is not currently.
- It would be difficult to deliver TOD before the public transport network with sufficient service is in place.
- Lack of a long-term strategic vision for places. A proper plan led process is needed which identifies the best location for development rather than the sites that are best promoted.
- Public awareness of TOD and why it is important is lacking.
- Rural and urban contexts present different challenges which are not yet fully understood.
- There is a need to distinguish between car ownership and car use.
- Current process is too developer led and needs more public ownership and control of land.
- Lack of long-term strategic vision, stability and collaboration



4. A Vision for TOD

Participants were asked to identify the key components of a TOD development and what was needed within the surrounding area, particularly a five- and ten-minute walking distance.



Each location will be unique and require a bespoke response but many of the components will be common to all locations. What emerged from the discussion is that there will be some distinction between locations that are more of an origin and those that are more of a destination. The origins will be smaller locations where good transport connectivity and day to day facilities are essential, and destinations will be larger settlements with more jobs, regionally significant facilities and larger retail facilities. No location must be confined to being an origin forever, as a result of public transport enhancements and if identified as regionally significant an origin can become more of a destination.

Transit stop

- Integrated bus, rail, taxi, secure bike storage, park and ride, disabled parking, car club/hire all with the potential for EV charging.
- Integrated information and ticketing.
- Cash point, coffee.
- Clean and safe and welcoming environment.

Within a five-minute walk

- Places people need – essential day-to-day facilities.
- Active travel connections to transport stop and facilities.
- High density residential e.g. 50-100dph (?)
- Potential park and ride locations.
- Smaller scale retail and commercial uses.
- High quality public open space, play space, parks.
- Aligned childcare, school and employment opportunities
- Social facilities
- Potential new business start-up space and/or co-working space
- Social care – e.g. care homes
- Local health care provision
- Pub/coffee shop
- Gyms

Particularly for destinations: mixed use development, public sector offices, commercial offices, further and higher education

Within five to ten-minute walk

- Slightly lower density residential development
- Access to active travel routes
- Access to the wider countryside
- Community hubs

Where it should be focused

There are likely to be opportunities for transit-oriented development across the Metro network. A further piece of work that identifies the available sites with the right characteristics for achieving the type of development and the benefits set out in this paper is needed to properly understand the opportunities.

The charette identified different categories for the potential future focus of TOD, including:

Early intervention – locations that are already served by facilities and where connectivity will be improved early in the Metro development such as Merthyr, Pontypridd, Caerphilly, Bridgend. This should be integrated with any existing or proposed regeneration considerations for town centres. TOD in these locations has the potential to further support the vitality of the larger towns on the Metro network.

