



TECHNICAL NOTE 01  
WINCHESTER PROPOSED  
SUBMISSION LOCAL PLAN  
(REGULATION 19)  
CONSULTATION (OCTOBER 2024)

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# Control Sheet

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# 1 INTRODUCTION

- 1.1.1 This technical note, prepared by Calibro, examines the evidence base of the Winchester Proposed Submission Local Plan (Regulation 19) consultation (October 2024). Our analysis reveals critical weaknesses and inconsistencies within the Plan that raise concerns regarding its overall soundness and alignment with stated objectives. This report should be read in conjunction with the wider representations prepared by Savills.
- 1.1.2 The key issues are summarised below whilst more detailed evaluation is provided under separate headings after.

## Key Issues

1. Spatial Strategy and Sustainability: The Plan's spatial strategy insufficiently prioritises Winchester Town as the most sustainable location for growth. The proposed distribution of development commits disproportionate growth to areas with limited active travel and public transport infrastructure. This will result in an over-reliance on private car use that will inevitably lead to increased congestion, emissions, and community severance, negatively impacting resident health and well-being. This approach contradicts the Plan's own Integrated Impact Assessment criteria and conflicts with both current and emerging national planning policy, raising significant questions about the Plan's soundness.
2. Public Transport Integration: The spatial strategy fails to demonstrate adequate integration with existing public transport networks and lacks a clear framework for aligning future development with public transport provision.
3. Infrastructure Delivery Plan: The highway modelling evidence identifies increased park & ride demand occurring in the southern part of Winchester Town which is of the same order of magnitude as anticipated in the northern part of the town. However, whilst the patronage changes in the northern part of the town will be accommodated (and indeed created) by a proposed new park & ride facility to be delivered as part of the Sir John Moore Barracks allocation, no new infrastructure has been identified to accommodate the change in demand in the southern part of the town.

This is critical given that the Pitt Park and Ride facility operates broadly at capacity and whilst reserve capacity exists at the South Winchester Park & Ride facility, this is a result of the facility being in the wrong location to elicit a mode change. This reflects the lack of bus priority which means that buses encounter the same congestion as car traffic, creating little benefit to changing mode – a point recognised by the operator.

The lack of suitable facilities is likely to underplay traffic modelling for already congested routes into Winchester City or else there is a need to identify a new



Park & Ride facility located in a suitable location – such as is incorporated within the omission site at South Winchester Golf Club - to accommodate the modelled increase in demand and protect the potential reduction in traffic movements, and the associated benefits that would arise from improved air quality, journey time reliability and severance.

4. Highway Capacity Modelling: The Plan's evidence relies on a modelling approach fixed on a 'predict and provide' methodology to highway capacity modelling. This is outdated and inconsistent with the Authority's stated commitment to a 'vision-led' approach for future transport schemes. While the Authority suggests such modelling will be used to identify areas where adverse impacts arise and be used to inform non-car mitigation measures, this approach presents several flaws:
  - a. Neglect of Beneficial Impacts: The approach fails to account for the positive secondary effects of a 'vision-led' approach. For instance, improved public transport and active travel connections can encourage modal shift amongst existing communities located along the route, generating wider benefits and modal shift beyond the immediate development site. These compound effects, which are likely to vary significantly by location, are not considered. This omission undermines a comprehensive assessment of each site's contribution to Plan objectives, particularly regarding reducing the need to travel and minimising carbon emissions. It potentially leads to a flawed growth strategy and site selection process, jeopardising the Plan's soundness.
  - b. Missed Strategic Opportunities: The modelling approach overlooks the potential for individual sites to make greater contributions when strategically planned in conjunction with other developments (i.e. the spatial strategy). For example, a coordinated 'vision-led' strategy for South Winchester Golf Club and Sir John Moore Barracks could facilitate integrated public transport solutions. This would not only strengthen connections to the town centre and railway station but also accelerate the delivery of the Winchester Movement Strategy, which aims to reduce the number of car trips travelling to the town centre. Failing to capitalise on such synergistic opportunities undermines the achievement of key Plan objectives and legal obligations to deliver net zero.

1.1.3 For all of the above reasons, the approach is patently in conflict with the proposed revised NPPF document, which whilst not adopted at the time of writing provides a clear direction of travel for government policy. Notwithstanding, the predict and provide approach is also in conflict with previous ministerial statements and the 'Decarbonising Transport report (2020), which was developed further in 'Decarbonising Transport; A Better, Greener Britain' report (2021). The approach is therefore clearly an issue of soundness.

## 2 SPATIAL STRATEGY & SUSTAINABILITY

### 2.1 Overview

2.1.1 The Plan's spatial strategy insufficiently prioritises Winchester Town as the most sustainable location for growth. The proposed distribution of development commits disproportionate growth to areas with limited active travel and public transport infrastructure. This will result in an over-reliance on private car use that will inevitably lead to increased congestion, emissions, and community severance, negatively impacting resident health and well-being. This approach contradicts the Plan's own Integrated Impact Assessment criteria and conflicts with both current and emerging national planning policy, raising significant questions about the Plan's soundness.

### 2.2 Explanation

2.2.1 Paragraph 2.1 of the 'Development Strategy and Site Selection (July 2024)' document states that the growth strategy for the District was informed by a 'settlement hierarchy' approach which ranked and classified settlements based on the availability and accessibility of a broad range of facilities and services, a settlement's economic role and the environmental constraints to development. The spatial strategy resulted in the following spatial areas: -

- Winchester Town Area (WTA);
- South Hampshire Urban Areas (SHUA); and
- Market Towns and Rural Area (MTRA).

2.2.2 Paragraph 4.4 of the Transport Assessment (August 2024) recognises that **“there are disparities in transport provision across the district”** and this mirrors similar recognition set out in the 'Transport Assessment Stage 1 Report' (September 2020). In this respect, the evidence has been consistent over time.

2.2.3 Such differences are understood within Paragraph 4.14 of the Transport Assessment (August 2024), which recognises that, within the South Hampshire Urban Areas, **“proximity to the strategic road network, combined with lower levels of amenities and employment opportunities with each urban area, encourages commuting trips to other towns being made by car, compounded by available public transport options being infrequent and limited in terms of accessible destinations and journey time”**.

2.2.4 The transport baseline summary provided on numbered page 38 of the report states **“most existing housing developments within the SHUAs provide footpaths which are attractive enough for most people to consider short trips by foot, however the distance to destination reduces the attractiveness of trips being made by this mode. Public transport options currently consist of limited and infrequent bus services between settlements...combined with lower levels of service for public transport and**

active travel modes means that the existing population is likely to have a relatively **high dependency on private car travel...**

- 2.2.5 The geography of the Market Towns and Rural Areas results in a broadly similar position as the SHUA and the transport baseline summary provided on numbered page 38 of the Transport Assessment report (2024) recognises that, **“based on the current situation, the relatively high distance from the settlements within this spatial area to the strategic road network may mean that increased development could result in higher congestion on the local road network as well as other transport-related impacts such as vehicle collisions and reduced air quality”**.
- 2.2.6 Conversely, the transport baseline summary on numbered page 37 recognises that **“the Winchester Town Area has the highest levels of transport accessibility across the District, with services and supporting infrastructure for public transport, walking and cycling in the district.”** Furthermore, paragraph 4.61 recognises that **“Winchester Town Area is relatively small, compact and is visually attractive, meaning it is potentially conducive for most people choosing to walk for part, if not all of many regular journeys. In fact, most of the people who live and work in the city currently walk or cycle to work (60%).”**
- 2.2.7 This statistic mirrors that presented within Calibro's Transport Related Sustainability report which was submitted under the Regulation 18 Consultation in December 2022, and which is contained hereafter at [Appendix A](#). Indeed, within the same representations (see Section 3), the report identifies that the equivalent Winchester Town Area comprises of more than 40% of the available jobs in the District – 11 times greater than the next largest area of employment. This is four times the size of the next largest cluster of job opportunities.
- 2.2.8 In this sense, Winchester Town Area will always remain the largest attractor of commuting trips in the District and this is recognised within the WTA transport baseline summary provided on numbered page 37 of the Transport Assessment (August 2024) report, which states that **“travel demand in highway peaks is primarily caused by the significant in and out-commuting patterns to/from the centre of Winchester and reflects the City's role as a regional employment centre”**. Consequently, delivering significant growth in other areas will inevitably result in the need to commute to the city over longer distance to access those opportunities.
- 2.2.9 However, on the Council's own evidence, such locations are poorly served by public transport and active travel connections, such that those longer distance journeys will inevitably need to be made by car – compounding existing congestion, delay, air quality and variance in public transport journey times within Winchester Town Area.
- 2.2.10 This is in contrast to growth occurring within the WTA which would have access to **more than 50% of the District's jobs within compact urban area which reduces travel distances, ensuring that over 60% of existing trips are already undertaken by non-car modes**. In this way, there is a proven ability for trips to be undertaken without reliance on private car travel, in combination with an ingrained propensity for the existing population to actively travel by more sustainable modes. It is also true that such

behaviour can more easily be influenced through vision-led strategies and travel planning interventions.

2.2.11 Despite the fact that such explicit recognition has been provided throughout the various iterations of the evidence base, the Plan proposes to accommodate growth in the following way:

- Winchester Town = 5,670 dwellings;
- South Hampshire Urban Areas = 5,700 dwellings; and
- Market Towns and Rural Area = 4,250 dwellings (of which 500 to be delivered in the South Downs National Park Local Plan area).

2.2.12 The spatial strategy therefore proposes to deliver some 63.7% of growth outside of the Winchester Town Area and therefore, as recognised in the Council's own evidence, in the least sustainable locations in the District. Whilst it is accepted that a level of growth needs to be planned for across the District – to support long term demographic changes and to sustain local amenities - there is clearly a disproportionate reliance on the least sustainable locations. This is entirely misaligned with national policy and conflicts with the Plan policies and objectives.

2.2.13 The only reasonable conclusion to draw is that political motivation has had an unbalanced influence on the outcome of the Plan. This political interference has sought to detract from the consistent and explicit recognition of the significant locational advantages that exist in the Winchester Town Area, in contrast to physical and service barriers within the SHUA and MTRA.

## 2.3 Conclusion

2.3.1 The approach to the plan-making has not only distorted the strategy which now not only conflicts with the Plan's stated objectives but also with its emerging policies and with national policy. In its current state, the Plan is obviously unsound and further evidence and evaluation is required to underpin the current strategy – or to inform of a revised strategy.

## 3 PUBLIC TRANSPORT INTERGRATION

### 3.1 Overview

3.1.1 The spatial strategy fails to demonstrate adequate integration with existing public transport networks and lacks a clear framework for aligning future development with public transport provision. Indeed, the proposed allocations outside of the WTA are on low frequency bus routes with significant journey times into the WTA, where over half of all journeys would to travel to access employment. This creates the conditions for car dominance that would result in more trips on the local and strategic road networks, compounding congestion and air quality issues.

### 3.2 Explanation

3.2.1 While a number of points on public transport integration are covered in the 'Spatial Strategy & Sustainability' section above, it is crucial to recognise **“there are disparities in transport provision across the district”** as per Paragraph 4.4 of the Transport Assessment (August 2024).

3.2.2 Indeed, the transport baseline summary provided on page 38 of the report states the following as it pertains of South Hampshire Urban Areas (SHUA) **“Public transport options currently consist of limited and infrequent bus services between settlements...combined with lower levels of service for public transport and active travel modes means that the existing population is likely to have a relatively high dependency on private car travel...”**. The geography of the Market Towns and Rural Areas results in a broadly similar position as the SHUA and the transport baseline summary provided on numbered page 38 of the Transport Assessment report (2024) recognises that, **“based on the current situation, the relatively high distance from the settlements within this spatial area to the strategic road network may mean that increased development could result in higher congestion on the local road network as well as other transport-related impacts such as vehicle collisions and reduced air quality”**.

3.2.3 Conversely, as per the transport baseline summary on numbered page 37 “the Winchester Town Area has the highest levels of transport accessibility across the District, with services and supporting infrastructure for public transport, walking and cycling in the district.” Beyond this, Paragraph 4.86 of the Transport Assessment report (2024) recognises that development within the WTA would be the most sustainable option, stating that: **“The opportunity for increasing levels of sustainable travel by residents in the WTA is likely to be higher than the rest of the district due to the existing services available and the concentration of development (particularly workplaces) in this area being higher, meaning the amount of people for which taking the bus is viable is also higher, meaning the amount of people for which taking the bus is viable is also higher.”**



3.2.4 The existing levels of public transport provision have been shown spatially within the figures below and also provided to scale at [Appendix B](#). As above, it is apparent that the Winchester Town Area is very well served by public transport, whilst services serving the SHUA and MTRA severely lacking.

Figure 3-1 AM Peak Bus Route Frequencies per Hour

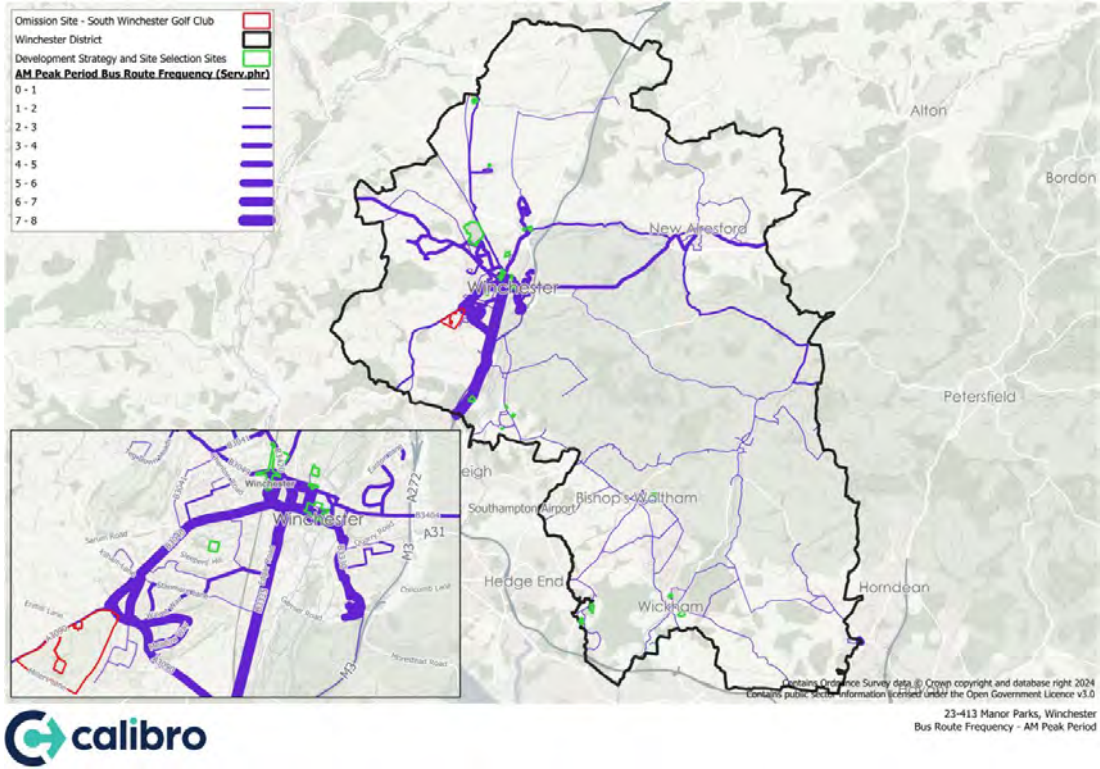
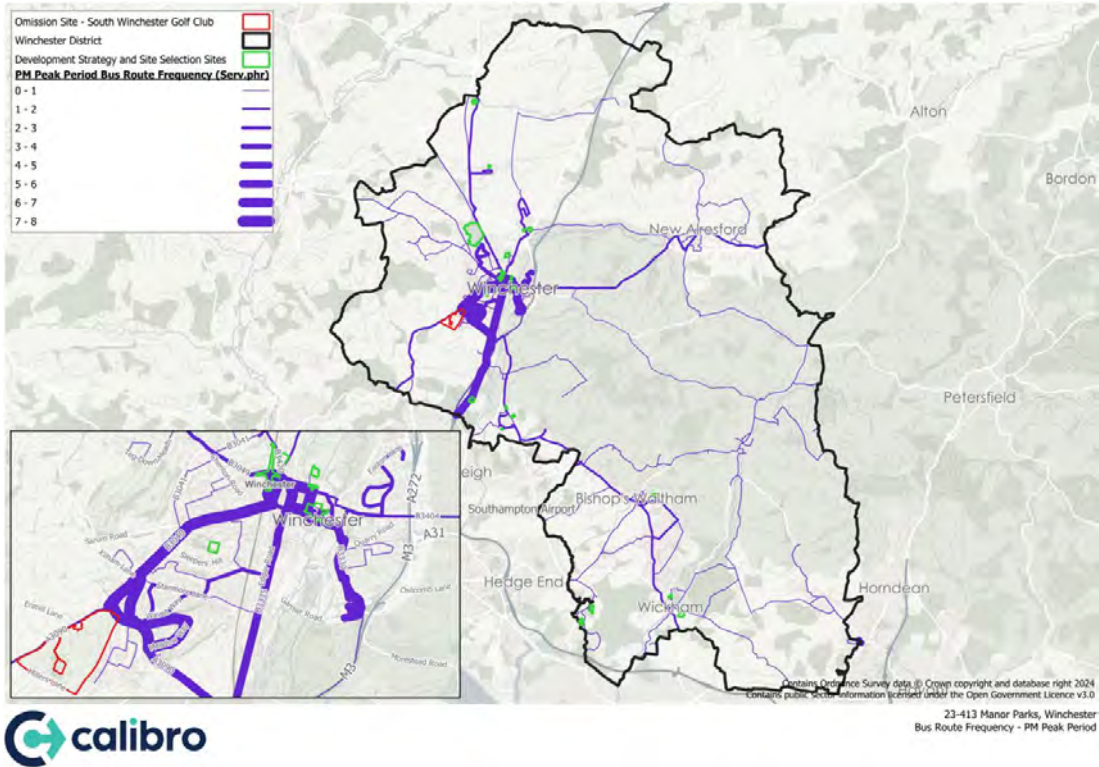




Figure 3-2 PM Peak Bus Route Frequencies per Hour



- 3.2.5 It can be seen that the South Winchester Golf Club omission site, with its proposed Park and Ride facility, is situated adjacent to the highest frequency bus route into Winchester City. If this were to be combined with the Sir John Moore Barracks Park and Ride it would facilitate integrated public transport solutions to mitigate future car use.
- 3.2.6 Beyond the above, it is noted that Paragraph 4.61 of the Transport Assessment report (2024), identifies that *that some 60% of commuting trips that start and end within the city are undertaken by non-car modes, which is commensurate with the analyses contained within the Calibro report at Appendix A.*
- 3.2.7 Consequently, the spatial strategy which proposes to deliver some over 63% of growth outside of the Winchester Town Area which, would be doing within the least sustainable locations of the District as recognised in the Council's own evidence. This is entirely misaligned with national policy and conflicts with the Plan policies and objectives.
- 3.2.8 By allocating over 63% of the proposed dwellings to areas that are not easily accessible by public transport it **“could result in higher congestion on the local road network as well as other transport-related impacts such as vehicle collisions and reduced air quality.”**, as already recognised by transport baseline summary provided on numbered page 38 of the Transport Assessment report (2024).

### 3.3 Conclusion

- 3.3.1 The Spatial Strategy does not align with the existing bus services within the District. By ignoring the current public transport routes and frequencies that exist in the District the proposed strategy does not build upon the existing areas of good public transport provision and fails to integrate with these existing provisions, thus requiring residents of the more remote areas to use the car to travel to the main employment areas. In its current state, the Plan is obviously unsound and further evidence and evaluation is required to underpin the current strategy – or to inform of a revised strategy.

## 4 INFRASTRUCTURE DELIVERY PLAN

### 4.1 Overview

- 4.1.1 The highway modelling evidence identifies increased park & ride demand occurring in the southern part of Winchester Town which is of the same order of magnitude as anticipated in the northern part of the town. However, whilst the patronage changes in the northern part of the town will be accommodated (and indeed created) by a proposed new park & ride facility to be delivered as part of the Sir John Moore Barracks allocation, no new infrastructure has been identified to accommodate the change in demand in the southern part of the town.
- 4.1.2 This is critical given that the Pitt Park and Ride facility operates broadly at capacity and whilst reserve capacity exists at the South Winchester Park & Ride facility, this is a result of the facility being in the wrong location to elicit a mode change. This reflects the lack of bus priority which means that buses encounter the same congestion as car traffic, creating little benefit to changing mode – a point recognised by the operator.
- 4.1.3 The lack of suitable facilities is likely to underplay traffic modelling for already congested routes into Winchester City or else there is a need to identify a new Park & Ride facility located in a suitable location – such as is incorporated within the omission site at South Winchester Golf Club - to accommodate the modelled increase in demand and protect the potential reduction in traffic movements, and the associated benefits that would arise from improved air quality, journey time reliability and severance. For the avoidance of doubt, the modelling has not accounted for the inherent locational issues of the south Winchester park ride and therefore fail to identify the gap in in P&R capacity in the south of the city to accommodate the modelled increase in P&R demand.

### 4.2 Explanation

- 4.2.1 The Winchester Local Plan reveals a concerning inconsistency between its stated commitment to sustainable development and its approach to park and ride infrastructure south of the city. While the Infrastructure Delivery Plan (August 2024) acknowledges at Paragraph 1.6 that **“New development can put pressure on existing infrastructure, of which may already be close to its full capacity. It is therefore essential that new homes proposed are delivered as sustainable communities and they deliver the necessary infrastructure that is needed to support them”** the Plan's proposals fail to adequately address the projected increase in demand for park and ride services.
- 4.2.2 The Transport Assessment (August 2024) further compounds this concern by highlighting the planned reduction of city centre parking (aligned with the Winchester Movement Strategy), which will inevitably increase pressure on existing park and ride facilities, some of which are already nearing capacity. This is particularly worrying given the Winchester Movement Strategy's observation that

*"The park and rides are now busy, as are the city centre car parks. Traffic demand is set to grow and, over time, more people are expected to come to Winchester for a range of purposes."*

- 4.2.3 In this regard, the evidence implicitly recognises that ingrained problems that would be created by the spatial strategy proposals to place over 60% of new homes in the parts of the district that have significantly lower levels of sustainability. Indeed, page 12 states **"Whilst most of those who live and work in the city walk or cycle to work (60%), three quarters of those travelling into and out of Winchester for work do so by car"** and who would be a primary cause of the additional issues.
- 4.2.4 Notwithstanding, the Transport Assessment modelling identifies at paragraph 9.19 that the change in patronage to the park and ride services would be around 150 passengers in the northern part of Winchester City and this would be accommodated by way of a new park and ride facility which would be delivered as part of the proposed allocation of Sir John Moore Barracks. However, whilst the model identifies a very similar change of 135 peak hour passengers in the southern part of the City, the Infrastructure Delivery Plan makes no suggestion of how this will be accommodated.
- 4.2.5 It may be the case that the Council assumes this additional demand can be accommodated within the existing Park and Ride facilities already operational in this part of the City, but on the Council's own evidence contained within the Winchester Movement Strategy, the Pitt Park and Ride is essentially operating at capacity. Meanwhile, whilst it is fair to say that the South Winchester Park and Ride does have sufficient capacity, the facility is located in an unattractive position to encourage modal switch given that passengers (i.e. buses) would continue to experience the same congestion as private car travel. Indeed, consultation with Stagecoach, who operate the services, confirms this point.
- 4.2.6 This is validated within Page 14 of the Winchester Movement Strategy which outlines the reliability of buses and park and ride and states **"Survey feedback indicates that users of the park and ride service are frustrated about being caught in the same congestion as all other road traffic. Delays mean that the park and ride service is no more attractive than driving, even if it is cheaper."**
- 4.2.7 The report continues to state that **"The technical work that has been undertaken to consider bus priority measures has identified modest benefits but also quite significant and complex issues for traffic re-routing. This suggests that such schemes need further detailed investigation. They will also be linked to the possible future location of park and ride sites and the routing of park and ride bus services, both of which also require further research to be undertaken."**
- 4.2.8 The Council therefore accepts that park and ride facilities – in this case, the South Winchester Park and Ride – are in the wrong location to fully exploit the opportunity to re-mode towards bus travel in order to reduce city-bound private car use. It also recognises the need for further capacity to resolve this.

