

COMMENTS ON THE PREFERRED STRATEGY OF THE CARDIFF REPLACEMENT LOCAL DEVELOPMENT PLAN

From: Radyr & Morganstown Local Development Group

Strategy

1. The Preferred Strategy - Option B - will increase the population by 39,742 by 2036 by the construction of 24,000 new homes on a mixture of 50:50 greenfield and brownfield sites. These houses will be occupied by 23,103 households. This is assuming that the new households are formed at a formation rate of 1.65 much lower than the figure from 2011 to 2021 of 2.46.
2. The strategy also assumes a housebuilding rate of 1,600 dwellings per annum which is well above the past 15-year average for Cardiff of 1,227. In fact, since 2009, the highest dwelling completion rate for one year only was 1,444 with the lowest 442. Indeed, Edge Analytics show that a target of 1,600 is close to twice the build out rate achieved in Cardiff over the last ten years (2011-2021 Cardiff averaged 835 pa). It is widely accepted in the housebuilding industry that the next few years will be bad years for completions given the economic climate so achieving this figure of 1,600 per annum could be even harder.
3. It would appear that this strategy is based upon Cardiff Council's own view of the growth of the City and is in excess of Option A which is based "upon the Council's own projections for economic growth", which is odd. Table 2 (page 24 of Edge Analytics Demographics study - October 2021 Technical Report: LDP Consultation Supporting Documents) indicates that there are three scenarios based upon the Welsh Government's 2018 population projections. The Principal of these (as opposed to High or Low) would lead to a growth in population of 17,194 and an average annual number of new dwellings of 898. Population growth in the strategy selected by Cardiff Council ("Option B") is more than double the Welsh Government Principal forecast, yet there is no rationale to justify this.
4. Paragraph 5.34 of the Development Plans Manual (2020) states that "in terms of considering the level of housing provision for a plan, the most up-to-date suite of Welsh Government Population and Household Projections are a fundamental part of the evidence base." Whilst we believe that the Welsh Government should have updated their planning and household projections from the 2018 baseline in the light of the results of the 2021 Census, it is clear that Cardiff Council should have used these 2018 projections as the starting point for setting levels of growth in the RLDP. Guidelines state that any departure from these figures should be fully justified by demonstrable evidence. The Preferred strategy fails to provide any such demonstrable evidence.
5. Moreover, the 2021 Census showed that Cardiff has not been growing as fast between 2011 and 2021 as was expected in the WG forecasts in 2018. Indeed, the Census results

showed that the projections for 2021 were almost 2% higher than actual. When the 2023 WG projections are produced, they are likely to be lower than the 2018 projections as a result of the new Census data. This could cause problems for the Preferred Strategy as it is highly likely that Cardiff's projections will be far adrift from the new WG forecasts, and it may find it hard to get the revised LDP accepted.

6. It is claimed that the reason for choosing Option B is that planning outcomes based on WG 2018 Principal Forecast would result in a "zero growth" situation, thereby undermining Cardiff's position as a motor for growth in SE Wales. This, however, is incorrect. The Edge Analytics report shows that the WG 2018 Principal Scenario would generate a population growth of 17,000, and new housing demand of 13,500. This is a far more realistic level of growth for Cardiff.
7. It is also noted that para 5.3 states that the latest mid-year population estimate showed the city had a population of 369,202. In fact, the 2021 Census figure states that the population Cardiff in April 2021 was 362,400.
8. Given that there are more than 8,000 people on Cardiff Council's housing waiting list the proposals in the Preferred Strategy "to deliver 5,000 to 6,000 affordable homes depending on the makeup of the sites" is disappointing and is contrary to Future Wales policies that at least 50% of the 66,000 houses in the South-East Wales region "need to be home affordable."
9. The Preferred Strategy (PS) must comply with the National Strategy for Wales; Future Wales Policy 33 of which identifies Cardiff, Newport and the Valleys as a National Growth Area. However, the PS document states "Future Wales: The National Plan 2040 which identifies the city as a National Growth Area"; this is a cleverly worded sentence which suggest that only Cardiff is the National Growth Area and is, in our view, designed to support a high rate of growth.
10. Future Wales requires 66,000 houses to be built in the SE Wales region between 2019 and 2039. The proposals in the PS, and those in other LDPs being prepared in SE Wales suggest that there will in fact be provision for in excess of 75,000 houses. Further, the population and household figures in the 2021 Census showed significantly fewer households in the 10 local authorities of the region than in the 2018 Welsh Government projections: 650,100 compared to 666,211. In other words, a reduction of 16,100 households or 25% of the Future Wales requirement for the region. This is a not insignificant figure.