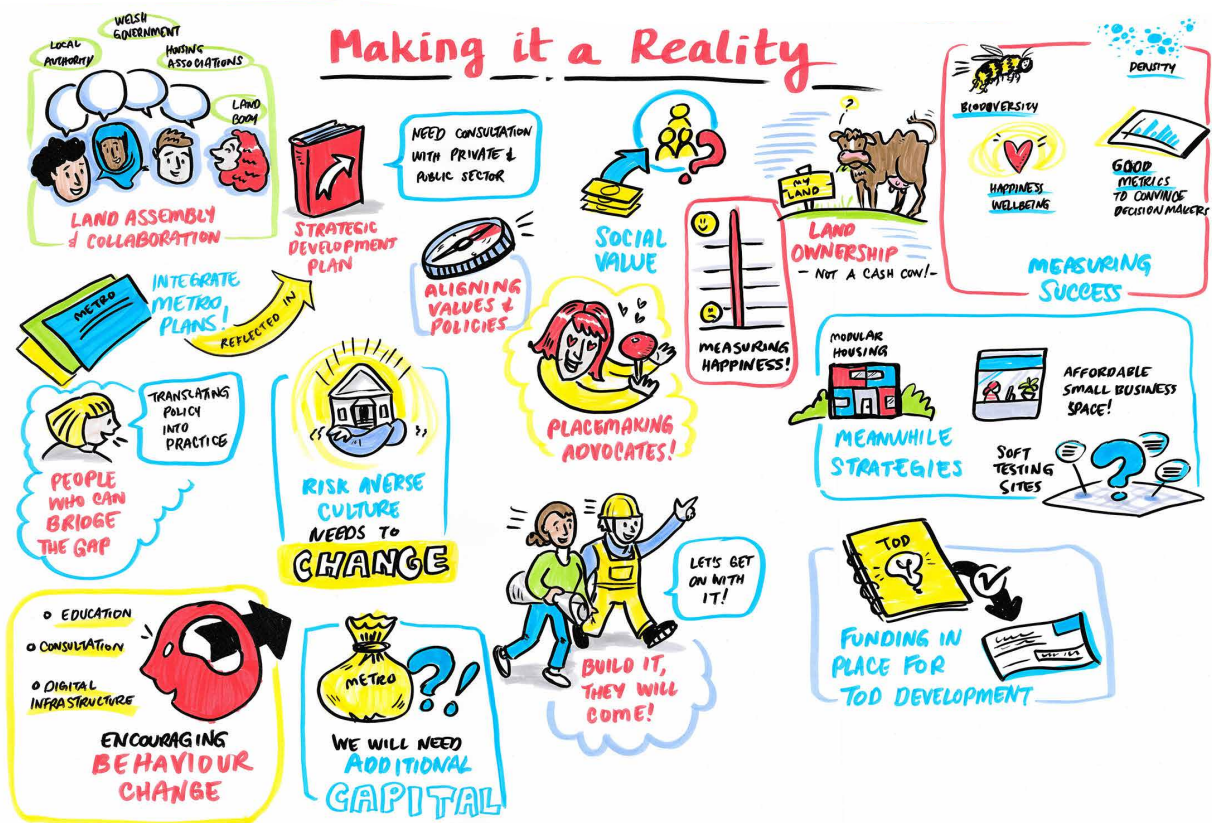
Future opportunities – the metro also provides the opportunity to deliver a different type of development in locations that would otherwise be very car dependent and therefore likely to be car based. More suburban locations such as Pontyclun, Rhoose and St Mellons could be good locations to explore different ways of delivering higher density, well-connected development. In these locations it is important that the infrastructure is in place before development so that non-car travel habits can be established from the beginning.



Source: CityLab

5. Next Steps

The charette was concerned with not just the theory but the implementation of TOD and therefore considered what was needed to make it a reality.



Early action

Ideas were considered for what might be done in the short term to promote and support TOD:

- A temporary or meanwhile use strategy for selected sites.
- Accelerate housing sites that are primary locations for TOD to be used as a pilot.
- Soft testing of key sites.
- Develop exemplars to learn from and promote the approach.
- Align funding streams around TOD.

What a land agency and other key participants might do?

As discussed in section 2, Welsh Government Land Division is seen as an opportunity for advancing TOD for publicly owned land. However, a broader land agency may be required to coordinate and promote TOD more widely and ensure it is delivered in the right locations. The following should be considered for either of these agencies:

- TOD requires a coordinated approach, so a delivery vehicle is needed.
- Land assembly/purchase/CPO powers are needed to establish the right sites in the right place.
- Such a body requires a design champion to promote excellence in placemaking from the beginning of a project.
- Land must not be seen as a cash cow for the public sector.
- An agency needs to have a leadership role in bringing developers together, allocating risk and coordinating funding.
- Develop a TOD masterplan or guidance with input from DCFW and Cardiff University.

What else might be needed?