- 4.2.9 In this regard, the IDP – and the Plan strategy more generally – compounds the need for people to travel longer distances to access the majority of employment opportunities located within Winchester City, compounding congestion, emissions and the severance effects of queuing traffic. However, no mitigation is offered that aligns with the 'vision-led' future prescribed within its own evidence, and which is supported.
- 4.2.10 To resolve this issue of soundness, the Plan must identify further sites within the Winchester Town Area itself to minimise the need to travel by car and which would minimise emissions and congestion on the local and strategic road networks. To compliment this strategy, new Park and Ride capacity should be located where it would create the benefits necessary to encourage a modal shift and reduce city-bound traffic movements. In this regard, it is noted that the South Winchester Golf Club omission site has incorporated proposals for a Park and Ride Lite site for this very purpose. Moreover, this proposal has the support of the operator of the Park and Rides, as set out in the Statement of Common Ground (SoCG) that is appended herewith.

### 4.3 Conclusion

- 4.3.1 The consideration and modelling of the infrastructure proposals has not considered other scheme locations for park and ride sites, which is likely to have not considered the potential of additional site and thus the reduction in traffic and associated benefits. In its current state, the Plan is obviously unsound and further evidence and evaluation is required to underpin the current strategy – or to inform of a revised strategy.



## 5 TRANSPORT MODELLING

### 5.1 Overview

5.1.1 The Plan's evidence relies on a modelling approach fixed on a 'predict and provide' approach to highway capacity modelling. This is outdated and inconsistent with the Authority's stated commitment to a 'vision-led' approach for future transport schemes. While the Authority suggests such modelling will be used to identify areas where adverse impacts arise and be used to inform non-car mitigation measures, this approach presents several flaws:

- a. Neglect of Beneficial Impacts: The approach fails to account for the positive secondary effects of a 'vision-led' approach. For instance, improved public transport and active travel connections can encourage modal shift amongst existing communities located along the route, generating wider benefits and modal shift beyond the immediate development site. These compound effects, which are likely to vary significantly by location, are not considered. This omission undermines a comprehensive assessment of each site's contribution to Plan objectives, particularly regarding reducing the need to travel and minimising carbon emissions. It potentially leads to a flawed growth strategy and site selection process, jeopardising the Plan's soundness.
- b. Missed Strategic Opportunities: The modelling approach overlooks the potential for individual sites to make greater contributions when strategically planned in conjunction with other developments (i.e. the spatial strategy). For example, a coordinated 'vision-led' strategy for South Winchester Golf Club and Sir John Moore Barracks could facilitate integrated public transport solutions. This would not only strengthen connections to the town centre and railway station but also accelerate the delivery of the Winchester Movement Strategy, which aims to reduce the number of car trips travelling to the town centre. Failing to capitalise on such synergistic opportunities undermines the achievement of key Plan objectives and legal obligations to deliver net zero.

### 5.2 Explanation

#### Model Scope

5.2.1 Section 6. of the Transport Assessment Report (August 2024) details the modelling methodology used in the assessment of transport effects resultants from the proposed spatial strategy and site allocations.

5.2.2 Paragraph 6.1 therein recognises that problems that are associated with traditional methods of planning and transport assessments that have been centred and a forecast-led concept of Predict & Provide, which essentially assumes past behaviour as a determinant of future impacts (and therefore determining future mitigation requirements). It recognises the possible consequences of this approach include perpetuating "car-led development" and the associated consequences as being: -



- *“the potential over-provision of highway capacity which, in turn, can induce motorised traffic (exacerbating efforts to reduce direct CO2 emissions from the transport sector);*
- *The potential under-provision or erosion of walking and cycling infrastructure or public transport services; and*
- *The risk of planning and developing underutilised or even stranded developments that become completely dependent on car-based travel.”*

5.2.3 Whilst paragraph 6.2 follows in recognising that the Chartered Institute of Highways and Transportation (CIHT) documented in their 2019 report entitled ‘Better planning, better transport, better places’ that these “outdated assessment methodologies” are a barrier to better planning,

5.2.4 Paragraph 8.6 of the report sets out the limitations of the transport modelling evidence and recognised that “measures to reduce trip rates including connectivity improvements and the mandated use of travel plans has not been included” and “measures such as increased walking and cycling resulting from improvements in associated infrastructure have also not been modelled as evidence to support these is not available in a suitable form for the model”.

5.2.5 The report claims at paragraph 8.7 that, for the reasons set out above, the modelling provides a worst-case scenario of the cumulative Local Plan growth on the transport networks within the district. This is patently untrue as the simple fact is that the modelling approach over-estimates vehicular traffic demand on the network and therefore underestimates active travel and public transport usage.

5.2.6 In turn, therefore, a very real risk is created that strategic infrastructure that would otherwise maximise active travel and public transport modes, is missed. This would be contrary to emerging policy T1 part ii which requires that development maximise (emphasis added) opportunities to walk and cycle and reduce the number of trips made by private motor vehicles.

5.2.7 Moreover, there is an implicit requirement imposed by the legal obligation to achieve net zero for the planning system to identify and deliver the most sustainable forms and patterns of development. This means identifying a pattern of complimentary developments that combine to deliver larger benefits than they would individually be able to deliver.

5.2.8 A great example of such an opportunity could be the combination of Sir John Moore Barracks and the South Winchester Golf Club omission site delivering new Park & Ride infrastructure to facilitate a dumbbell of new public transport services that provided non-car alternatives to the town centre and railway station in support of the Winchester Movement Strategy. The combination of meaningful quantum of development at the end of public transport routes maximises the commercial viability of high frequency services that provide a real alternative to private car use.

- 5.2.9 It should also be noted that the model has not been adjusted to reflect post-Covid traffic levels. Although no analysis is yet available to determine any divergence between the traffic levels recorded in 2019 and those post-covid within Winchester district, there is evidence elsewhere within the UK of overall reduction of up to 10% in the number of movements being made. The model therefore presents a higher baseline in terms of traffic levels across the district (and region).
- 5.2.10 This is a potentially significant issue given that site have been omitted within the SHEELA on unfounded perceptions of congested highway network. Indeed, in the case of the South Winchester Golf Club Site the SHEELA and Integrated Sustainability Assessment together, appear to have dismissed the Site without further testing of Local Parish Council concerns.
- 5.2.11 Such testing need not have required detailed modelling, since the Council's own evidence highlights the locational advantages that development within the WTA have over other parts of the District. They would have easily been able to conclude that alternative development outside of the WTA would compound traffic issues on the local and strategic road networks more than the South Winchester Golf Club, for example, since development outside of the WTA would (as highlighted elsewhere in this Note) be located in areas of disparate and low frequency public transport which would result in high car dependency. This being particularly important when over 50% of all commute trips would still be drawn into the WTA.

### 5.3 Conclusion

- 5.3.1 The Winchester Local Plan's reliance on a 'predict and provide' transport modelling approach, with its inherent limitations and acknowledged inaccuracies, raises serious concerns about the Plan's overall soundness. By overestimating vehicular traffic and underestimating active travel and public transport usage, the model risks overlooking crucial sustainable transport infrastructure and contradicts the Plan's stated commitment to maximising these modes.
- 5.3.2 Furthermore, the failure to consider the synergistic benefits of strategically planned developments, such as the potential for Sir John Moore Barracks and the South Winchester Golf Club to deliver integrated public transport solutions, represents a missed opportunity to promote genuine alternatives to private car use and therefore maximise the legally required move towards the achievement of net zero.
- 5.3.3 The flawed and incomplete assessment process undermines the Plan's sustainability claims and casts doubt on its alignment with its own emerging policies and Plan objectives, but also of national policy and net-zero objectives. These issues go to the heart of soundness and significant further evidence is required – and potential refinement of the strategy – are needed to resolve the weakness.

# APPENDICES



## APPENDIX A

### Calibro Report – Spatial and Local Accessibility: Transport Related Sustainability



# SOUTH WINCHESTER GOLF CLUB

Romsey Road, Winchester, SO22 5QX

## SPATIAL AND LOCAL ACCESSIBILITY: TRANSPORT-RELATED SUSTAINABILITY

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This report has been prepared by Calibro Consultants Ltd for the sole benefit and use of the Client. Calibro Consultants Ltd offer no liability for the information contained within the report to any third party.

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# 1 EXECUTIVE SUMMARY

## 1.1 What is the purpose of the study?

- 1.1.1 Bloor Homes are committed to responding positively to the climate emergency and working alongside public bodies in their efforts to achieve net zero status over the next decade.
- 1.1.2 It is in this context that Calibro were instructed to undertake research that considers the way people move around the district of Winchester for work, learning and play to provide an understanding of the way in which these movement patterns may inform the Council's optimal spatial strategy to the emerging Winchester District Council Local Plan (2018-2039).
- 1.1.3 Specifically, the Council's declared climate emergency and net zero aspirations imply of a need to deliver growth that achieves the most sustainable form of development rather than a potentially lower threshold of merely achieving the basic requirements of sustainability.
- 1.1.4 The study therefore exploits additional computational power to create an expanded Sustainability Appraisal that takes account of the various interactions of competing amenities, network capacity and the implications on the environment and economy. The study also considers the potential to deliver growth in line with the principles of the 15-minute city / neighbourhood.
- 1.1.5 In this way, the combined approach responds to the three strands of sustainability as they are presented within the National Planning Policy Framework, such that the study is not only fully compatible with the requirements of Plan-making, but which also provides an evidence base that allows the Council to achieve the biggest against their Local Plan vision and objectives.
- 1.1.6 Moreover, despite the many millions of calculations used to consider these interactions, the results are presented in simplified forms to ensure transparency with the purpose of encouraging increased engagement with officers, members and the wider public.

## 1.2 What does the study reveal?

- 1.2.1 The study identifies that Winchester (District) is subject significant levels of net in-commuting, meaning that more people travel into the district for work than people leaving the district for the same purpose. Indeed, data suggests that across the southeast, only Oxford City and Crawley experience greater numbers of net in-commuting; locations that also have affordability issues and high-density clusters of employment opportunities.
- 1.2.2 However, there is a clear north/south divide within the district as the southern parts are shown to have a much greater propensity to out-commute to places such as Southampton and Portsmouth.

- 1.2.3 When considering movement within the district, it is evident that Winchester (City) is the main destination for jobs, and by a significant margin. Indeed, the city accounts for some 0% of all jobs within the district which compares to just 11% within the next largest location. Winchester (City) is therefore four times more significant as a destination than the second largest location across the district.
- 1.2.4 As such, it is evident that Winchester (District) has the jobs but perhaps does not have the right number of homes, and certainly not the right number of homes in the right places. The resultant effect is one of unnecessary vehicle mileage, creating avoidable vehicle emissions, increased congestion and lost utility in the economy.

### 1.3 Are the principles supported by stakeholders?

- 1.3.1 As part of the commission, Calibro has drawn on its close relationship with Stagecoach, as the local bus operator, to gauge their support or otherwise for the principle of development at South Winchester Golf Club.
- 1.3.2 Whilst discussions are preliminary in nature and a further meeting is currently being arranged, Stagecoach have confirmed that the site as **“probably one of the two best options for the City”** and the **“potential to speed up the 66 Romsey-Winchester service and add substantial additional demand on to it, is a kind of helpful combination we rarely see”**.
- 1.3.3 Calibro has also undertaken discussion with Enterprise Car Club and Brompton Bike Hire with a view to establishing a commercial interest in the creation of mobility hub strategy within and adjoining the development.
- 1.3.4 Whilst the ultimate format will be determined in due course to reflect the masterplan, a future strategy is likely to include several electric car club vehicles located at the neighbourhood centre as well as one or several bike-hire vending machines located at the neighbourhood centre and adjoining an internal traffic-free cycle route.
- 1.3.5 Both Enterprise and Brompton Bike hire have confirmed a commercial interest and consider there to be exciting opportunities for their services to underpin a sustainable development in this location.

- 1.3.6 Calibro is currently working with both parties on other projects with a view to creating a technical evidence base that will allow estimates of likely modal shift resultant from specific strategy interventions. It is suggested that, when available, this information is used to help to shape the size of the offer in the future.
- 1.3.7 It is therefore evident that key transport stakeholders consider the development of the site to represent an exciting opportunity that has the potential to offer benefits that extend beyond the limit of the site boundary. In this context, the site has the potential to amplify the Council's response to the climate emergency by increasing the sustainability performance of the adjoining communities – a potential benefit not replicated by competing allocations.

#### 1.4 What are the implications for development of the site?

- 1.4.1 The study confirms that Winchester (City) is the focus of employment activity across the district, and by a significant margin. The number of jobs within the City, in combination with other pertinent factors such as affordability, is causing unnecessary longer distance commuting trips which in turn result in increased emissions and congestion.
- 1.4.2 Winchester (City) should therefore be a focus of future development, not least as this is the only part of the District where a baseline of sustainable travel behaviour has been noted.
- 1.4.3 At the Winchester (City) level, a number of potentially competing sites appear to have very similar credentials to South Winchester Golf Club. However, based on our observations, there is an opportunity for the proposed allocation to deliver meaningful benefit that extends far beyond the limits of the site, that would allow it to perform much better than other locations.
- 1.4.4 The wider transport and masterplan strategy will therefore be key to distinguishing this site from other potential growth areas. In this regard, consultation with Stagecoach – the local bus operator – has acknowledged this site to be possibly one of the best locations to deliver sustainable development and this study has set out the basis of a strategy for discussion.

#### 1.5 Are there opportunities to expand the evidence base further?

- 1.5.1 Based on the work undertaken to date, it is considered that further work will be inevitable in order to create separation between the proposed allocation and other competing locations. Modelling can be undertaken to assess and inform the transport strategies in an iterative approach.
- 1.5.2 It is suggested that separate discussions be undertaken once the content of this study are fully digested.

## 2 SCOPE OF STUDY

### 2.1 Introduction

2.1.1 Calibro has been appointed by Bloor Homes to provide an assessment of the transport-related sustainability within the Winchester Local Authority District.

2.1.2 This study considers sustainability at three principles levels;

1. A strategic level, taking into account broad patterns of movement both within and beyond Winchester District Council administrative area;
2. A spatial level, incorporating modelling of the relative accessibility to all employment areas within and beyond the District, and the time cost and CO2 emissions that would be involved in such commuting trips; and
3. A local level, which provides a more refined analysis at an urban level, focusing on the relative sustainability merits within the urban context.

2.1.3 In this way, the study considers how people are moving about the District, where growth within the District should be focused, and where within the optimal urban locations such growth may be best accommodated.

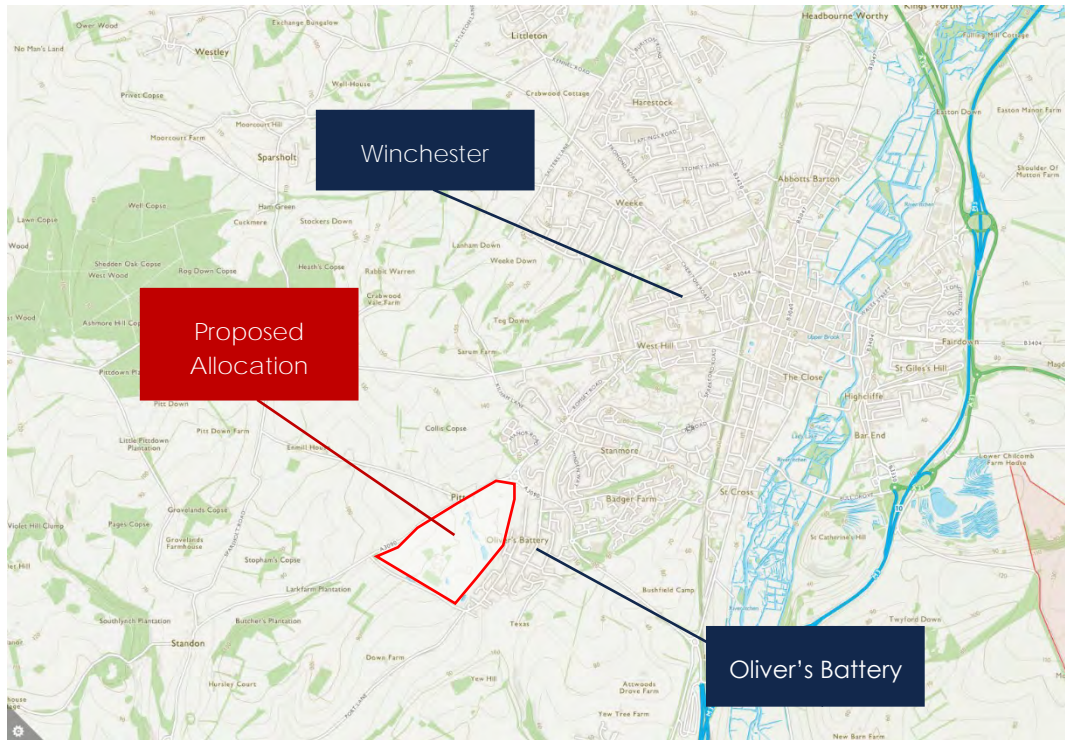
### 2.2 Site Location

2.2.1 This study has been commissioned by Bloor Homes Ltd, who have recently acquired freehold ownership of South Winchester Golf Club. Despite the basis of this commission, the nature of the modelling set out hereafter provides a level of independence – being nothing more than significant computation of centralised data collected and made available from such independent sources as the national census and Ordnance Survey. Confidence can therefore be taken that the modelling is free of bias.

2.2.2 On this basis, the sustainability merits of the proposed allocation of South Winchester Golf Club have been explored in relative terms. The site abuts the southern extents of the existing built-up area of the city of Winchester to the north, and to the immediate east the site **abuts the residential suburb of Oliver's Battery.**



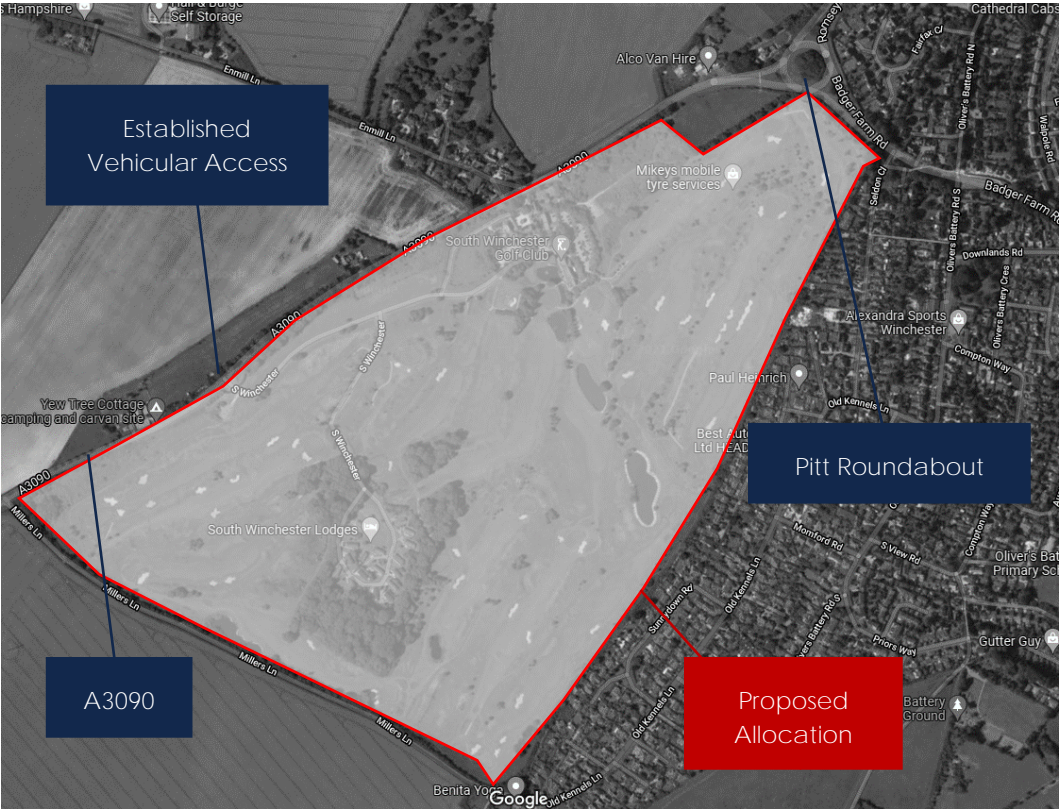
Figure 1 Site in Regional Context



2.2.3 The proposed allocation benefits from established vehicular access via a standard form priority T-junction at the site's northern boundary onto A3090-Romsey Road and is located some 1-kilometre west of the Pitt Roundabout, which connects with the M3 Motorway via Badger Farm Road.

2.2.4 The site is shown in its local context in the below Figure.

Figure 2 Site in Local Context



## 3 POLICY CONTEXT

### 3.1 Introduction

3.1.1 This section of the sets out the relevant national and local sustainable transport policies that provide the context for evaluating and prioritising Local Plan strategies for the achievement of sustainable development.

### 3.2 National Planning Policy Framework (NPPF), July 2021

3.2.1 The NPPF sets out the Government's planning policies for England and how it expects these to be applied. The Framework clarifies at Paragraph 7 that **“the purpose of the planning system is to contribute to the achievement of sustainable development”** and this is the only occasion within the entirety of the Framework that the purpose of the planning system is stated.

3.2.2 It is therefore evident that the sole purpose of the planning system is to achieve sustainable development and the achievement of sustainable development is therefore to be given the highest degree of weight in the Local Plan process. Moreover, since the policies within the NPPF must be considered in the preparation of Local Plans, there is a requirement for the Local Plan to evaluate with evidence the likely outcomes in the context of achieving sustainable development

3.2.3 In concise terms, Paragraph 8 identifies that sustainable development is achieved via three mutually dependant dimensions (economic, social and environmental) and these give rise to the need for the planning system to perform a number of roles:

- “an economic objective – to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure.
- a social objective – to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering a well-designed, beautiful and safe places, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural well-being; and
- environmental objective - to protect and enhance our natural, built and historic environment; including making effective use of land, improving biodiversity, using natural resources prudently, minimising waste and pollution, and mitigation and adapting the climate change, including moving to a low carbon economy.”