Countryside

11. We are delighted to see that, notwithstanding the above comments, the PS proposes no new greenfield development over and above the Strategic Sites in the current LDP and, also that para 10.93 states that Cardiff's countryside is a "valuable and finite resource which is under pressure from all kinds of development due to its proximity to the urban area.....Cardiff's countryside is particularly vulnerable to the cumulative impact of new developments that may harm its character and appearance." We will avoid commenting on the irony of this paragraph given that much of this pressure has

come from the Council's own policies in the current LDP in North and North West Cardiff.

12. In this regard it is particularly encouraging to see that the PS allocates considerable amounts of land in NW Cardiff as "countryside to be enhanced and protected." This is to be especially welcomed in Radyr and Morganstown which has a very low level of public open space.
13. We fully accept that the Candidate Sites submitted under the RLDP process must be fully evaluated, in line with the provisions of the Development Plans Manual, after receipt of comments from all stakeholders and we agree that those Candidate Sites within the Green Wedge should not proceed to Stage Two Analysis. However, it is surprising that the two Candidate Sites 23 Plas Dwr Uchaf and 61 Goitre Fawr are still being considered as "potential reserve sites for housing" as they are both located in the "countryside to be enhanced and protected". We will comment further on these separately, particularly as one contains a Site of Special Scientific Interest (SSSIs) and both contain a number of Sites of Scientific Importance for Nature Conservation (SINCs).

Transport

14. Given the extensive developments proposed in both the current LDP Strategic Sites and the brownfield sites - essentially the Central Area - the Strategic Policies SP16 and SP17 are weak. We fully understand the Council's Transport White Paper (TWP) and a fine document it is, but it is now four years out of date and only contains vague cost estimates. It is difficult for even an optimist to see that much of the proposed Cardiff Crossrail tram-train line will be complete - or even started - by 2035 (The White Paper states that it will be complete by 2030). In the White paper's own words the "new communities in the west of the city.....are currently poorly served by public transport" yet the PS does nothing to improve this situation.
 - 14.1. Current estimates of railway line building and rebuilding from other parts of the UK (and the costs of the link from Cardiff Central to the Bay) would suggest that the 8 miles from Fairwater to Creigiau would exceed £1 billion at current prices.
15. Improvements to the Core Valley Lines from Radyr from 2024 will help a little and the increase in daily seats from approximately 15,000 to 32,000 is to be welcomed but many of these will be occupied by passengers from north of Cardiff.
16. The proposals to improve the level of active travel are welcome yet ignore the hilly topography and lack of pavements in North West Cardiff which deters less-active members of the population. The key has to be full integration of active travel, bus and car into fixed rail in the suburbs yet there has been precious little sign of Cardiff Council even attempting to do this to date and no plans in the near future. The improvement of bus services in the North West Corridor is important and the provision of bus lanes in Llantrisant Road is welcome but we have seen no proposals to date which indicate how bus times will be improved through current bottlenecks of Llandaff Village and Cathedral Road.