The following suggestions and ideas were put forward for what is needed to support a TOD approach:

- There is an important role for Strategic Development Plans – with input from delivery partners, public services, significant employers.
- Identify primary sites and a methodology for assessing sites with a role for CCR at the regional scale in identifying the priorities.
- Review what policies may need to be changed such as parking and public open space requirements.
- Coordination of input from public, private, housing associations and community builders is needed.
- A common design guidance for highways, public transport and travel.
- The Consultation Draft National Development Framework is supportive of a TOD approach, particularly in this region.
- The placemaking vision for Wales needs to be clearer from Welsh Government and could include a set of principles.

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- A resource is required to help take policy through into practice with the right skills, resources and political buy-in.
 - Ongoing strengthening of the public transport options and considerably more capital and revenue funding is needed to further strengthen the offer beyond the current proposed metro interventions.
 - Review of best practice elsewhere e.g. Leeds, Manchester, Nottingham, Liverpool, Glasgow, Taf Field development, Barry station, Freiburg, Scandinavia, Salford Quays
 - Consideration of how to enable the development of alternative housing models that are needed for TOD, potentially through a specific fund.

Other ideas

Improving transport options has many benefits but ideas were also provided for how to manage peak congestions times in other ways:

- Digital infrastructure.
- Flexible spaces to work.
- Flexible employers to help make it easier to take alternative transport modes.

Measuring the impact

The potential health, wellbeing, social, economic and environmental benefits of TOD are as yet untested in the region. A pilot or test scheme should build in an assessment process that compares a range of outcomes with current common practice.

The metrics must include wider considerations than housing numbers, land value and capital receipt. There must also be consideration of impact on:

- Health
- Happiness
- Car usage
- Carbon emissions
- Obesity

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- Deaths on roads
 - Affordable housing provision
 - Inward investment
 - Socio-economic indices
 - Demographic trends
 - Ecology and biodiversity
 - Job creation

The narrative of a pilot scheme should include the social value of the places created, how value can be captured and how future savings (such as reduced impact on NHS) can be factored in at the beginning. Developing a set of metrics would also help to measure suitability of sites such as average travel distances, how much can be done by active travel and public transport, access to work, schools, hospitals, public services, leisure, retail etc. A process for the development and implementation of a pilot would be needed.

Involvement

It is essential to join up public bodies/departments around the idea of TOD for it to be successful. For example, the consideration of where to locate schools should involve how they might contribute to successful TOD. Similarly, health and infrastructure investments will have an impact that should work with, not against, the vision for TOD.

Public engagement requires clear communication, involvement of young people and education around what TOD is and why it is significant. Careful consideration of ways to encourage culture change is needed. Systemic and strategic thinking and practice is critical.



Appendices

Appendix One: Charette Attendees

Katie Allister	Head of Transport Policy, Cogitamus Ltd
Joe Ayoubkhani	Planning Associate, Barton Willmore
Clare Cameron	City Deal Development Officer (Transport), Cardiff Capital Region City Deal
Jane Carpenter	Planning Director, Redrow
Brian Davies	
Emyr Davies	Senior Planning Manager Redrow Homes, South Wales
Gareth Davies	Executive Director of Growth & New Business, Coastal Housing Group
Matthew Davies	Executive Director of Development, Newport City Homes
Hakeem Din	Trainee Solicitor, Capital Law
Simon Gale	Director of Prosperity and Development, RCT County Borough Council
Richard Hallett	Development Manager, Linc Cymru Housing Association
David Holmes	Architect, Sustainability In The Built Environment
Calvin Jones	
Rob Jones	Senior Project Manager, TfW
Jo Lerner	Head of Regeneration South, Welsh Government
Dave Lucas	Team Leader Strategic Planning, Caerphilly County Borough Council
Sam O'Callaghan	Solicitor, Capital Law Limited

Scott Orford	Professor, School of Geography and Planning, Cardiff University
Cai Parry	Barratt Homes
Bob Smith	Honorary Senior Research Fellow, Cardiff University
Roger Tanner	Retired, Cardiff Civic Society
Jamie Tucker	Senior designer, Arup
Roger Waters	Service Director - Frontline Services, RCTCBC
Colin Whittle	Research Associate, Cardiff University
Cheryl Williams	Principal Health Promotion Specialist, Public Health Wales

Facilitators

Mark Barry	Cardiff University and M&G Barry Consulting
Jen Heal	DCFW
Nicola Sommerville	CCR
Rhea Stevens	CHC
Andy Sutton	Sero Homes
David Ward	Tirion Homes

Graphic Illustrator: Laura Sorvala
Photography: Magenta Photography

Appendix Two: What would you need to live without a car?