- 3.2.4 In the case of transport-related sustainability, Paragraph 104 of the Framework requires that “transport issues should be considered at the earliest stages [emphasis added] **of plan making**” so that the “environmental impacts of traffic and transport can be identified and taken into account – including appropriate opportunities of avoiding [emphasis added] and mitigating adverse **impacts**”. This is supplemented by Paragraph 105 of the Framework which requires that “**the planning system should actively manage patterns of growth**” and “**significant development should be focused in locations which are or can be made sustainable, through limiting the need to travel and offering a genuine transport modes**”.
- 3.2.5 To help inform the appropriate pattern of growth, Paragraph 106 (b) requires that planning policies should be “prepared with the active involvement [emphasis added] of local highway authorities, other transport infrastructure providers and **operators**”.
- 3.2.6 Taking this together, the NPPF therefore seeks to deliver development (in this case, housing development) in locations and with appropriate strategies that minimise the need to travel, reduce consequential greenhouse gas emissions and help to conserve natural resources effectively.
- 3.2.7 It is the case therefore that Government policy is concerned in the significant part with the location of development relative to supporting jobs, shops, and local amenities, which create the need to travel. In this context, Paragraph 105 of the Framework requires that locations that minimise the need to travel should be the focus of future development as these can help to “**reduce congestion and emissions and improve air quality and public health**”.
- 3.2.8 The above policy requires that journey lengths are minimised, which is a threshold set at a higher level than “reduce” and which suggests of a requirement to reduce journeys to the smallest possible degree. It is therefore fundamental that each allocation demonstrate that it is located where the need to travel can be minimised and non-car travel options be maximised.
- 3.2.9 This requirement is implicitly transposed to Paragraph 32 which requires that “**significant adverse impacts... should be avoided and, where possible, alternative options which reduce or eliminate [emphasis added] such impact should be pursued**”.



### 3.3 Decarbonising Transport: A Better, Greener Britain

3.3.1 In the foreword to the Government's 'Decarbonising Transport; A Better, Greener Britain' report (2021), The Rt Hon Grant Shapps (then Secretary of State for Transport) wrote:

***“We must also do better at joining up our transport, decarbonisation, and planning goals in both urban and rural areas. Too many new developments – not just by housebuilders, but by public-sector bodies – are difficult to reach without a car. But if we do development in a greener way, and if we join it to existing places, we can make it lower-carbon, lower-emission and lower-traffic – and more acceptable to local communities.”***

3.3.2 The document recognises that increased levels of walking and cycling can reduce greenhouse gas emissions from cars by 1-6 mega tonnes of CO<sub>2</sub>e between 2022 and 2050, and that would help to save between 50 and 120 thousand premature deaths and reduce work absence by around 50-140 million days. In this context, the policy recognises the significant benefits to decarbonising transport.

3.3.3 The document commits the Government to embedding transport decarbonisation principles within spatial planning and across transport policy, to ensure that new development is designed in a way that promotes sustainable travel choices. However, it is accepted that there is no uniform approach to decarbonisation and each local area in the UK will have its own role to place in ensuring that the UK meets its target of net zero by 2050.

3.3.4 In this context, it is implicit that the Government expects local authorities to maximise their contribution towards the goal of achieving net zero targets using spatial planning and related policies.

### 3.4 Winchester District Local Plan 2018-2039 (emerging)

3.4.1 In July 2018, the Council agreed to launch the preparation of a new Local Plan with the purpose to provide planning policy framework to direct growth and change to achieve sustainable development. The Council undertook initial consultation on the range of issues that the Local Plan should cover and followed this in February 2021 with a Strategic Issues and Priorities Document, which considers the key issues and priorities that will be addressed by the Local Plan.

3.4.2 Based on the consultation responses to the initial local plan consultation, the Council has identified 9 interlocking areas of focus, of which the following are most pertinent to this study:

#### 1. Carbon Neutrality

At a local level, Winchester City Council has declared its own climate emergency and is committed to becoming a carbon neutral district by 2030.



## 6. Promoting Sustainable Transport

The Council recognises transport as one of the highest sources of carbon emissions in the district and recognises the important role that promoting sustainable and active transport (public transport, cycling and walking) will play on achieving carbon neutrality.

## 7. Living Well

The 'Living Well' topic of the Local Plan is about creating places where people want to live and ensuring those places to as much as possible to support our health and wellbeing and reduce inequality. There are obvious crossovers within this topic to active travel and access to local amenities.

### Winchester District Local Plan Integrated Impact Assessment – Scoping Report, July 2020

- 3.4.3 In support of the emerging Local Plan, an Integrated Impact Assessment will be undertaken which combines the traditionally separate analysis of the Sustainability Appraisal, Strategic Environmental Assessment, Health Impact Assessment, Equalities Impact Assessment and Habitats Regulations.
- 3.4.4 At this stage in the preparation of the Plan, the scope of the Integrated Assessment has been identified. Whilst covering a plethora of issues, it recognises that transport there is a need to reduce journeys by private. It states that ***“transport is the largest contributor to carbon dioxide emissions in Winchester. However, this will be challenging given the rural nature of the majority of the District and current levels of in and out commuting by car between the larger settlements to the south of the District (Eastleigh, Southampton, Fareham, Portsmouth).”***
- 3.4.5 The scope explicitly identifies that the new Local Plan will update existing policies to respond to the declared climate emergency and policies should contribute to the achievement of carbon neutrality by 2030 – an earlier target than has been set at the national level. The scoping document recognises that importance of the city of Winchester and provides a commitment to help deliver the Winchester Movement Strategy by increasing capacity of Park & Ride, bus priority measures on key routes into the city centre, and improved pedestrian and cycling provisions through the reallocation of road space.
- 3.4.6 An indirect influence on transport is also recognised, in that Winchester (City) ***“has significantly higher unaffordability in its house prices than the average for England and Wales”***, which would have the potential to increase travel distances into the city.
- 3.4.7 And the SA also recognises that Oliver's Battery has a net deficiency in open space such that there is an opportunity for development at South Winchester Golf Club to create wider community benefits via a development connected with existing suburbs.

3.4.8 On the basis of the above, the SA Framework identifies a number of key objectives:

SA1: To minimise **the District's contribution to climate change** through a reduction of greenhouse gas emissions from all sources and facilitate the aim of carbon neutrality by 2030.

SA2: To reduce the need to travel by private vehicle in the District and improve air quality.

SA2.1 Provide easy access to public transport provision and active travel networks, including those for walking and cycling?

SA2.2. Support development which is able to access Town/District/Local Centres, services and facilities (e.g. shops, post offices, GPs, school) and /or key employment areas via active travel networks and/or public transport?

SA2.3 Minimise increases in traffic in the Air Quality Management Areas within and adjoining the District?

SA7: To ensure essential services and facilities and jobs in the District are accessible.

SA7.1: Provide for development that is well linked to existing services and facilities (e.g. shops, post offices, GPs, schools, broadband) and employment areas?

3.4.9 Taken together, there is a clear thread of a requirement to respond positively to the climate emergency. The challenge has been set to achieve net zero by 2030 and it is therefore implicit that the Council make the best choices available to them to succeed in this objective. Transport is a key theme that runs through the local plan documentation, with significant thought having already been provided to the issue.

3.4.10 The Council therefore appear to understand the broad issues and how to go about addressing them. However, certain statements made regarding the amount of inward and outward commuting suggest the complexity of transport is not as developed as it could be with greater computational effort.

### 3.5 Section Conclusion

- 3.5.1 It is implicit from the above that there will be an underlying requirement in determining an optimal spatial strategy to ensure that proposed allocations are located close to relevant amenities and job opportunities (to minimise the need to travel and reduce public transport journey times where required) and to provide a choice of non-car travel options (to minimise emissions and other costs of private car use).
- 3.5.2 To some extent, it appears that the emerging policies are on the right path. However, the full complexity of the issues has perhaps not been fully explored such that opportunities may be missed, particularly at the stage of allocating individual sites for development.

## 4 STRATEGIC ANALYSIS

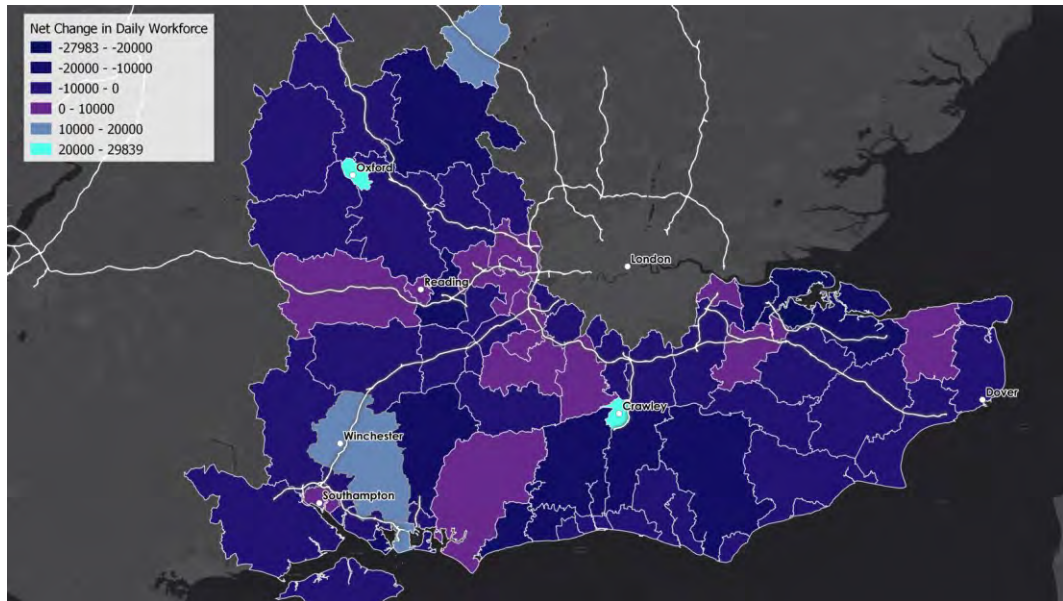
### 4.1 Introduction

- 4.1.1 This section of the study provides a strategic level assessment of travel-to-work travel behaviour for all movement to and from the District. It focuses on travel-to-work behaviour as this represents one of the largest travel requirements by frequency and distance, and which therefore has a disproportionate influence on the environmental effects of transport.
- 4.1.2 Of course, many commentators refer to increased levels of home working after the Covid pandemic and this is certainly the case in 2021. However, there is an increasing realisation that this will most likely take the form of a hybrid way of working, **with the office still playing an important role in people's work regime** – and some commentators believe a more traditional return to work will be seen over the course of several years.
- 4.1.3 In whichever way the return to the office plays out, however, the approach taken within this study is to consider the relative effects of each journey such that, so long as journeys to the office are required, the frequency of those visits would have no influence on the conclusions drawn from the model.
- 4.1.4 On this basis, the study considers the travel behaviour at a strategic level considering patterns observed within the national census (2011). The complete set of updated census data will not be available until 2023 so this remains the most relevant at the time of preparation.

### 4.2 Is Winchester (District) Self Contained?

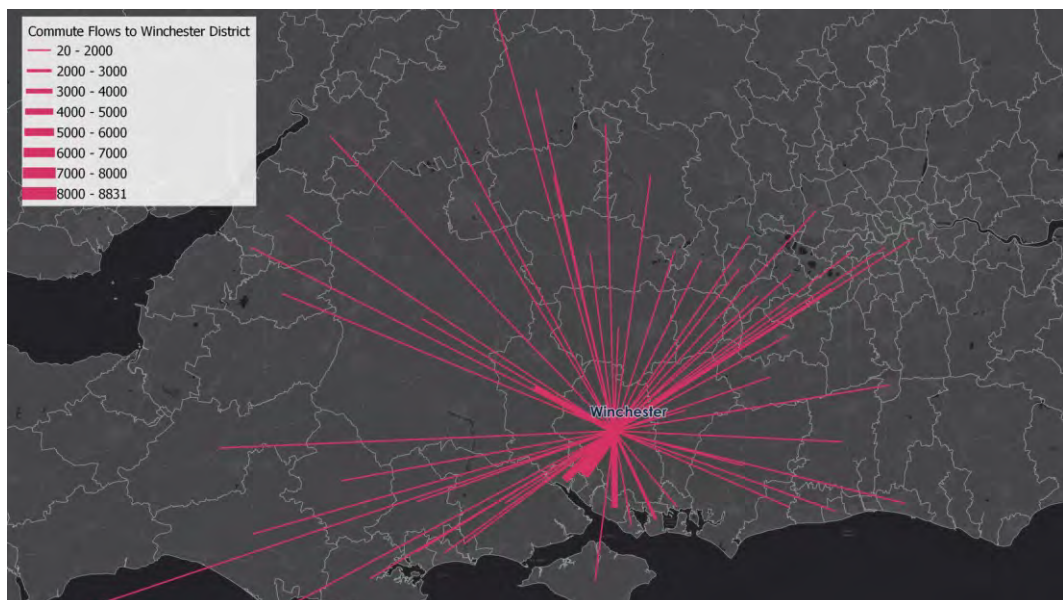
- 4.2.1 Consideration has been given to the balance of inward vs outward commuting to Winchester (District) which is shown as the change in daily population for each Local Area District (LAD).
- 4.2.2 The below Figure, which is replicated to a larger scale at [Appendix A](#), suggests that Winchester (District) does not only experience net in-commuting (meaning that more people commute into the District from outlying areas than those people that leave the District), but that the difference is amongst the highest in the region – with only Oxford City and Crawley being comparable.
- 4.2.3 This suggests that there are possibly more employment opportunities within the District than there are people, or at least there are more jobs than people with the right skills. Similarly, it may be a symptom of relatively high house prices in certain parts of the District, as a consequence, encourage people to live further afield where affordability is more favourable.

Figure 3 Net Change in Workforce Population



- 4.2.4 On this basis, the results suggest that Winchester (District) is not self-sufficient in the context that, on balance, it relies on an influx of workforce to meet the needs of the plentiful employment opportunities that exist within its limits.
- 4.2.5 Indeed, further interpolation of the census allows for consideration of the origins of journeys occurring into the District. The below Figure, which is again replicated to a larger scale at [Appendix A](#), shows the relative area of influence of the District, which extends as far as central London, Bristol and Dorset. However, it also identifies that the bias of trip origins relates to Southampton, Eastleigh and Fareham, to the south.

Figure 4 Flow Mapper – Working in Winchester LAD from external LADs



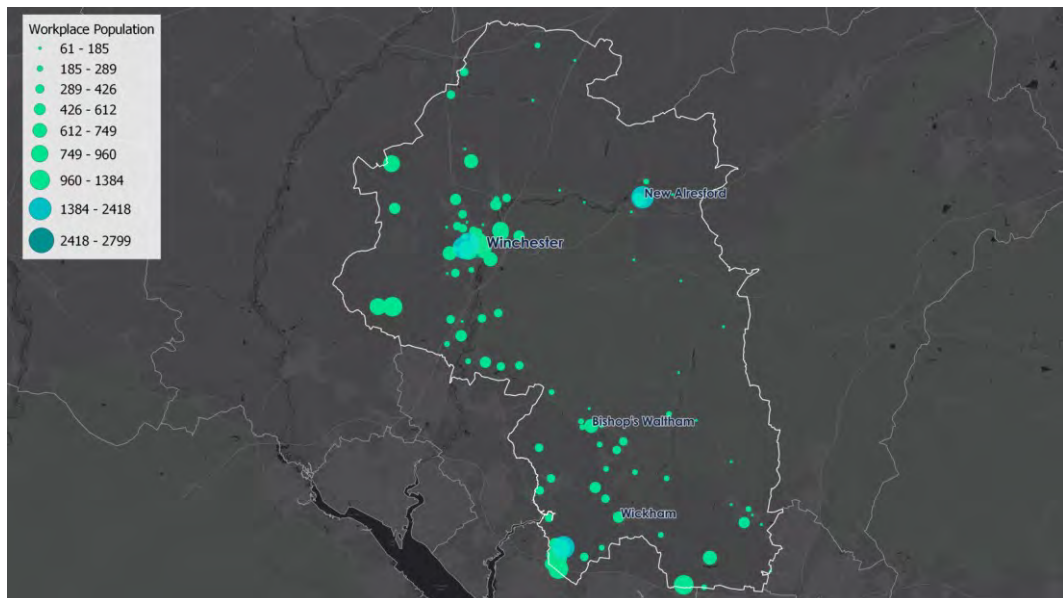


- 4.2.6 Interestingly, therefore, the Local Area Districts lying immediately north, which are shown to lose daytime population in Figure 5-1 (suggestive of net out-commuting) are likely to be more closely attracted to places along the M4 corridor, such as Reading.
- 4.2.7 Consequently, there exists a relatively focused geography that could be more sensitive to policy interventions or infrastructure proposals; a more disparate picture may otherwise dilute the return from policy investments.

### 4.3 Where are people travel within Winchester (District)

- 4.3.1 If one were to then consider the distribution of the employment opportunities that exist throughout Winchester (District), it becomes clear that Winchester (City) is the focus of all activity – as shown in the below Figure and to a larger scale at [Appendix A](#). Indeed, Winchester (City) accounts for some 40% of all jobs within the District and which is almost four times that of the next most significant centre for job opportunity of just 11%.

Figure 5 Workplace Zones within Winchester LAD



- 4.3.2 It is also interesting to note that residents that are closest to the greatest number of jobs are also less likely to leave Winchester (District) than in other locations. This is clearly evidenced in the below Figure (replicated at Appendix X) which indicates that the percentage of residents working within the District (i.e. not out commuting) is greatest around Winchester City as compared with the fringes of the District which see particularly low retention levels.
- 4.3.3 The influence of Winchester is also clearly shown in the subsequent Figure which illustrates where people within the District begin and end their travel-to-work journey. It confirms the significant attraction of Winchester (City) relatively to any other location in the District.

- 4.3.4 Thus, there is a very clear picture emerging from the strategic modelling that suggest that the District attracts a workforce from much further afield and that the majority of the workforce is associated with employment in Winchester (City).
- 4.3.5 Consequently, in the context of responding to a climate emergency, there is the beginning of a logical argument to suggest that the majority of housing growth should be focused towards Winchester (City)

Figure 6 % of jobs taken by Winchester LAD residents

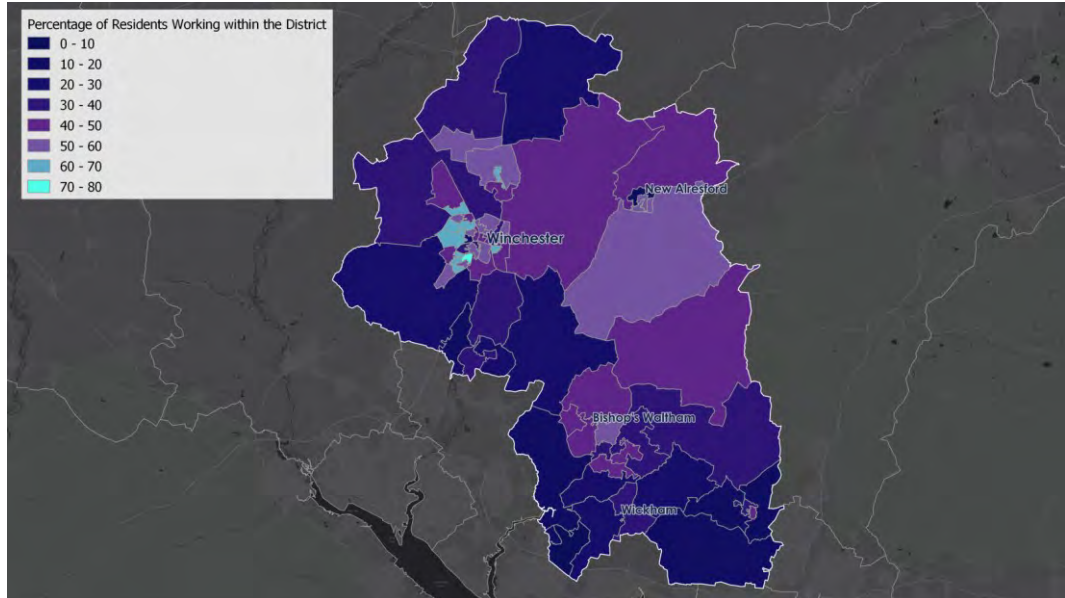
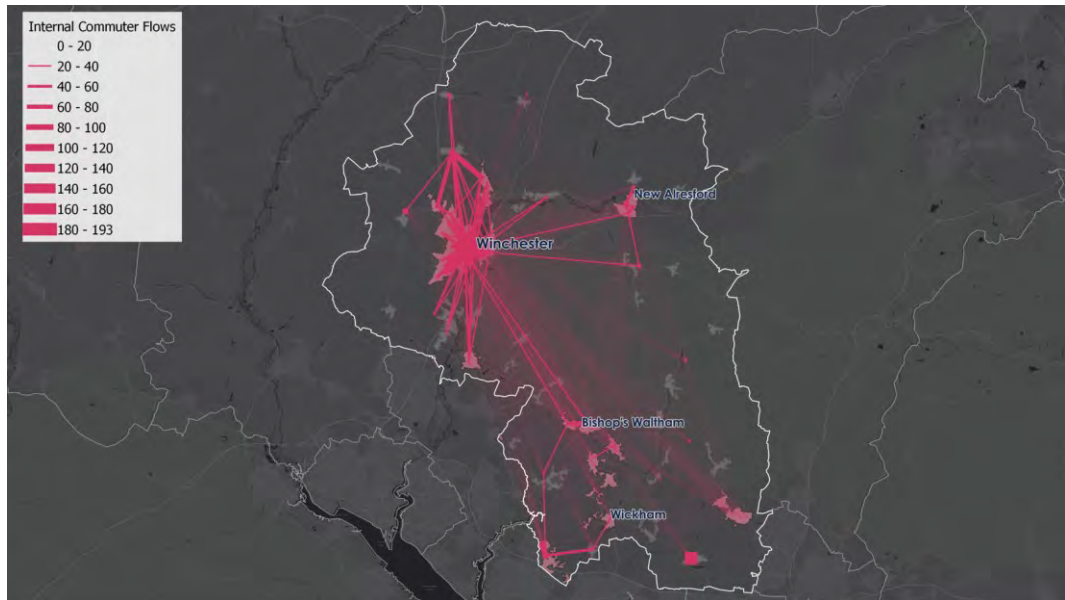
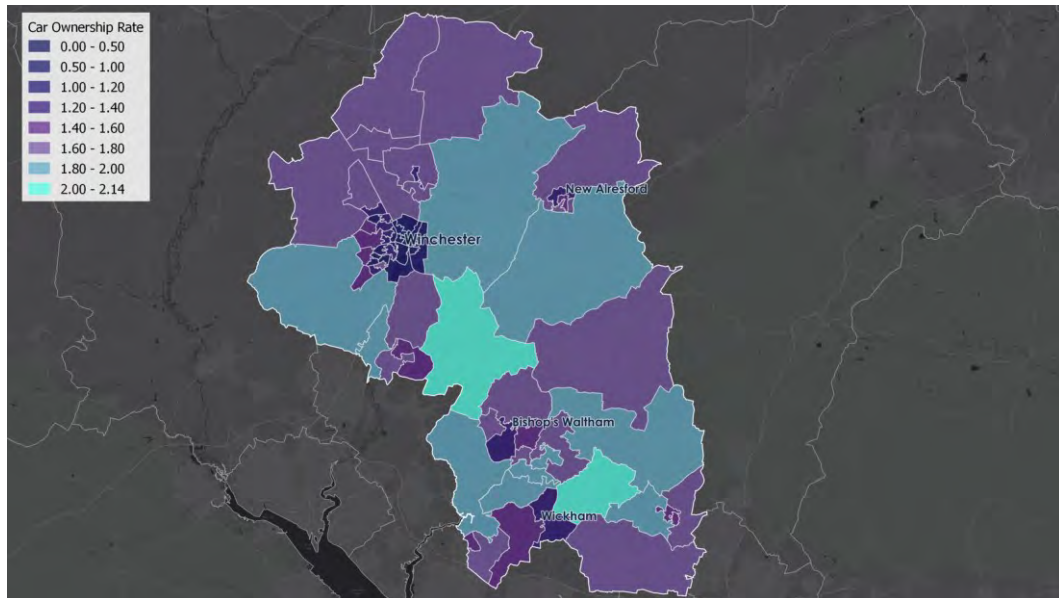