17. Integration of ticketing has to be a core part of enhanced public transport but, again, there is little sign of this. We do not understand what is happening here. The continued story of the delay to the “integrated transport interchange” at Cardiff Central Station, and the acknowledgement by Cardiff Bus even in their 2022 Annual Report that the closure of the bus station in 2015 is still causing a shortfall of approximately 10% in their passenger numbers, highlights a failure by Cardiff Council in this important area.
18. Professor Mark Barry is correct when he highlights the failure of the current plans by TfW Rail regarding the City Line which does not bode well for the TWP’s plans to deliver the “Cardiff Circle tram-train line to complete an orbital route around the city.” Failure to double the track of the current City Line will restrict the service to two trains per hour and will not encourage transfer onto rail. Further the huge costs of extending the line from Coryton over the River Taff do not appear to have been evaluated.
19. There are significant capacity problems to the western throat of Cardiff Central Station for which there are no funds available in Network Rail’s CP7 programme (2024-29) to resolve. This will inevitably hamper the implementation of any further improvements to the Radyr to Cardiff portion of the City Line until at least the 2030s and is one reason why the current two trains per hour service cannot be improved in the medium term.
 - 19.1. It would appear that the LDP process has failed to bring Transport for Wales Rail on board.

Other Infrastructure Capacity

20. Plas Dwr has shown that there are already significant capacity problems in North West Cardiff with regard to water and sewerage. At the time that Plas Dwr was approved, Dwr Cymru stated that there was sufficient water and sewerage capacity in the network. This has proved spectacularly incorrect and significant additional work is now having to be undertaken. There is significant disruption in attempting to retrofit solutions to these problems, which should have been foreseen by Cardiff Council when considering the area for such extensive development. No further development should be proposed in North West Cardiff until all these problems are resolved.
21. Plas Dwr has also exposed significant problems with surface water drainage, leading to flooding. Extensive building on greenfield sites causes more surface water run-off and substantially increases the risk of flooding, particularly in North West Cardiff given its geological structure. Adding further development in the same area will simply worsen the problem.

Air Quality

22. Professor John Harwood, School of Biosciences, Cardiff University considers that major housing developments on green spaces have multiple negative impacts on the environment, including on air quality (see his short paper in Appendix A, attached). Of all the air pollutants relevant to North West Cardiff, particulate matter is the most

serious. Primary particulate matter comes from non-exhaust emissions, resulting from braking, tyres and road surfaces. They are the same for electric and conventional vehicles.

- 23.** Particulate emissions have been estimated to result in over 2000 deaths in Wales per year (compared to 100 deaths from road accidents). They also cause major health problems in all age groups. According to WHO's recent publication on Air Quality Guidelines (2021), Cardiff is already in excess of the recommended values (DEFRA. Wales figure). No further development in North West Cardiff should be agreed until further consideration is given to this issue.

Community Facilities

- 24.** Plas Dwr was approved based on the provision of a range of community facilities (schools, medical facilities and a commercial centre). However, most of these are not scheduled to be built until quite late in the construction of Plas Dwr, which Cardiff Council now admits is unlikely to be completed until 2035. If yet more land in North West Cardiff is designated for development, there is a chance that the new allocation starts to be developed before Plas Dwr is completed, and we will have houses without the necessary community infrastructure. It is imperative that Plas Dwr is completed and the necessary infrastructure delivered before any new developments are started. Since that completion date may well be at the end of the Replacement LDP period (2036), there is no need to include new site as "reserved" or otherwise.