Participants were asked individually to write down what they would need to live without a car:

Public transport

- Public transport systems which are reliable, cost effective for users and flexible in meeting demand.
- Availability of 'short term' car loan schemes.
- Regular, reliable, rapid and well connected public transport that coordinates and links together to make a journey in a reasonable time.
- Reliable public transport.
- Cost effective alternative.
- More reliable public transport.
- 21st Century upgrades to public transport.
- Proximity to a high quality and high frequency public transport network.
- Public transport that is better and easier than car travel.
- Cheaper, more efficient public transport options.
- Metro everywhere.
- Clean, cost effective, frequent public services.
- Comprehensive bus network with high frequency services and sufficient cross-city coverage.
- Integrated ticketing (minimum across operators but ideally across all modes).
- High frequency rail services.
- Wider education on sustainable transport.

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- Reliable, frequent, affordable public transport.
 - Integrated public transport.
 - Cheaper and more reliable rail travel across the UK.

Active travel

- Safe cycling routes.
- Immediate access to high quality and comprehensive walking and cycling network.
- Safe streets.
- More cycle routes that are safe, well lit, not shared with cars and connect well across the city.
- Local facilities within walking or cycling distance of home.

Land use

- Bigger variety of amenities outside of the city centre.
- Great public spaces for quality of life.
- Local shops and services to walk to.
- Amenity space.
- Local goods/services to where I live.

Lifestyle/culture change

- A society and environment whose design is not entirely based on the assumption of car ownership.
- More time to get anywhere.
- A less lively dog that would not need to run around in parks.
- Shorter day trips.

- To live in a place I want myself and family to spend most of our time.
- Slower pace of life.
- Good broadband to allow home working.
- Home deliveries e.g. supermarket shopping.

Other

- Taxi or van to deliver the weekly food shopping.
- Taxi for me and kids to visit friends.
- Disincentives to use the car making costs unviable (even though I live in a 1970s mid-valleys suburb, I could live without a car if I had to, but currently it's just more convenient to use it.
- Green infrastructure.
- Uber/equivalent to supplement public transport.



Appendix Three: Further reading

The following links provide access to further material on or related to the topic of Transit Oriented Development.

<https://swalesmetroprof.blog/2019/04/25/transit-oriented-development-in-the-cardiff-capital-region/>

<https://www.youtube.com/watch?v=hltQZfVU6-g>

<https://www.cnu.org/publicsquare/2017/10/31/25-great-ideas-new-urbanism>

<http://www.transportfornewhomes.org.uk/>

https://www.vox.com/platform/amp/2017/6/20/15815490/toderian-nimbys?__twitter_impression=true

<https://www.vox.com/energy-and-environment/2019/4/10/18273895/traffic-barcelona-superblocks-gentrification>

<http://luminocity3d.org/indexRetina.html#undefined>

<http://www.urbantransportgroup.org/media-centre/press-releases/%E2%80%98transit-oriented-development%E2%80%99-can-help-meet-housing-demand-and-reduce>

<http://www.urbantransportgroup.org/system/files/general-docs/The%20place%20to%20be%20-%20Urban%20Transport%20Group%20FINAL%20WEB.pdf>

<https://swalesmetroprof.blog/2018/10/02/metro-me-october-2018/>

<http://www.transportfornewhomes.org.uk/>

<http://www.urbantransportgroup.org/>



DESIGN
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