Figure 7 Internal Commute flows across Winchester District



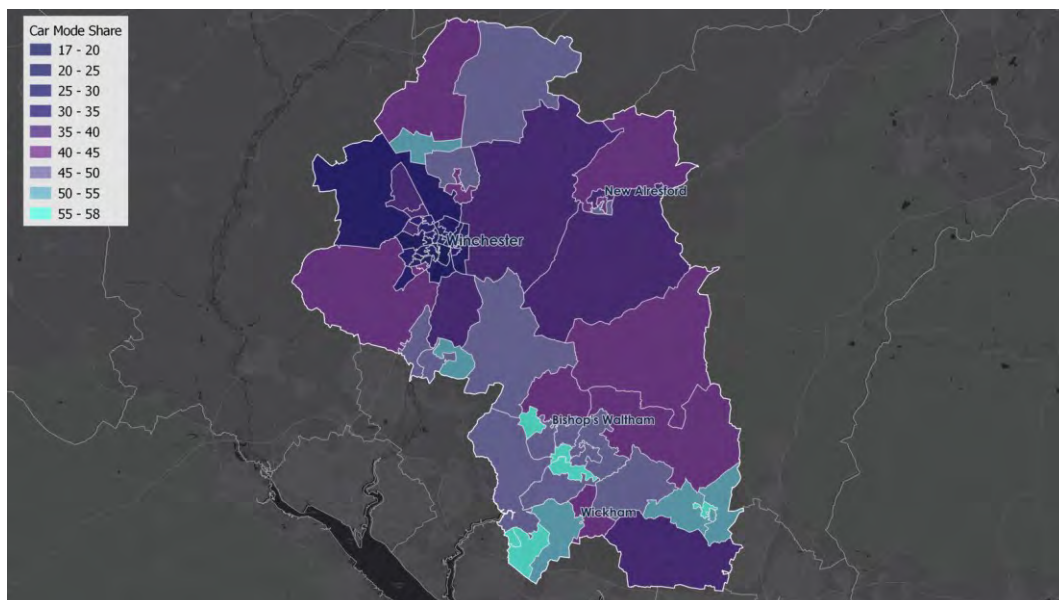
- 4.3.6 If we explore how people undertake their journeys across the District, the below Figures identify that car ownership is amongst the very lowest in Winchester, with notable pockets at Bishops Waltham and Wiskham.

Figure 8 Car Ownership



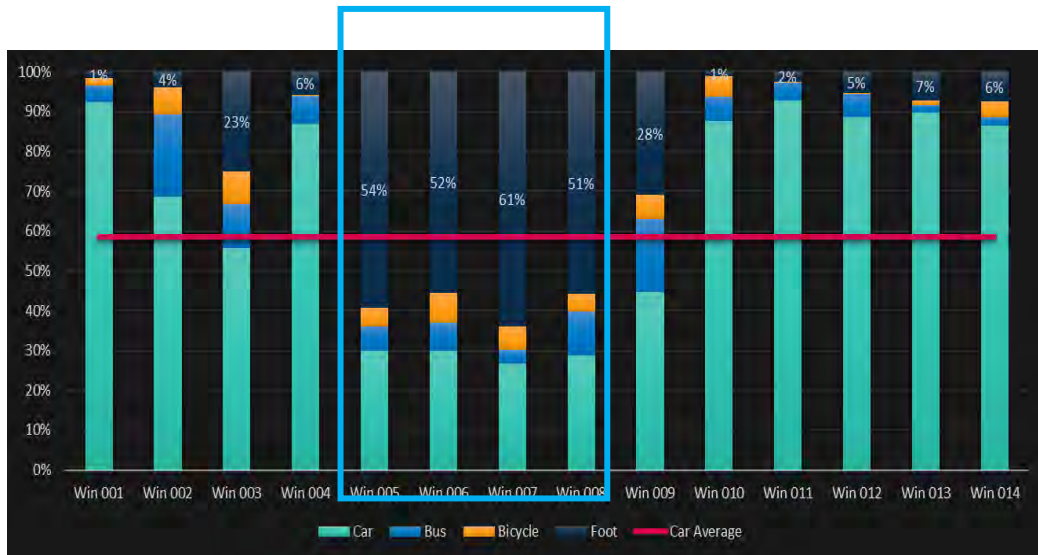
- 4.3.7 However, car ownership doesn't correlate directly with the number of commuter journeys undertaken by car, as evidenced in the below Figure, which shows that the immediate areas around Winchester are significantly lower than any other location within the District.
- 4.3.8 In this context, there appears to be an existing and ingrained behaviour in favour of non-car travel modes amongst residents that are within reach of Winchester (City). There is therefore the suggestion that further growth in these areas represent 'low hanging fruit' in maximising non-car travel behaviour amongst a growing population.

Figure 9 Car Mode Share for Journeys to Work





4.3.9 This is shown in a different way in the below Table, which shows the contribution of each travel mode for each Output Area within the District, and which clearly shows how the contribution of car journeys is much less in the areas that comprise Winchester (City) which are shown highlighted blue. More importantly, however, is how the balance of journeys in this area strongly favours those by foot, with journeys by foot accounting for an average of 55% of all trips within the City.



## 4.4 Section Conclusion

4.4.1 In summary, the Winchester (District) daytime population grows significantly which is suggestive of large-scale inward commuting patterns which unnecessarily increase vehicle kilometres, emissions and congestion. The largest origins of trips commuting into the District are from adjoining authority areas such that proximity is relevant.

4.4.2 However, jobs are not evenly distributed throughout the District and Winchester (City) is the focus of all economic activity, accounting for 40% of all jobs and four times more significant than its next closest cluster. However, of the trips that start and end in and close to Winchester (City) 50% of trips are completed by foot, with corresponding reductions in car ownership.

4.4.3 As such, there are potentially more job opportunities within the District than there are homes – or at least affordable homes. However, the focus of those job opportunities is at Winchester (City) where affordability is known to be an issue and which is likely to be leading to inward commuting to the city.

4.4.4 Thus, growth at Winchester (City) is a must and not least as there is existing data that demonstrates that this is the only location within the District that enables truly sustainable travel patterns to become established. Thus, development at Winchester (City) appears to be the most appropriate way to respond to the climate emergency.

## 5 SPATIAL ANALYSIS - MODEL DEVELOPMENT

### 5.1 Introduction

5.1.1 This section of the study sets out the methodology and assumptions used in the creation of the sustainability appraisal model.

5.1.2 In this way, the appraisal is informed by way of a bespoke GIS based accessibility model, which has been constructed by Calibro using independent data from sources such as Department for Transport, The Office for National Statistics, Ordnance Survey, and local public transport operators.

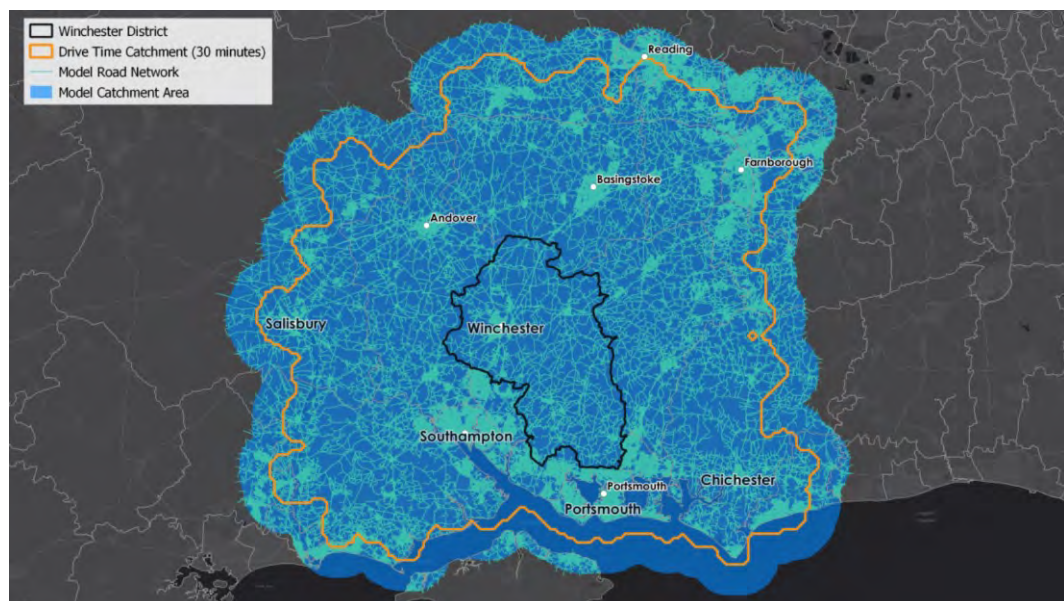
### 5.2 Modelled Study Area

5.2.1 The extent of the model covers the wider region to reflect that the people's travel decisions are not constrained by the invisible administrative limits and so the model considers sustainability as a 'bigger picture'.

5.2.2 In this way, the extents of the model have been determined by calculation of a 30-minute unconstrained (i.e., uncongested road network) drive time catchment from the outer limits of the Winchester District boundary, and then adding rudimentary buffer of 5-kilometres beyond that catchment. The 30-minute drive time catchment has been determined in accordance with the average commute time by car for the south-east region, as presented by the Department for Transport dataset: TSGB 2019.

5.2.3 This provides a model area that extends from Reading in the north to Farnborough in the east, Portsmouth in the south and west to Salisbury. The resultant model area is shown below, and to a larger scale at [Appendix X](#).

Figure 10 Model Area





## 5.3 Model Parameters

### Modelled Road Network, Public Rights of Way, and Cycle Network

- 5.3.1 The model utilises the most detailed road network currently available in combination with a comprehensive public right of way and cycle network dataset which allows for one-way streets or time-based street/lane closures and banned movements.
- 5.3.2 In all, the model reflects over 645.5k individual links and allows for a highly accurate modelling of available route choices.

### Traffic Congestion

- 5.3.3 The ability to access employment opportunities and key amenities is constrained by travel time. Congestion therefore has the effect of reducing the distance over which people may be willing to travel to access certain amenities and employment opportunities, even if their overall travel time remains constant.
- 5.3.4 To allow for this, the model incorporates Trafficmaster data which contains GPS-source vehicle speeds polled every 1-to-10 seconds throughout the data, by direction of travel. Essentially, the model is based on real-world observations for each of the 645.5k links within the model.
- 5.3.5 To ensure accuracy, this study has used journey speed data from September to November 2019 to avoid any distortion that may otherwise have been caused by the effects of the national response to the outbreak of COVID-19.
- 5.3.6 The model is therefore based on real-world travel conditions and provides a highly accurate estimate of likely journey times. It is also an independent data source that ensures the integrity of the model.

### Public Transport

- 5.3.7 Current public transport timetable and routing information from the Traveline National Dataset has been incorporated into the model along with NAPTAN stop references to enable identification of the geographical areas (and amenities that lie within).
- 5.3.8 The public transport strategies identified within Local Plans for adjoining Authorities have also been reflected within the model to reflect future influences on travel behaviour.

### Future Infrastructure

- 5.3.9 In a similar way, planned infrastructure projects identified within the Local Plans of adjoining Authorities have been incorporated within the model to allow for future influences or changes on travel behaviour.

## Vehicular Emissions Calculations

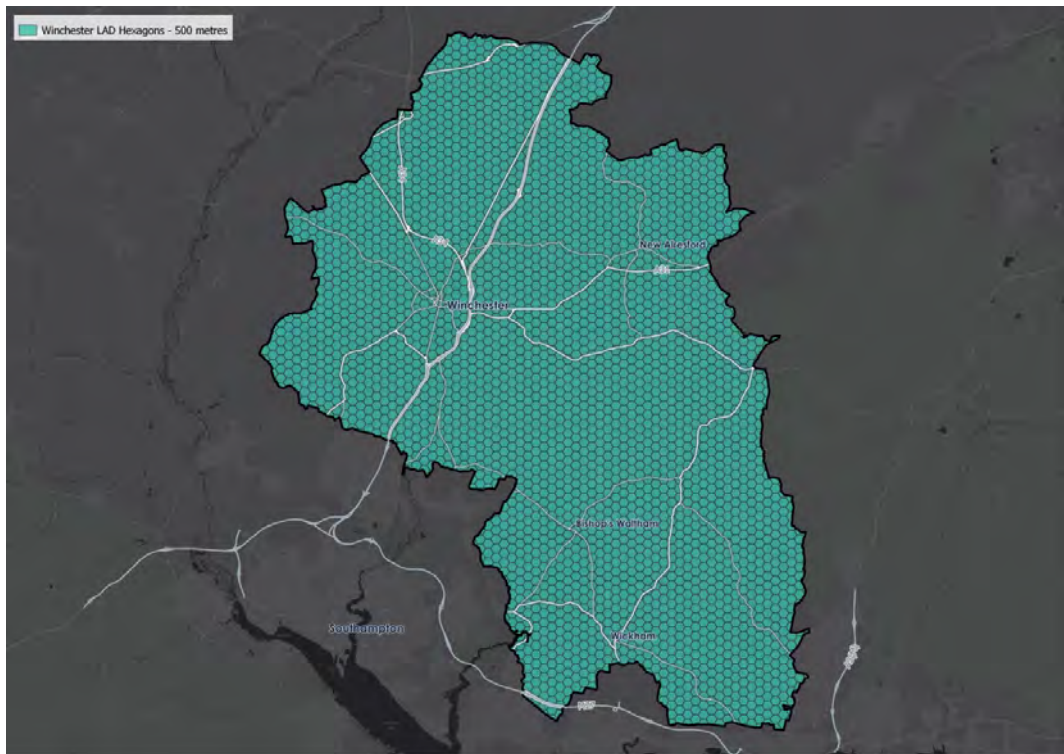
5.3.10 Vehicular emissions have been determined in line with the DEFRA published Emissions Factor Toolkit (EFT Version 10.1) and current WebTAG guidance for tailpipe CO<sub>2</sub> emissions. In this way, the model considers the way proportion of electric, petrol and diesel vehicles in the fleet and how CO<sub>2</sub> emissions vary by speed.

## Model Data Points

5.3.11 The model provides an evaluation of accessibility and likely CO<sub>2</sub> emissions at 500-metre. With this, the District wide analysis includes some 3,250 origin points, from which a relationship is considered to 611 workplace destinations. This results in 1.9M independent calculations.

5.3.12 In this context, the model processes significantly more data than typical Sustainability Appraisal techniques to provide a more complete picture of relative sustainability throughout the District.

*Figure 11 Winchester District Origin Cells -500-metre spacing*



## Model Destination Points: Employment

5.3.13 The model incorporates a gravity model approach to identify the propensity to travel between each employment zone and each of the data points, set at 500 metre centres.

5.3.14 In this way, the model incorporates Census 2011 Workplace Zones and uses the number of people working in each zone as a proxy for 'job opportunities'. The use of Workplace Zones allows the model to use the population weighted centroid to reflect the distribution of jobs within the respective area.

5.3.15 The number of jobs opportunities in each workplace zone have also been manually adjusted to reflect the economic strategy of each of the adjoining Local Plans where available. The model therefore takes into account the potential change in the distribution of jobs across the following Local Plan areas:

- Winchester;
- Eastleigh;
- Southampton City Council ;
- Portsmouth City Council;
- Fareham;
- Test Valley;
- East Hampshire;
- Basingstoke & Deane; and
- Havant.

## 5.4 Section Conclusion

5.4.1 The scope of the model is therefore extensive, comprehensive, and far reaching. However, it should be noted that the model broadly replicates the issues considered within traditional Sustainability Appraisals but does so more thoroughly, because of the additional computational/processing ability created by the modelling techniques.

5.4.2 In this sense, the modelling is entirely complimentary of the Council's emerging Sustainability Appraisal.

## 6 SPATIAL ANALYSIS - RESULTS

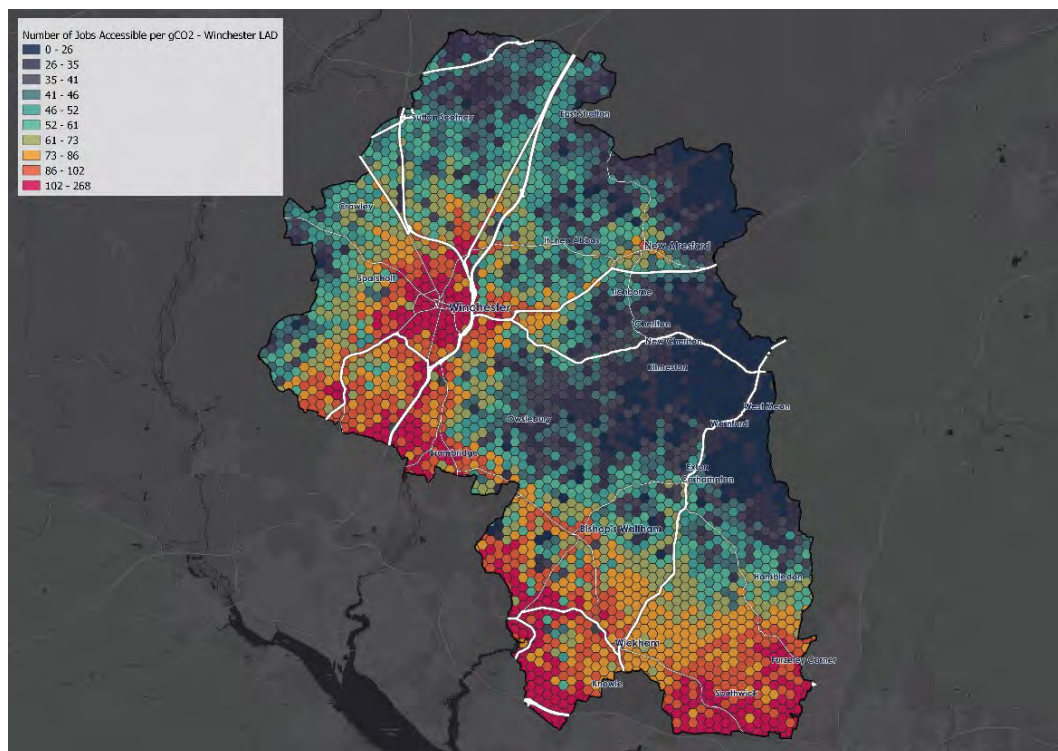
### 6.1 Introduction

- 6.1.1 This section of the study sets out the graphical results of the sustainability model. The results are presented in the form of a easy-to-understand heatmap where each cell is colour coded to reflect the number of jobs that are accessible for each gramme of CO2 required to access the opportunity.
- 6.1.2 In this way, the results ignore the complexity of the size of individual sites and therefore their relative contribution or otherwise to the goal of net zero. This reflects the current spatial planning stage of the Local Plan where there should be an aspiration to maximise growth in the most sustainable locations first.
- 6.1.3 Similarly, the model considers the relative sustainability performance of each cell on an 'each and every journey' basis, which overcomes uncertainty around future hybrid working patterns. So long as a journey to work is required, the model provides an appraisal of the relative environmental effect of that journey.

### 6.2 Model Output

- 6.2.1 The model combines the various strands of information previously identified at Section 6 of this study to provide an indication of the number of jobs that would be accepted per weighted gramme of CO<sub>2</sub> from each datapoint within the model.
- 6.2.2 The results of the model are presented in the below Figure and to a larger scale at [Appendix B](#).

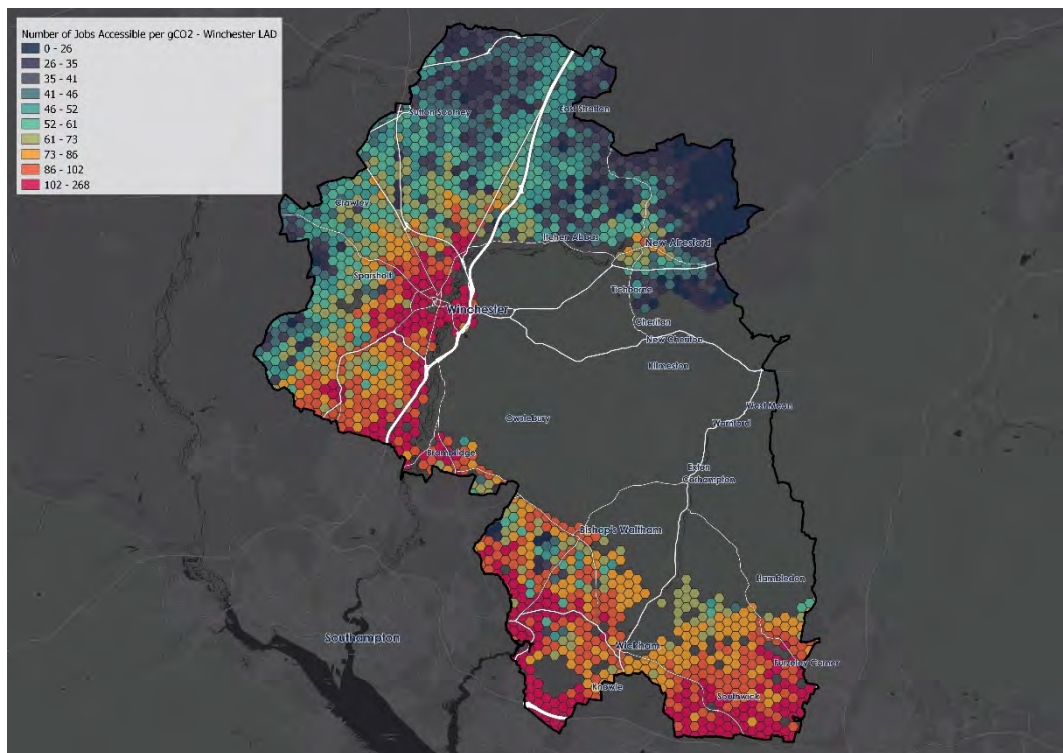
Figure 12 SPATIAL ANALYSIS - Winchester District





- 6.2.3 However, before interpreting the results it is important to reflect on the fact that there are policy and environmental constraints that create places where the presumption would be against development, such as the South Downs National any Sites of Special Scientific Interest (SSSIs).
- 6.2.4 The geographical extent of such policy and environmental constraints have been overlaid onto the model outputs and the results beneath removed, to enable a better understanding of the relative sustainability merits of those areas where development may, at least as a starting point, be possible.
- 6.2.5 These results are shown in the below Figure and to a larger scale at [Appendix C](#).