Conclusions

- 25.** We thank Cardiff Council for the opportunity to comment on the Preferred Strategy. In conclusion:
- 25.1.** The Preferred Strategy proposes a level of growth which will lead to population growth of between 10.7% and 16.2% if a more historically accurate household formation rate is used. This is an extremely high level of growth, and is not underpinned by any clear rationale or sound evidence.
- 25.2.** The housebuilding rate of 1,600 dwellings per annum is double the rate achieved over the last decade and is, therefore an unreliable basis for planning;
- 25.3.** Cardiff Council have failed to justify why they have chosen a population growth option that is more than twice the level of the Welsh Government 2018 projections. Whilst the WG projections are admittedly out of date, the results of 2021 Census is highly likely to cause new 2023 WG projections to be revised downwards, not upwards.
- 25.4.** Rather, it would appear that the Preferred Strategy selects a growth option on the basis of outcomes that are desired by the Council, not those that are realistic or underpinned by sound evidence. It is circular reasoning to argue that Cardiff has

to show housing growth because Cardiff has to grow as part of the SE Wales Regional Strategy.

25.5. We are at a loss to understand how these high rates of population growth accord with the vision of the Plan “To create a fair, healthy, more liveable, sustainable and low carbon city by, inter alia, creating a greener, fairer, and stronger city that enhances the health of the current population and wellbeing of future generations”;

25.6. We welcome the brownfield – greenfield split and the proposals to protect and enhance the countryside around Cardiff;

25.7. Strategic Policies SP16 and SP17 provide no basis whatsoever for enhancing the transport infrastructure needed to support the current planned development in NW Cardiff and most certainly could not provide for any further growth from the Candidate Sites 23 and 61.

25.8. Plas Dwr has highlighted the significant problems of development in North West Cardiff, in terms of water and sewerage infrastructure, flooding problems, and air quality. No further land should be allocated in NW Cardiff, as reserve sites or otherwise, until Plas Dwr is complete and all its associated infrastructure and community facilities delivered.

26. Please note that if amendments are not made in the Deposit Plan we intend to raise these comments at the Enquiry.

Our comments on the Candidate Sites will be sent separately.

Radyr & Morganstown Local Development Group
August 2023

Professor John Harwood, School of Biosciences, Cardiff University

Air pollution

The effects of housing developments on the environment are well known [1- 7] with multiple negative aspects including air quality. In Wales we have already seen speed limits introduced, although their positive effects in urban areas are debatable. But, in any case, major housing developments on green spaces will only make the situation worse.

It has been suggested that the popularisation of electric vehicles will solve air pollution problems. Although electric vehicles have very low exhaust emissions, they do have important environmental effects [8,9]. First, they have to be made and, in particular, battery costs and disposal are major considerations. For example, energy use during construction has been estimated to be 59% higher for electric compared to internal combustion vehicles [10]. Also, there are critical raw materials needed and the mechanism of electricity generation during use needs to be properly considered. Some of these aspects should be improved with time.

Of all the air pollutants relevant to N.W. Cardiff, particulate matter is the most serious (see later). Primary particulate matter (PM) comes from non-exhaust emissions. They are equivalent for electric and conventional vehicles [11-16]. Particulate emissions have been estimated to result in over 2000 deaths in Wales per year compared to about 100 deaths from road accidents. Furthermore, PM2.5 are increasingly recognised to cause major health problems to all ages. Particles are a result of braking, tyres and road surfaces [17]. Although regenerative braking systems will help, their use is negated by the heavier weight of electric vehicles [13]. Depending on which study is considered, non-exhaust PM emissions account for up to 85% of total PM2.5 and up to 90% of PM10. The negative effect of heavier vehicles has been underlined by the increasing popularity of SUVs and the consequent increases in vehicle emissions [18].

Considering the effect of air pollution on health in more detail---according to WHO's recent publication on Air Quality Guidelines (2021), Cardiff is already in excess of the recommended values (DEFRA Wales figures). Of the various pollutants, PM2.5 is the most serious because such particles can penetrate the body and, hence, affect every tissue. Moreover, they affect all ages with toxic effects on foetal development through to dementia of the elderly. Examples of particular studies are given in references 19-27. In addition, air pollution exacerbates epidemics such as SARS or Covid-19 [22]. Moreover, it should be noted that the WHO 2021 guidelines are based on evidence from more than 500 scientific papers.

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