Figure 13 SPATIAL ANALYSIS - Winchester District (Constraints Removed)



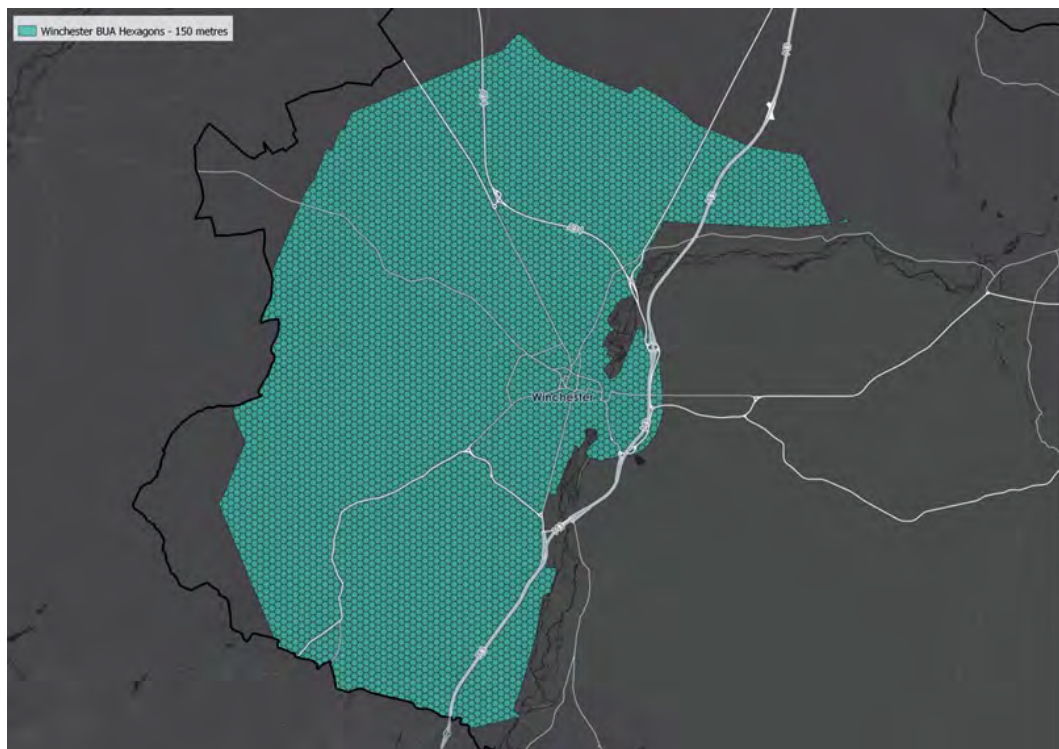
- 6.2.6 It is evident from the above results that a significant geographical area of the District would have a presumption against development and, of the remaining areas, Winchester (City) is a significant area of relative sustainability.
- 6.2.7 There is also a ribbon of relative sustainability to the foot of the District but it is noted that this is strongly influenced by out-commuting to key employment areas such as Fareham and Portsmouth. This is not to diminish the significance of these areas as they should play a part in the wider response to climate emergency. However, given the significant inward commuting that has been observed in the strategic level assessment, Winchester (City) would help to deliver the largest gains.



## 7 URBAN CONTEXT ANALYSIS

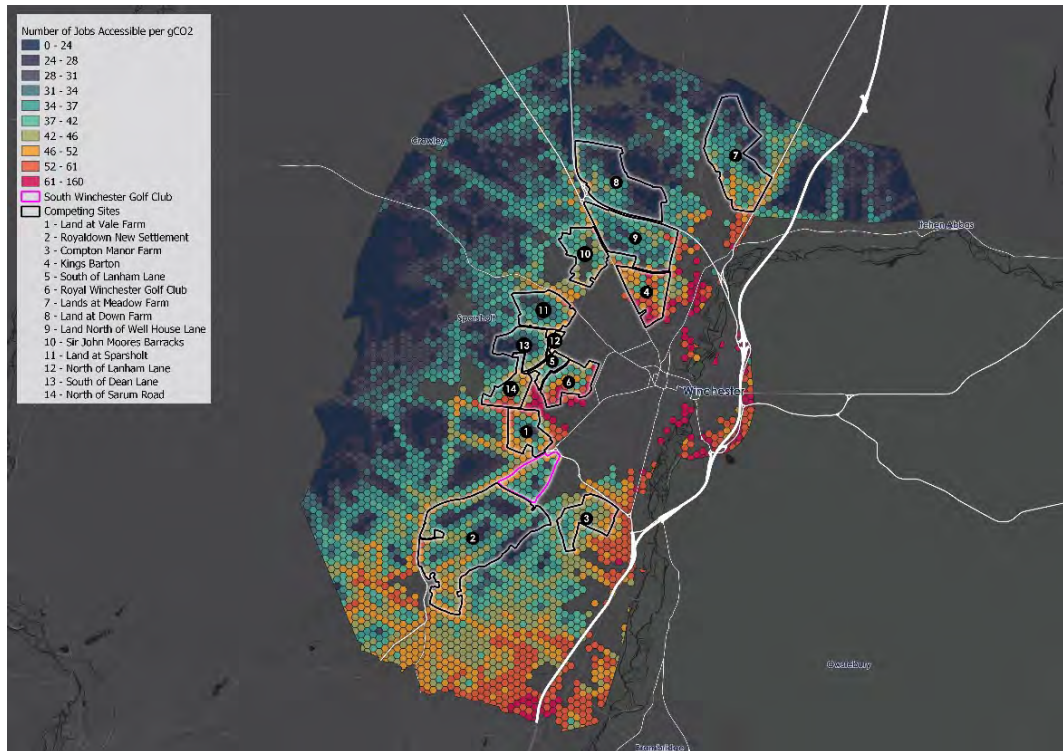
- 7.1.1 Having established above that Winchester (City) should be a focus of growth within a future spatial strategy, the model has been refined to enable consideration at an urban level. As well as a few discrete changes, the model considers the relative performance at 150-metre intervals, rather than 500-metres.
- 7.1.2 This means the model considers 5,780 origin points and results in over 3.5M independent calculations – so essentially almost double the data for a significantly smaller area of consideration.

Figure 14 URBAN CONTEXT ANALYSIS - Winchester City Model Area



- 7.1.3 The results of the urban context model are provided in the below Figure and to a larger scale at [Appendix D](#). As with the spatial analysis, the results are shown as a heatmap for ease of reference but with existing built-up areas removed to highlight the relative sustainability opportunity for land which is considered available.
- 7.1.4 The model also shows the proposed allocation site of South Winchester Golf Club together with indicative boundaries of other potential locations within the assessment area.

Figure 15 URBAN CONTEXT ANALYSIS - Results



- 7.1.5 It is evident from the above that Site 4 (Kings Barton) is particularly well located to offer sustainable forms of development. However, this is understood to be currently under construction and so should be treated as an existing commitment. However, Site 6 (Royal Winchester Golf Club) is modelled to have similar levels of sustainability, and this can be put down to proximity to the city centre.
- 7.1.6 Beyond this, the proposed allocation of South Winchester Golf Club and Site 9 – Land North of Well House Lane appear to be excellent candidates to accommodate sustainable growth. However, it should be noted that the base model does not consider potential mitigation, and it is suggested that Site 9 and 10 in particular, are unlikely to yield significant opportunity to make improvements.
- 7.1.7 Conversely, the proposed allocation has reasonable prospects of resolving existing congestion that places it ahead of other sites, at this stage in the process.

## 7.2 Section Conclusion

- 7.2.1 There are a number of sites that are modelled to have similar levels of 'opportunity' and this is a logical response to proximity. However, the result does not presently identify potential mitigation and local knowledge suggests that sites along Romsey Road could potentially deliver improvements to reduce delay and congestion on this route into the site, which propel their performance ahead of others.
- 7.2.2 Consequently, at the local level, the transport strategy will be key to determining the most sustainable allocations and, in this regard, it would be a mistake to focus on the immediate means of access and masterplan. It is evident that a more holistic approach will be necessary to deliver the greatest benefit, and which, in the context of the South Winchester Golf Club site, is likely to make it one of the very best sites, comparatively.

## 8 THE 15-MINUTE CITY

### 8.1 Introduction

- 8.1.1 Building upon the urban context conclusion, further analysis has been undertaken around the principle of the 15-minute city which, to all intents, relates to an idea that the majority of human needs are available within a 15-minute journey of where someone lives.
- 8.1.2 For the purpose of this assessment and reflecting the early stage in the process, the assessment has been undertaken for the proposed allocation of South Winchester Golf Club only and considers how the introduction of different types of amenities within the masterplan could deliver wider community benefits that extend beyond the redline.
- 8.1.3 Detailed plans are provided in the figures that follow and which are contained to a larger scale at [Appendix F](#). However, the results are summarised in the below table which highlights the population that would lie within a 15-minute walk of the amenity in question, and how this would change with the provision of that type of amenity within the site proposals.

Table 8-1 15-minute City Evaluation (Summary)

Amenity	Existing Amenities	+ Proposed Allocation	Change in Population
Primary School	69,147	69,201	+54
Convenience Store	68,552	68,588	+35
Post Office	55,675	55,710	+35
Doctors	43,282	43,741	+458



Figure 16 15-minute City Analysis – Walk to Existing Primary Schools

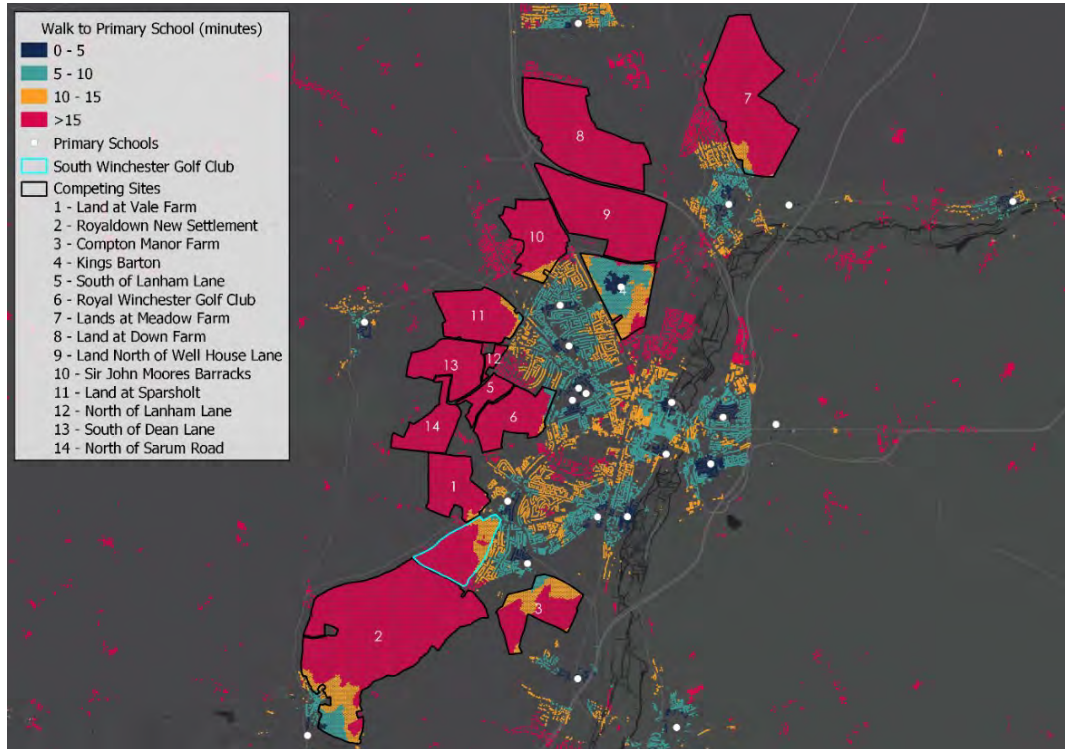


Figure 17 15-minute City Analysis – Walk to Existing Primary School + Proposed Allocation

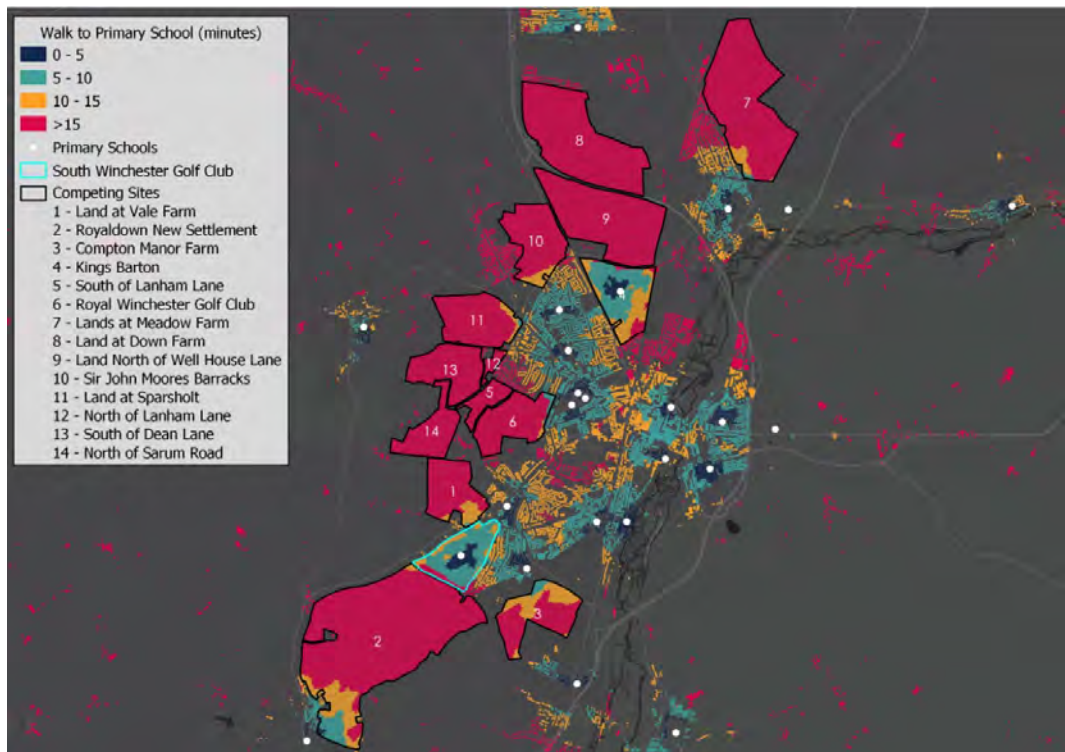




Figure 18 15-minute City Analysis – Walk to Existing Convenience Stores

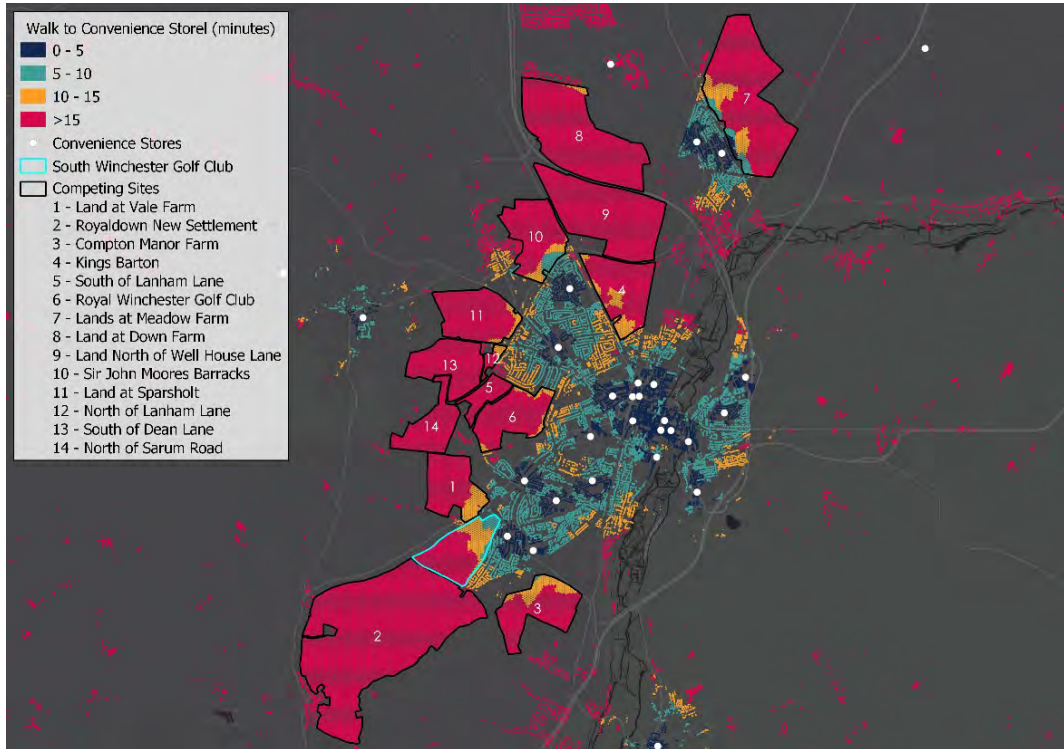


Figure 19 15-minute City Analysis – Walk to Existing Convenience Stores + Proposed Allocation

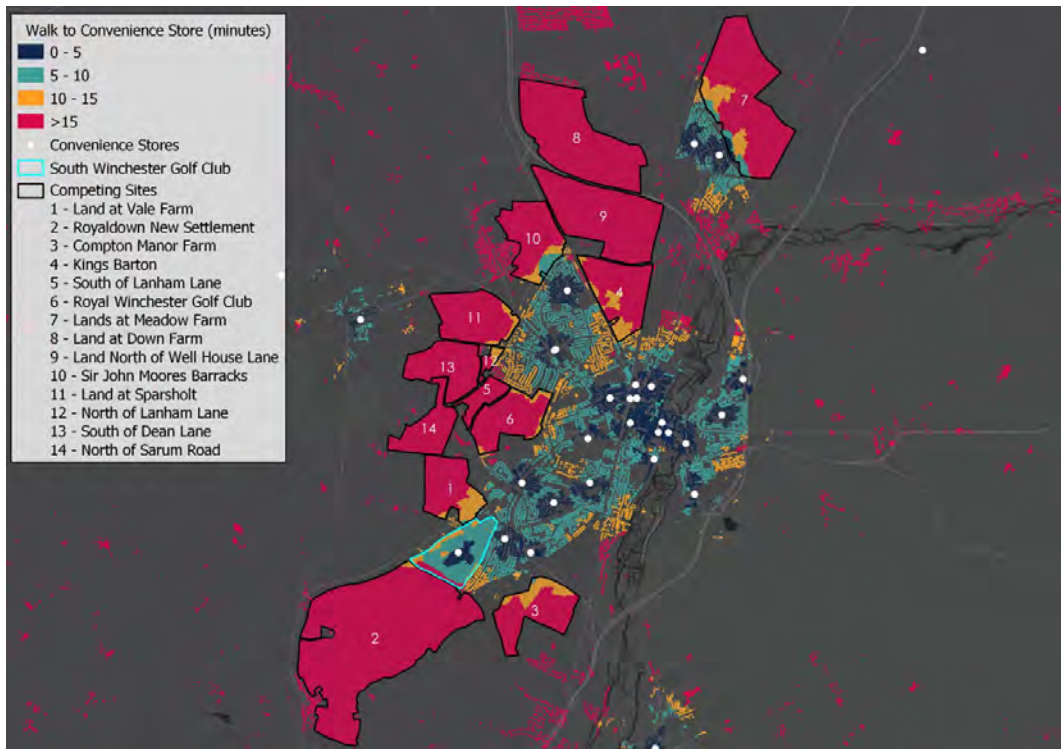


Figure 20 15-minute City Analysis – Walk to Existing Post Offices

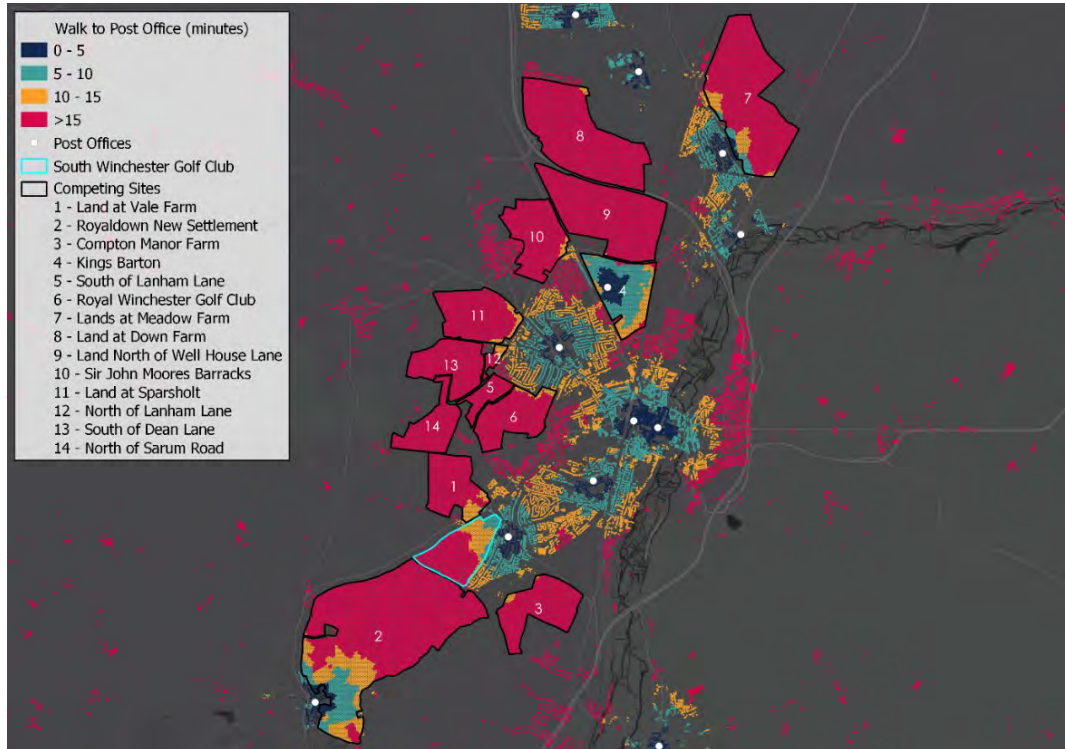


Figure 21 15-minute City Analysis - Walk to Existing Post Offices + Proposed Allocation

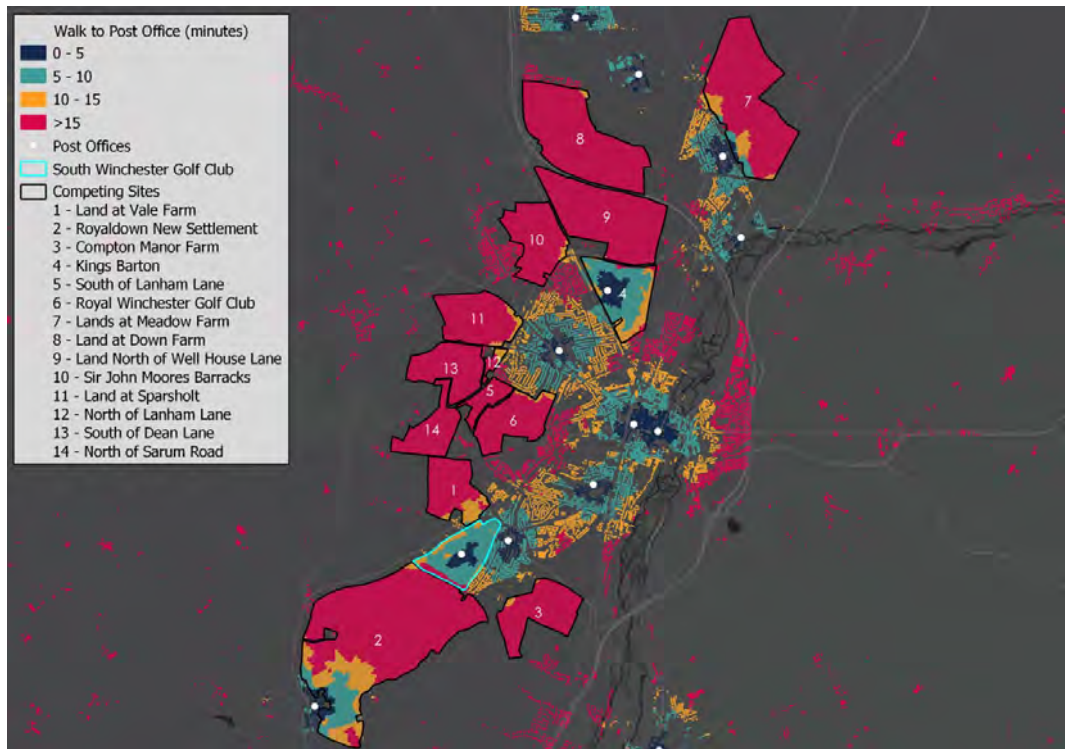




Figure 22 15-minute City Analysis – Walk to Existing Doctors Surgeries Offices

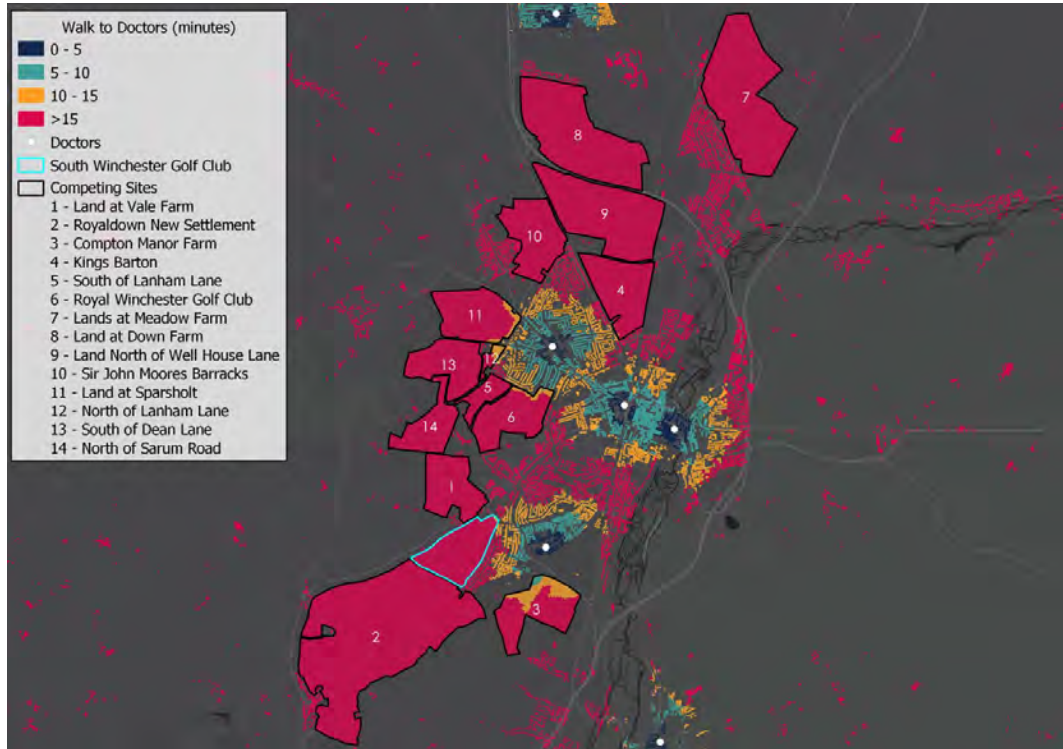


Figure 23 15-minute City Analysis - Walk to Existing Doctors Surgeries + Proposed Allocation

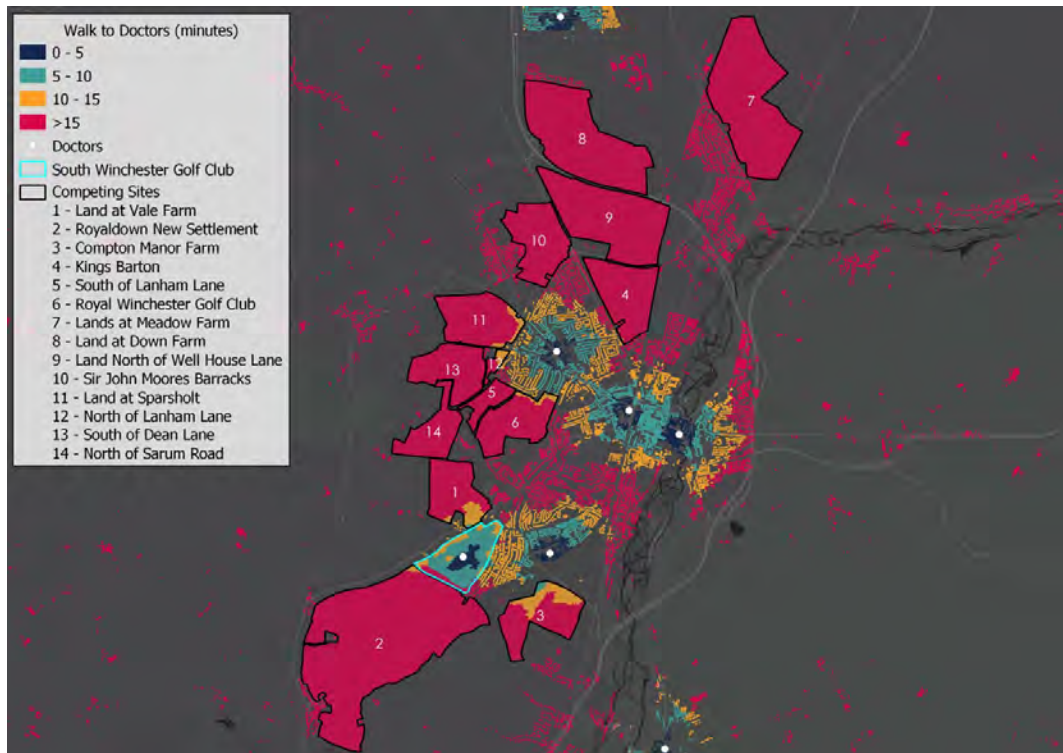


Figure 24 15-minute City Analysis – Walk to Bus Stops

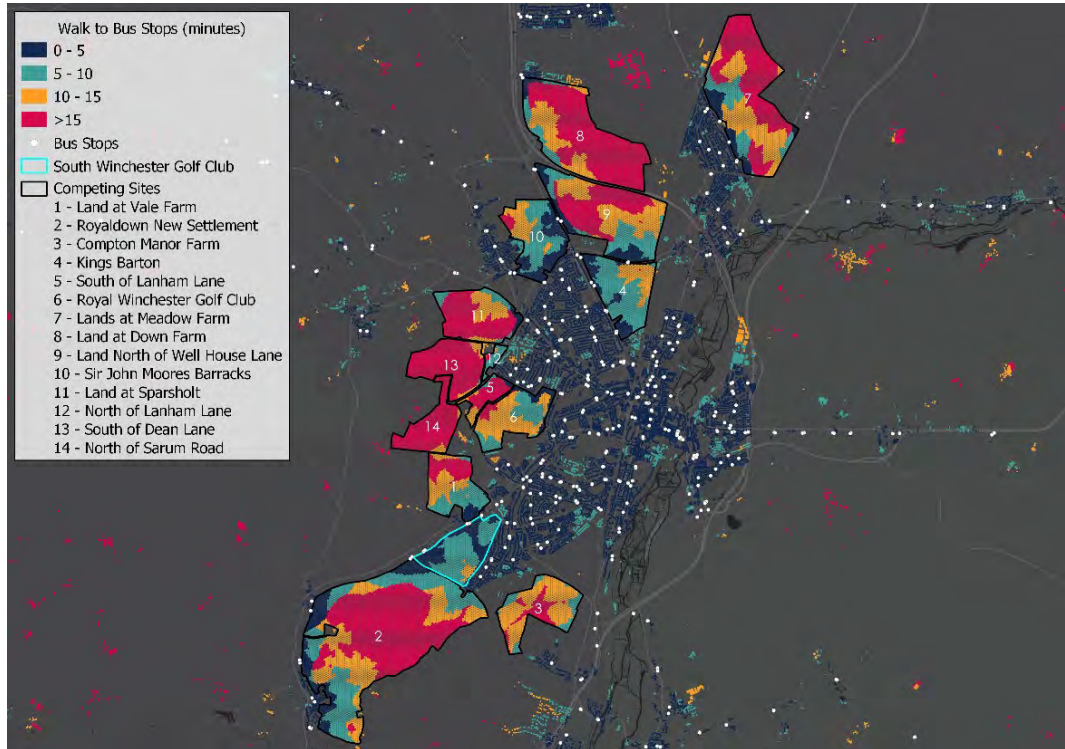


Figure 25 15-minute City Analysis – Walk to Secondary Schools

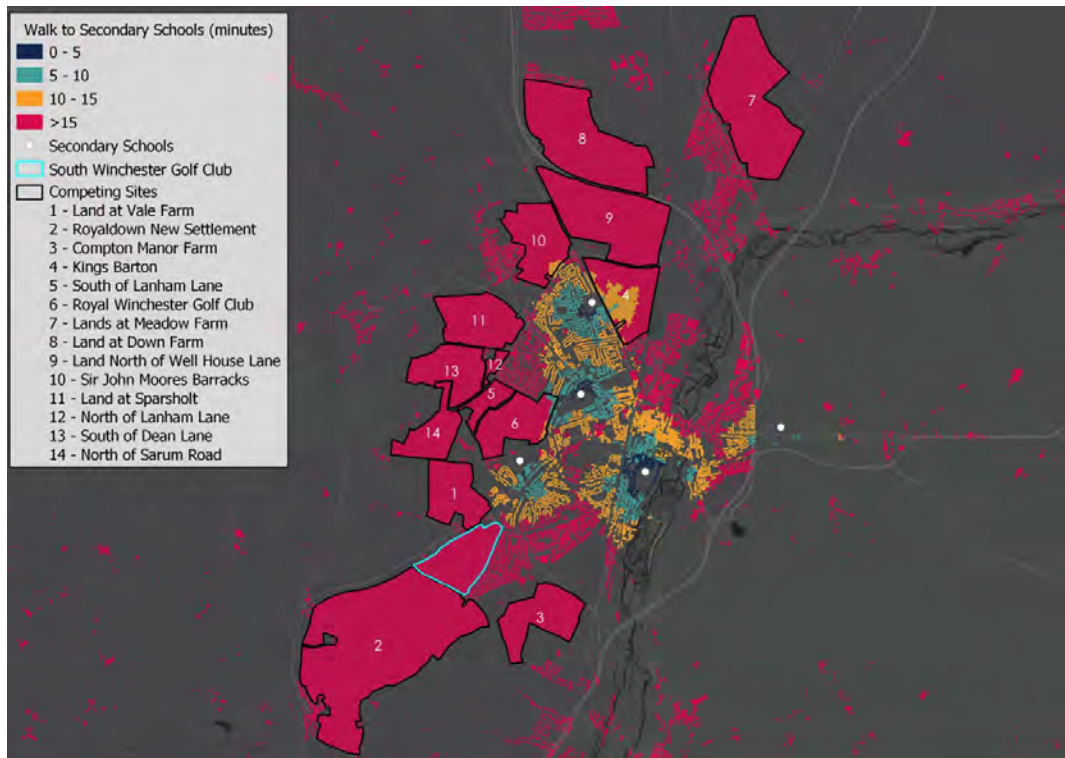
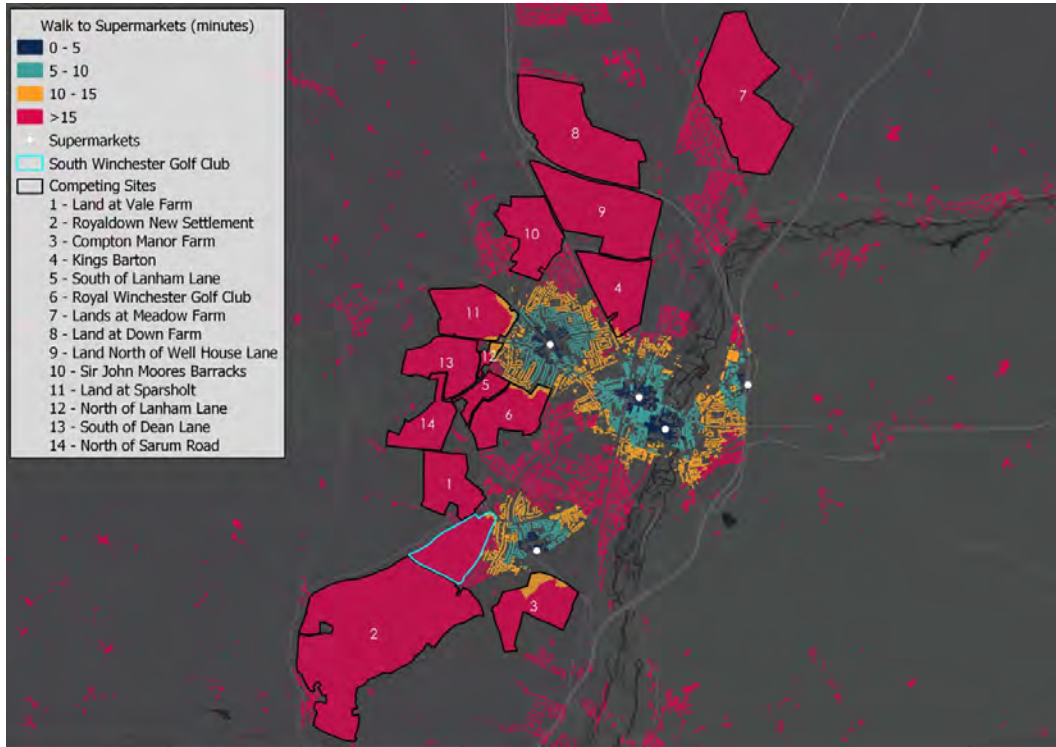




Figure 26 15-minute City Analysis – Walk to Supermarkets





## 9 POTENTIAL DESIGN RESPONSES

### 9.1 Masterplan Principles

- 9.1.1 A successful scheme will need to create a walkable and permeable street network that encourages social interaction and play. As such, there is significant merit in assessing the potential to deliver pockets of development that are essentially 'hung' from a higher order road network to reduce the need for vehicles to circulate through the residential areas, and reduce interaction between vehicles, pedestrians, and children at play.
- 9.1.2 The higher order roads could also create an opportunity for centralised delivery lockers located with pull-in spaces to reduce the need for smaller delivery vehicles to enter onto the more sensitive residential streets. Such vehicles are often driven above desirable speeds in residential areas and park in ways that can block visibility and cause hindrance to the free flow of traffic. An example of an external local is provided below for content

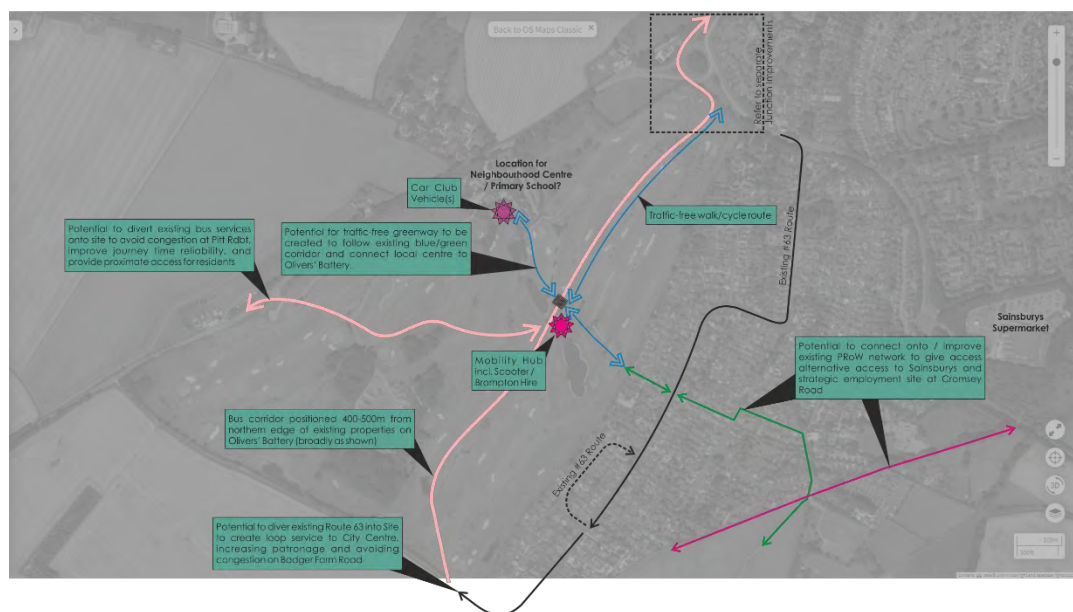
Figure 27 Example Delivery Locker



- 9.1.3 Informal engagement with the local bus operator (Stagecoach) confirms the site is likely to be viewed one two best options for Winchester (City) and it is recognised that, if well designed, has the potential to offer the potential to speed up the No. 66 Romsey>Winchester service whilst adding substantial demand to it. This is a helpful combination noted to be rarely seen by Stagecoach.

- 9.1.4 To build upon the above sentiment, each pocket of development should have ease of access to a non-car transport corridor linking the residential neighbourhoods with high quality transport connections towards the city and nearby residential areas. In this way, we foresee merit in considering a bus corridor running through the heart of the site, connecting onto Romsey Road at the north-western corner of the site and onto Badger Farm Road in the east.
- 9.1.5 Responding to key themes within the Council's Sustainability Appraisal, we consider opportunities for a reconfiguration of the Pitt Roundabout that would allow city-bound traffic to be throttled to help achieve greater free flow conditions in areas more sensitive to air quality, and create bus priority through the junction such that buses are unaffected by any delay.
- 9.1.6 It will be important, however, to create an integrated non-car transport strategy to respond to the locally relevant issues and a traffic free walk/cycle route could run alongside the bus corridor to provide connections onto Badger Farm Road where there is existing provision for both modes. Similarly, existing public rights of way exist into Olivers' Battery and onwards towards the Sainsburys supermarket and strategic employment site located at Cromsey Road, which could be upgraded.
- 9.1.7 Calibro has also undertaken informal discussions with Enterprise Car Club and Brompton Bike Hire, with whom we have an established relationship, who confirm that they see an exciting opportunity to integrate their mobility hub concept within the masterplan. Further discussions will be required in due course.
- 9.1.8 A conceptual illustration of the non-car strategy is shown below for context.

Figure 28 Non-Car Infrastructure Concept



## Pitt Roundabout Improvements

- 9.1.9 Calibro has noted the significant emphasis that is placed on public transport improvements within the emerging Local Plan and Winchester Movement Plan, combined with the results of the modelling which suggests that the relative performance of South Winchester Golf Club – which being very good – should be exaggerated wherever possible to fend off potential competing allocations which have similar levels of sustainability.
- 9.1.10 In this regard, Calibro considers that a full vehicle access onto the existing **Pitt Roundabout, at the site's north-eastern corner**, would be a missed opportunity. Based on our own observations, the existing roundabout does not operate at or beyond capacity limitations. However, traffic queues block back through the junction from the downstream crossroads that are created where Romsey Road connects with Kilham Road and Stanmore Lane – after which traffic continues to move slowly with friction caused by the urban street network.
- 9.1.11 The proposed solution, which will inevitably be refined with further thought and analysis, is to use the junction to throttle traffic away from the more sensitive part of the network – essentially hold traffic back in this location where the emissions from vehicles are not trapped in the street canyon and which do affect sensitive receptors that exist along Romsey Road. Controlling traffic in this location will also be synergistic in respect of encouraging drivers to pull into the Park & Ride facility, of which there is also an opportunity to create a new facility within the site, such that there is a combined reduction in traffic volumes travelling towards the city.
- 9.1.12 However, this would need to be delivered with a signalised upgrade of the roundabout and bus priority measures will be needed to make the alternative an attractive and viable option – points well made within the emerging Local Plan Sustainability Appraisal scoping document.
- 9.1.13 Calibro has provided a conceptual plan to highlight the broad strategy. However, it should be noted that the below is an exaggerated version of what is likely to be achieved with more detailed analysis and design.

Figure 29 Pitt Lane Roundabout Improvement (Conceptual)



# APPENDICES





# APPENDIX A

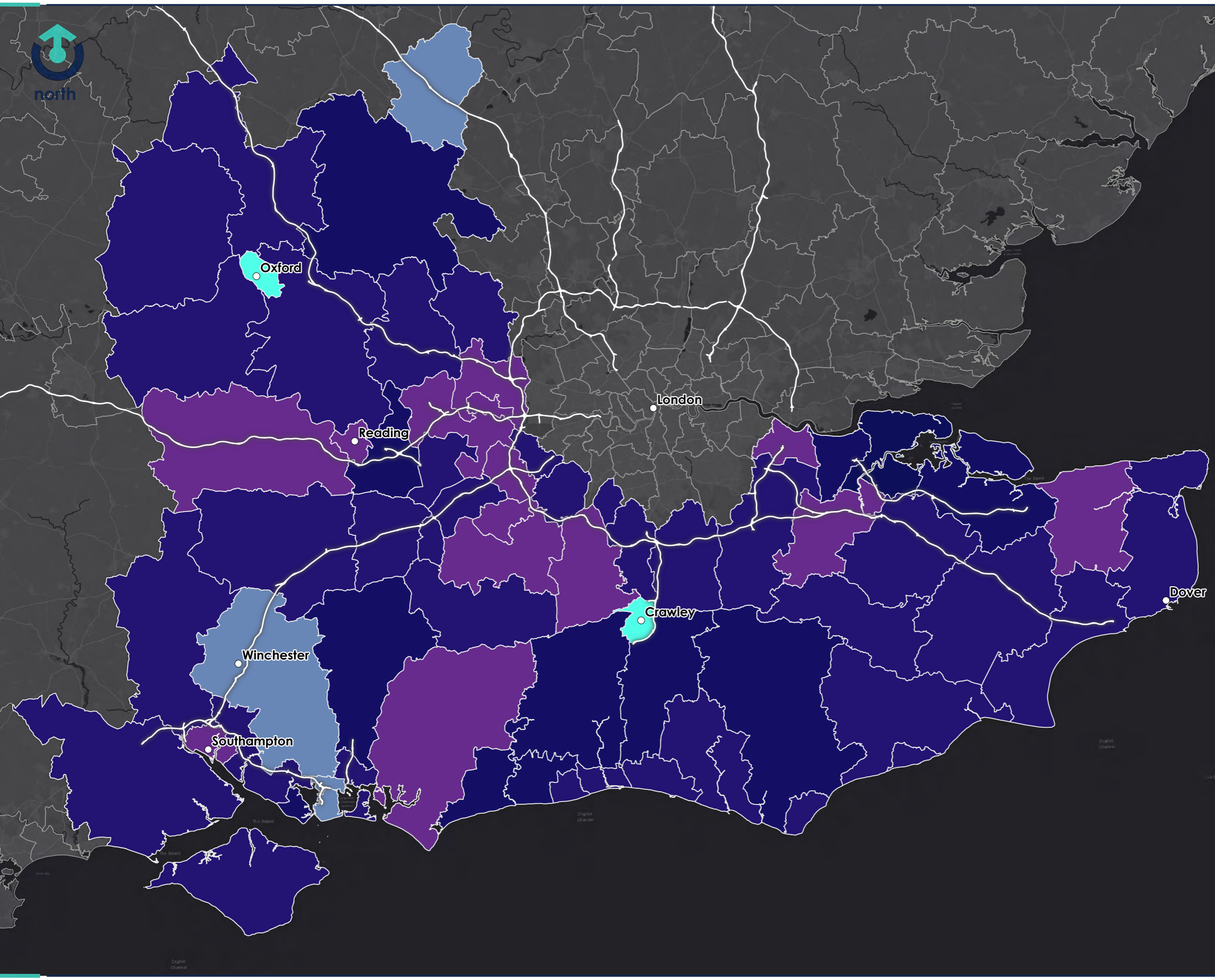
## Strategic Analysis



### Legend

LAD - Net Change

- 27983 - -20000
- 20000 - -10000
- 10000 - 0
- 0 - 10000
- 10000 - 20000
- 20000 - 29839



-	FIRST ISSUE	MK	01/10/2021
REV:	DESCRIPTION:	BY:	DATE:

STATUS: FOR INFORMATION

CLIENT:  
BLOOR HOMES

SITE:  
SOUTH WINCHESTER GOLF CLUB, WINCHESTER

TITLE:  
NET CHANGE IN WORKFORCE POPULATION



SCALE AT A3: 1:700000	DATE: 01/10/2021	DRAWN: AF	CHECKED: RW
PROJECT NO: 21-268	DRAWING NO: 10-002	REVISION: -	





### Legend

#### LADs to Winchester

- 0 - 20
- 20 - 2000
- 2000 - 3000
- 3000 - 4000
- 4000 - 5000
- 5000 - 6000
- 6000 - 7000
- 7000 - 8000
- 8000 - 8831

-	FIRST ISSUE	MK	01/10/2021
REV:	DESCRIPTION:	BY:	DATE:

STATUS: FOR INFORMATION

CLIENT:  
BLOOR HOMES

SITE:  
SOUTH WINCHESTER GOLF CLUB, WINCHESTER

TITLE:  
WORKING IN WINCHESTER LAD FROM EXTERNAL LADs



SCALE AT A3: 1:700000	DATE: 01/10/2021	DRAWN: AF	CHECKED: RW
PROJECT NO: 21-268	DRAWING NO: 10-002	REVISION: -	





### Legend

#### Number of Workers

- 61 - 185
- 185 - 289
- 289 - 426
- 426 - 612
- 612 - 749
- 749 - 960
- 960 - 1384
- 1384 - 2418
- 2418 - 2799

-	FIRST ISSUE	MK	01/10/2021
REV:	DESCRIPTION:	BY:	DATE:

STATUS: FOR INFORMATION

CLIENT:  
BLOOR HOMES

SITE:  
SOUTH WINCHESTER GOLF CLUB, WINCHESTER

TITLE:  
WORKPLACE ZONES WITHIN WINCHESTER LAD



SCALE AT A3: 1:140000	DATE: 01/10/2021	DRAWN: AF	CHECKED: RW
PROJECT NO: 21-268	DRAWING NO: 10-003	REVISION: -	





### Legend

% of workers living in Winchester LAD

- 0 - 10
- 10 - 20
- 20 - 30
- 30 - 40
- 40 - 50
- 50 - 60
- 60 - 70
- 70 - 80

-	FIRST ISSUE	MK	01/10/2021
REV:	DESCRIPTION:	BY:	DATE:

STATUS: FOR INFORMATION

CLIENT:  
BLOOR HOMES

SITE:  
SOUTH WINCHESTER GOLF CLUB, WINCHESTER

TITLE:  
% OF WORKERS LIVING IN WINCHESTER LAD



SCALE AT A3: 1:140000	DATE: 01/10/2021	DRAWN: AF	CHECKED: RW
PROJECT NO: 21-268	DRAWING NO: 10-005	REVISION: -	





### Legend

#### Internal Commute Flows

- 0 - 20
- 20 - 40
- 40 - 60
- 60 - 80
- 80 - 100
- 100 - 120
- 120 - 140
- 140 - 160
- 160 - 180
- 180 - 193

Winchester

-	FIRST ISSUE	MK	01/10/2021
REV:	DESCRIPTION:	BY:	DATE:

STATUS: FOR INFORMATION

CLIENT:  
BLOOR HOMES

SITE:  
SOUTH WINCHESTER GOLF CLUB, WINCHESTER

TITLE:  
INTERNAL COMMUTE FLOWS WINCHESTER DISTRICT



SCALE AT AS:	DATE:	DRAWN:	CHECKED:
1:140000	01/10/2021	AF	RW
PROJECT NO:	DRAWING NO:	REVISION:	
21-268	10-007	-	





### Legend

- Car Ownership
- 0.00 - 0.50
  - 0.50 - 1.00
  - 1.00 - 1.20
  - 1.20 - 1.40
  - 1.40 - 1.60
  - 1.60 - 1.80
  - 1.80 - 2.00
  - 2.00 - 2.14

-	FIRST ISSUE	MK	01/10/2021
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STATUS: FOR INFORMATION

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BLOOR HOMES

SITE:  
SOUTH WINCHESTER GOLF CLUB, WINCHESTER

TITLE:  
CAR OWNERSHIP



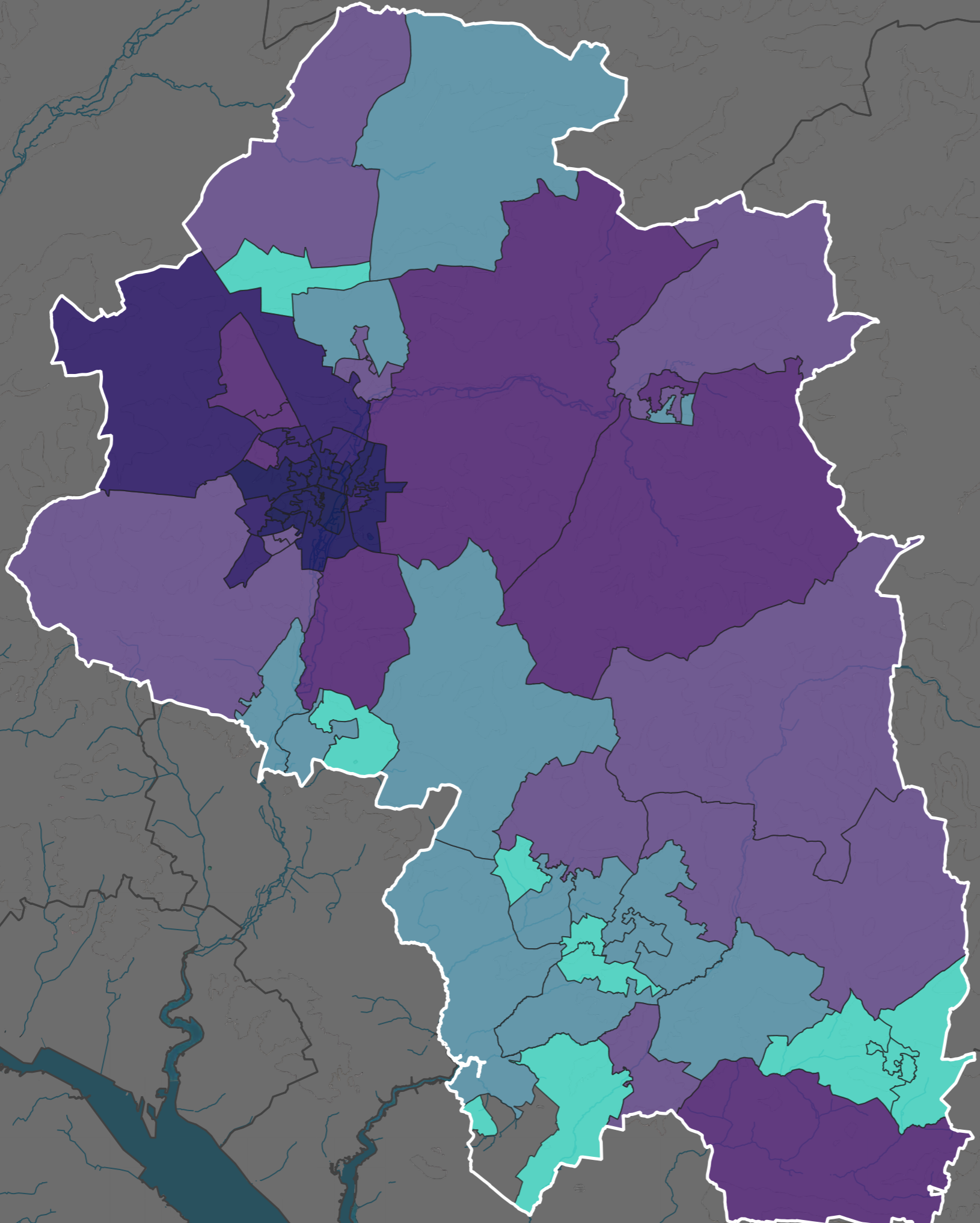
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PROJECT NO: 21-268	DRAWING NO: 10-007	REVISION: -	



### Legend

#### Car Mode Share

- 17 - 20
- 20 - 25
- 25 - 30
- 30 - 35
- 35 - 40
- 40 - 45
- 45 - 50
- 50 - 55
- 55 - 58



-	FIRST ISSUE	MK	01/10/2021
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STATUS: FOR INFORMATION

CLIENT:  
BLOOR HOMES

SITE:  
SOUTH WINCHESTER GOLF CLUB, WINCHESTER

TITLE:  
MODE SHARE - CAR

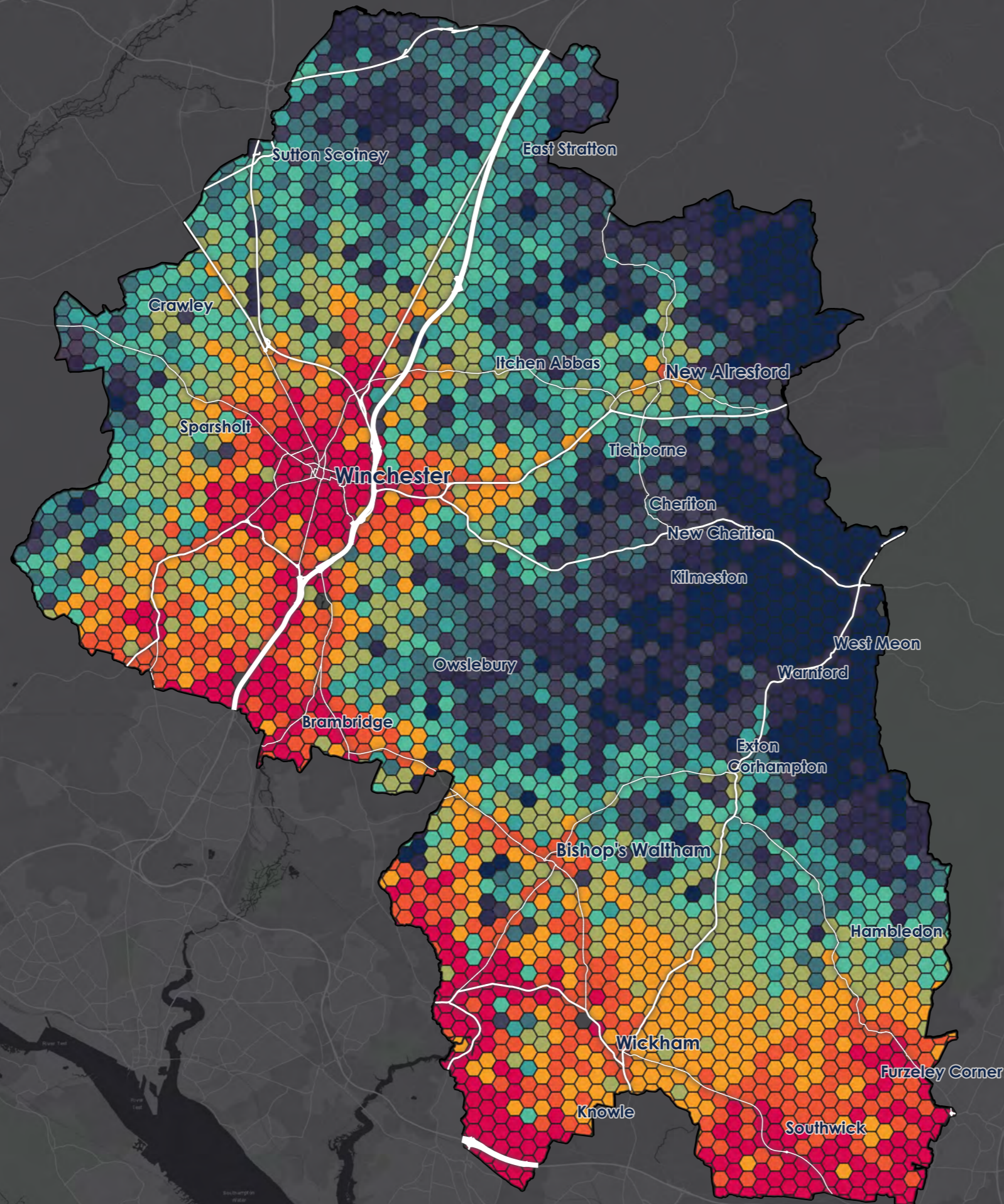


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## APPENDIX B

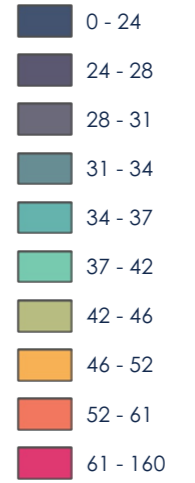
### Spatial Analysis – Winchester District





### Legend

Number of Jobs Accessible per gCO2



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REV:	DESCRIPTION:	BY:	DATE:

STATUS: FOR ISSUE

CLIENT:  
BLOOR HOMES

SITE:  
SOUTH WINCHESTER GOLF CLUB

TITLE:  
REVEAS - WINCHESTER DISTRICT



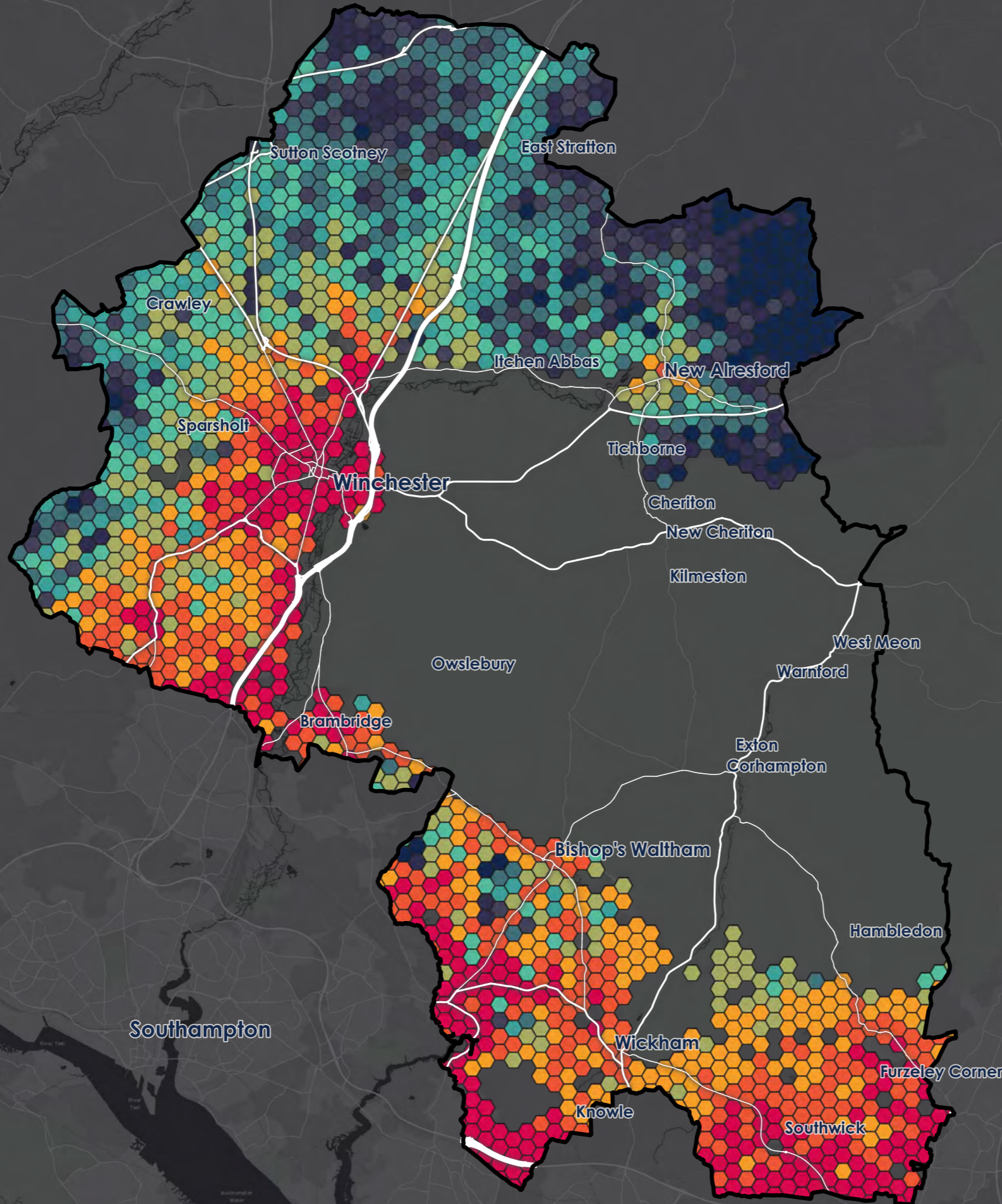
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PROJECT NO: 21-268	DRAWING NO: 20-009	REVISION: -	



## APPENDIX C

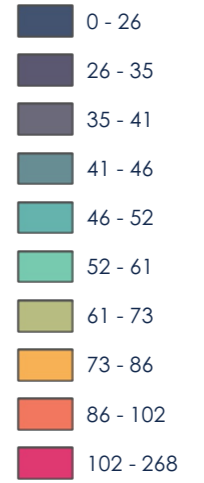
### Spatial Analysis – Winchester District with Constraints Removed





### Legend

Number of Jobs Accessible per gCO2



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STATUS: FOR ISSUE

CLIENT:  
BLOOR HOMES

SITE:  
SOUTH WINCHESTER GOLF CLUB

TITLE:  
REVEAS - WINCHESTER DISTRICT WITH CONSTRAINTS REMOVED



Transport Planning | Road Risk & Hydrology | Infrastructure & Drainage  
81 Whitehoads Road, Bistol, BS5 2AT | 0117 2441 970  
t: hello@calibro-consultants.com www.calibro-consultants.com

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PROJECT NO: 21-268	DRAWING NO: 20-012	REVISION: -	



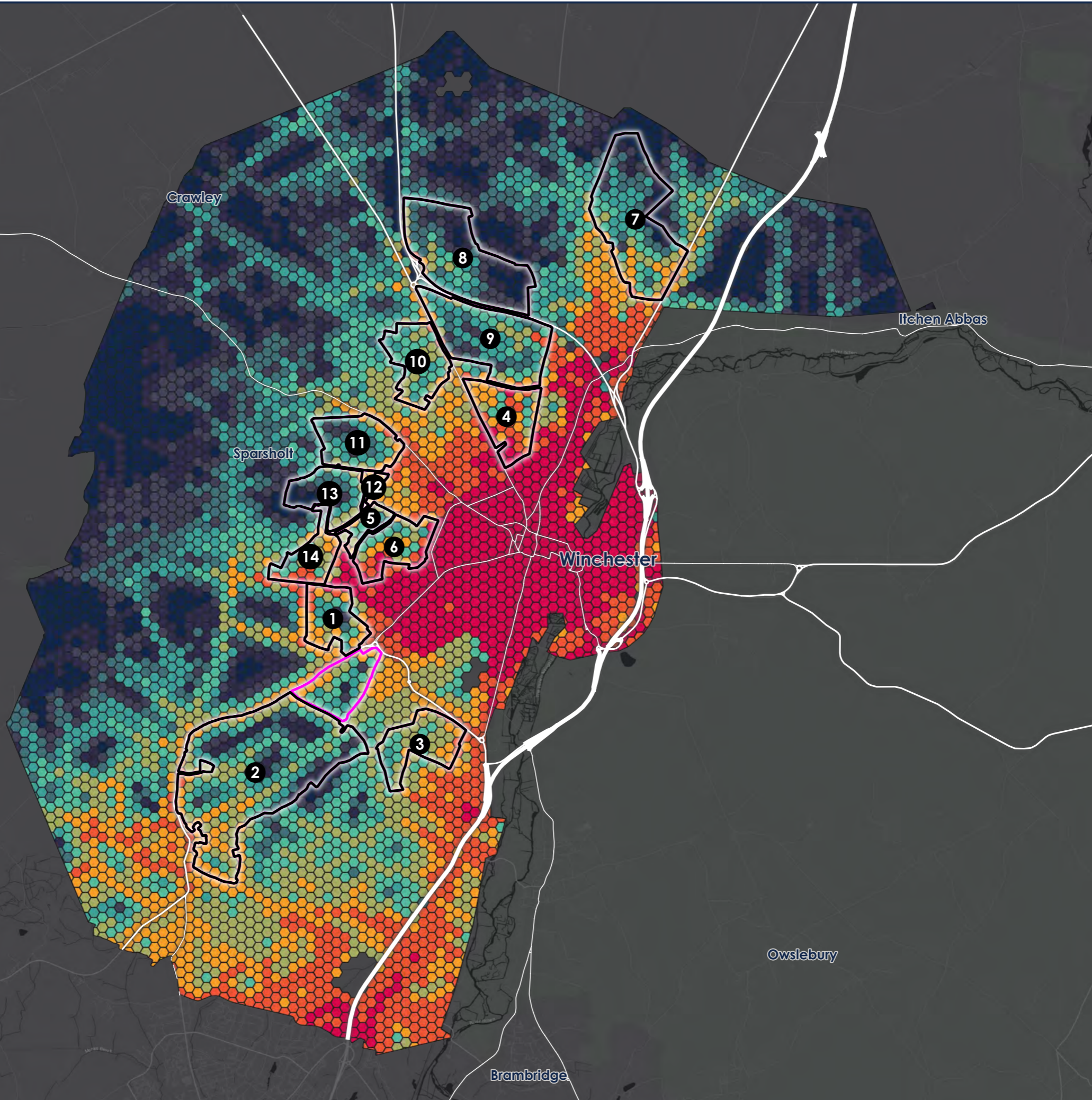
## APPENDIX D

### Urban Context Analysis – Winchester BUA



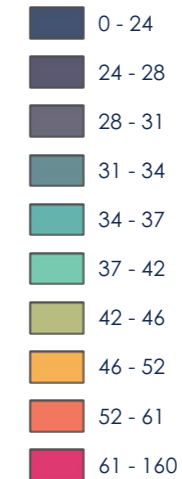


north



### Legend

Number of Jobs Accessible per gCO2



-	FIRST ISSUE	MK	01/11/21
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STATUS: FOR ISSUE

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BLOOR HOMES

SITE:  
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TITLE:  
REVEAS - WINCHESTER CITY



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PROJECT NO: 21-268	DRAWING NO: 20-011	REVISION: -	



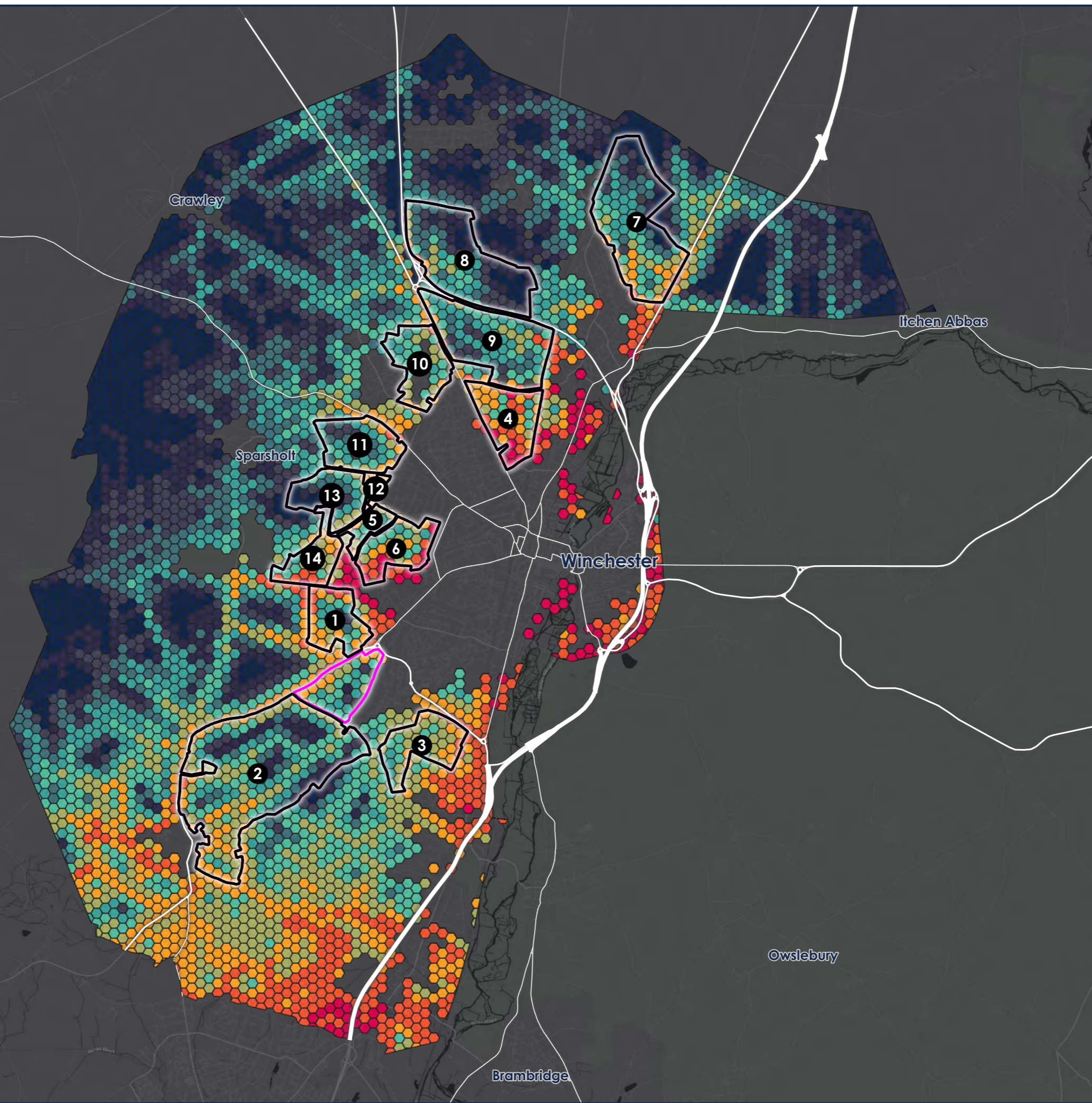
## APPENDIX E

### Urban Context Analysis – Winchester BUA – with Constraints Removed





north



### Legend

Number of Jobs Accessible per gCO2

- 0 - 24
- 24 - 28
- 28 - 31
- 31 - 34
- 34 - 37
- 37 - 42
- 42 - 46
- 46 - 52
- 52 - 61
- 61 - 160

-	FIRST ISSUE	MK	01/11/21
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TITLE:  
REVEAS - WINCHESTER CITY constraints removed



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PROJECT NO: 21-268	DRAWING NO: 20-012	REVISION: -	



## APPENDIX F

### 15-minute City Analysis



### Legend

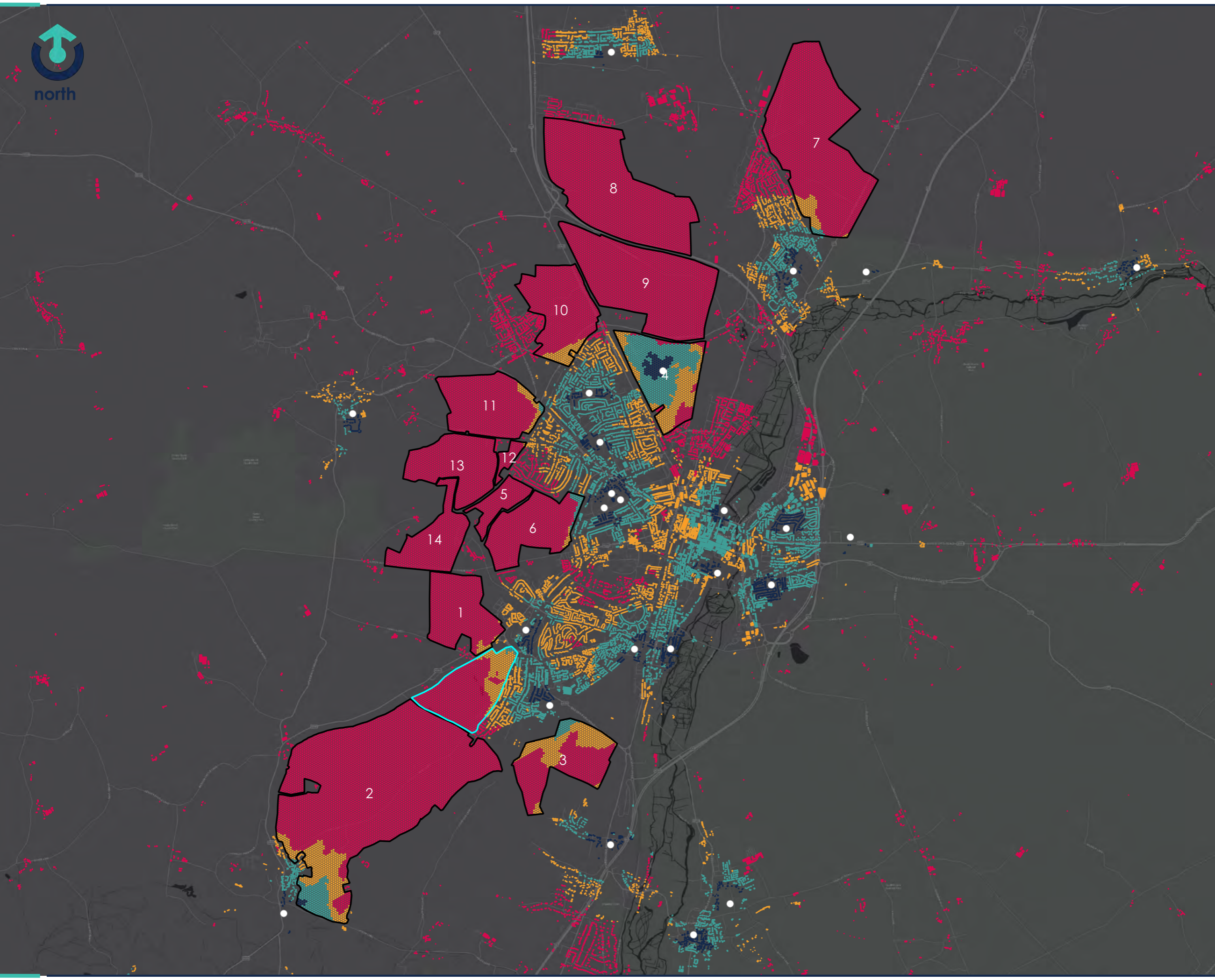
Walk to Primary School (minutes)

- 0 - 5
- 5 - 10
- 10 - 15
- >15

○ Primary Schools

□ South Winchester Golf Club

- Competing Sites
- 1 - Land at Vale Farm
  - 2 - Royaldown New Settlement
  - 3 - Compton Manor Farm
  - 4 - Kings Barton
  - 5 - South of Lanham Lane
  - 6 - Royal Winchester Golf Club
  - 7 - Lands at Meadow Farm
  - 8 - Land at Down Farm
  - 9 - Land North of Well House Lane
  - 10 - Sir John Moores Barracks
  - 11 - Land at Sparsholt
  - 12 - North of Lanham Lane
  - 13 - South of Dean Lane
  - 14 - North of Sarum Road



-	FIRST ISSUE	MK	01/11/21
REV:	DESCRIPTION:	BY:	DATE:

STATUS: FOR ISSUE

CLIENT:  
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SITE:  
SOUTH WINCHESTER GOLF CLUB

TITLE:  
WALK TO PRIMARY SCHOOL



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21-268	20-001	-	





# Legend

Walk to Primary School (minutes)

- 0 - 5
- 5 - 10
- 10 - 15
- >15

○ Primary Schools

□ South Winchester Golf Club

□ Competing Sites

- 1 - Land at Vale Farm
- 2 - Royaldown New Settlement
- 3 - Compton Manor Farm
- 4 - Kings Barton
- 5 - South of Lanham Lane
- 6 - Royal Winchester Golf Club
- 7 - Lands at Meadow Farm
- 8 - Land at Down Farm
- 9 - Land North of Well House Lane
- 10 - Sir John Moores Barracks
- 11 - Land at Sparsholt
- 12 - North of Lanham Lane
- 13 - South of Dean Lane
- 14 - North of Sarum Road

-	FIRST ISSUE	MK	01/11/21
REV:	DESCRIPTION:	BY:	DATE:

STATUS: FOR ISSUE

CLIENT:  
BLOOR HOMES

SITE:  
SOUTH WINCHESTER GOLF CLUB

TITLE:  
WALK TO PRIMARY SCHOOL + SOUTH WINCHESTER GOLF CLUB



SCALE AT A3:	DATE:	DRAWN:	CHECKED:
1:45000	01/11/2021	MK	RW
PROJECT NO:	DRAWING NO:	REVISION:	
21-268	20-008	-	





### Legend

Walk to Convenience Store (minutes)

- 0 - 5
- 5 - 10
- 10 - 15
- >15

○ Convenience Stores

□ South Winchester Golf Club

□ Competing Sites

- 1 - Land at Vale Farm
- 2 - Royaldown New Settlement
- 3 - Compton Manor Farm
- 4 - Kings Barton
- 5 - South of Lanham Lane
- 6 - Royal Winchester Golf Club
- 7 - Lands at Meadow Farm
- 8 - Land at Down Farm
- 9 - Land North of Well House Lane
- 10 - Sir John Moores Barracks
- 11 - Land at Sparsholt
- 12 - North of Lanham Lane
- 13 - South of Dean Lane
- 14 - North of Sarum Road

-	FIRST ISSUE	MK	01/11/21
REV:	DESCRIPTION:	BY:	DATE:

STATUS: FOR ISSUE

CLIENT:  
BLOOR HOMES

SITE:  
SOUTH WINCHESTER GOLF CLUB

TITLE:  
WALK TO CONVENIENCE STORE



SCALE AT A3: 1:45000	DATE: 01/11/2021	DRAWN: MK	CHECKED: RW
PROJECT NO: 21-268	DRAWING NO: 20-002	REVISION: -	





### Legend

Walk to Convenience Store (minutes)

- 0 - 5
- 5 - 10
- 10 - 15
- >15

○ Convenience Stores

□ South Winchester Golf Club

□ Competing Sites

- 1 - Land at Vale Farm
- 2 - Royaldown New Settlement
- 3 - Compton Manor Farm
- 4 - Kings Barton
- 5 - South of Lanham Lane
- 6 - Royal Winchester Golf Club
- 7 - Lands at Meadow Farm
- 8 - Land at Down Farm
- 9 - Land North of Well House Lane
- 10 - Sir John Moores Barracks
- 11 - Land at Sparsholt
- 12 - North of Lanham Lane
- 13 - South of Dean Lane
- 14 - North of Sarum Road

-	FIRST ISSUE	MK	01/11/21
REV:	DESCRIPTION:	BY:	DATE:

STATUS: FOR ISSUE

CLIENT:  
BLOOR HOMES

SITE:  
SOUTH WINCHESTER GOLF CLUB

TITLE:  
WALK TO CONVENIENCE STORE + SOUTH WINCHESTER GOLF CLUB



SCALE AT A3: 1:45000	DATE: 01/11/2021	DRAWN: MK	CHECKED: RW
PROJECT NO: 21-268	DRAWING NO: 20-005	REVISION: -	





## Legend

Walk to Post Office (minutes)

- 0 - 5
- 5 - 10
- 10 - 15
- >15

Post Offices

South Winchester Golf Club

Competing Sites

- 1 - Land at Vale Farm
- 2 - Royaldown New Settlement
- 3 - Compton Manor Farm
- 4 - Kings Barton
- 5 - South of Lanham Lane
- 6 - Royal Winchester Golf Club
- 7 - Lands at Meadow Farm
- 8 - Land at Down Farm
- 9 - Land North of Well House Lane
- 10 - Sir John Moores Barracks
- 11 - Land at Sparsholt
- 12 - North of Lanham Lane
- 13 - South of Dean Lane
- 14 - North of Sarum Road

-	FIRST ISSUE	MK	01/11/21
REV:	DESCRIPTION:	BY:	DATE:

STATUS: FOR ISSUE

CLIENT:

BLOOR HOMES

SITE: SOUTH WINCHESTER GOLF CLUB

TITLE: WALK TO POST OFFICE



SCALE AT A3:	DATE:	DRAWN:	CHECKED:
1:45000	01/11/2021	MK	RW
PROJECT NO:	DRAWING NO:	REVISION:	
21-268	20-004	-	





## Legend

Walk to Post Office (minutes)

- 0 - 5
- 5 - 10
- 10 - 15
- >15

○ Post Offices

□ South Winchester Golf Club

□ Competing Sites

- 1 - Land at Vale Farm
- 2 - Royaldown New Settlement
- 3 - Compton Manor Farm
- 4 - Kings Barton
- 5 - South of Lanham Lane
- 6 - Royal Winchester Golf Club
- 7 - Lands at Meadow Farm
- 8 - Land at Down Farm
- 9 - Land North of Well House Lane
- 10 - Sir John Moores Barracks
- 11 - Land at Sparsholt
- 12 - North of Lanham Lane
- 13 - South of Dean Lane
- 14 - North of Sarum Road

-	FIRST ISSUE	MK	01/11/21
REV:	DESCRIPTION:	BY:	DATE:

STATUS: FOR ISSUE

CLIENT:  
BLOOR HOMES

SITE:  
SOUTH WINCHESTER GOLF CLUB

TITLE:  
WALK TO POST OFFICE  
SOUTH WINCHESTER GOLF CLUB



SCALE AT A3: 1:45000	DATE: 01/11/2021	DRAWN: MK	CHECKED: RW
PROJECT NO: 21-268	DRAWING NO: 20-006	REVISION: -	





## Legend

Walk to Doctors (minutes)

- 0 - 5
- 5 - 10
- 10 - 15
- >15

○ Doctors

□ South Winchester Golf Club

□ Competing Sites

- 1 - Land at Vale Farm
- 2 - Royaldown New Settlement
- 3 - Compton Manor Farm
- 4 - Kings Barton
- 5 - South of Lanham Lane
- 6 - Royal Winchester Golf Club
- 7 - Lands at Meadow Farm
- 8 - Land at Down Farm
- 9 - Land North of Well House Lane
- 10 - Sir John Moores Barracks
- 11 - Land at Sparsholt
- 12 - North of Lanham Lane
- 13 - South of Dean Lane
- 14 - North of Sarum Road

-	FIRST ISSUE	MK	01/11/21
REV:	DESCRIPTION:	BY:	DATE:

STATUS: FOR ISSUE

CLIENT:  
BLOOR HOMES

SITE:  
SOUTH WINCHESTER GOLF CLUB

TITLE:  
WALK TO DOCTORS



SCALE AT A3: 1:45000	DATE: 01/11/2021	DRAWN: MK	CHECKED: RW
PROJECT NO: 21-268	DRAWING NO: 20-003	REVISION: -	





## Legend

Walk to Doctors (minutes)

- 0 - 5
- 5 - 10
- 10 - 15
- >15

○ Doctors

□ South Winchester Golf Club

□ Competing Sites

- 1 - Land at Vale Farm
- 2 - Royaldown New Settlement
- 3 - Compton Manor Farm
- 4 - Kings Barton
- 5 - South of Lanham Lane
- 6 - Royal Winchester Golf Club
- 7 - Lands at Meadow Farm
- 8 - Land at Down Farm
- 9 - Land North of Well House Lane
- 10 - Sir John Moores Barracks
- 11 - Land at Sparsholt
- 12 - North of Lanham Lane
- 13 - South of Dean Lane
- 14 - North of Sarum Road

-	FIRST ISSUE	MK	01/11/21
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STATUS: FOR ISSUE

CLIENT:

BLOOR HOMES

SITE: SOUTH WINCHESTER GOLF CLUB

TITLE: WALK TO DOCTORS + SOUTH WINCHESTER GOLF CLUB



SCALE AT A3:	DATE:	DRAWN:	CHECKED:
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PROJECT NO:	DRAWING NO:	REVISION:	
21-268	20-007	-	





### Legend

Walk to Bus Stops (minutes)

- 0 - 5
- 5 - 10
- 10 - 15
- >15

○ Bus Stops

□ South Winchester Golf Club

- Competing Sites
- 1 - Land at Vale Farm
  - 2 - Royaldown New Settlement
  - 3 - Compton Manor Farm
  - 4 - Kings Barton
  - 5 - South of Lanham Lane
  - 6 - Royal Winchester Golf Club
  - 7 - Lands at Meadow Farm
  - 8 - Land at Down Farm
  - 9 - Land North of Well House Lane
  - 10 - Sir John Moores Barracks
  - 11 - Land at Sparsholt
  - 12 - North of Lanham Lane
  - 13 - South of Dean Lane
  - 14 - North of Sarum Road

-	FIRST ISSUE	MK	01/11/21
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SITE:  
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TITLE:  
WALK TO BUS STOPS



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PROJECT NO: 21-268	DRAWING NO: 20-013	REVISION: -	





### Legend

Walk to Secondary Schools (minutes)

- 0 - 5
- 5 - 10
- 10 - 15
- >15

○ Secondary Schools

□ South Winchester Golf Club

□ Competing Sites

- 1 - Land at Vale Farm
- 2 - Royaldown New Settlement
- 3 - Compton Manor Farm
- 4 - Kings Barton
- 5 - South of Lanham Lane
- 6 - Royal Winchester Golf Club
- 7 - Lands at Meadow Farm
- 8 - Land at Down Farm
- 9 - Land North of Well House Lane
- 10 - Sir John Moores Barracks
- 11 - Land at Sparsholt
- 12 - North of Lanham Lane
- 13 - South of Dean Lane
- 14 - North of Sarum Road

-	FIRST ISSUE	MK	01/11/21
REV:	DESCRIPTION:	BY:	DATE:

STATUS: FOR ISSUE

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TITLE:  
WALK TO SECONDARY SCHOOL



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PROJECT NO:	DRAWING NO:	REVISION:	
21-268	20-014	-	





## Legend

Walk to Supermarkets (minutes)

- 0 - 5
- 5 - 10
- 10 - 15
- >15

○ Supermarkets

□ South Winchester Golf Club

□ Competing Sites

- 1 - Land at Vale Farm
- 2 - Royaldown New Settlement
- 3 - Compton Manor Farm
- 4 - Kings Barton
- 5 - South of Lanham Lane
- 6 - Royal Winchester Golf Club
- 7 - Lands at Meadow Farm
- 8 - Land at Down Farm
- 9 - Land North of Well House Lane
- 10 - Sir John Moores Barracks
- 11 - Land at Sparsholt
- 12 - North of Lanham Lane
- 13 - South of Dean Lane
- 14 - North of Sarum Road

-	FIRST ISSUE	MK	01/11/21
REV:	DESCRIPTION:	BY:	DATE:

STATUS: FOR ISSUE

CLIENT:  
BLOOR HOMES

SITE:  
SOUTH WINCHESTER GOLF CLUB

TITLE:  
WALK TO SUPERMARKETS



SCALE AT A3: 1:45000	DATE: 01/11/2021	DRAWN: MK	CHECKED: RW
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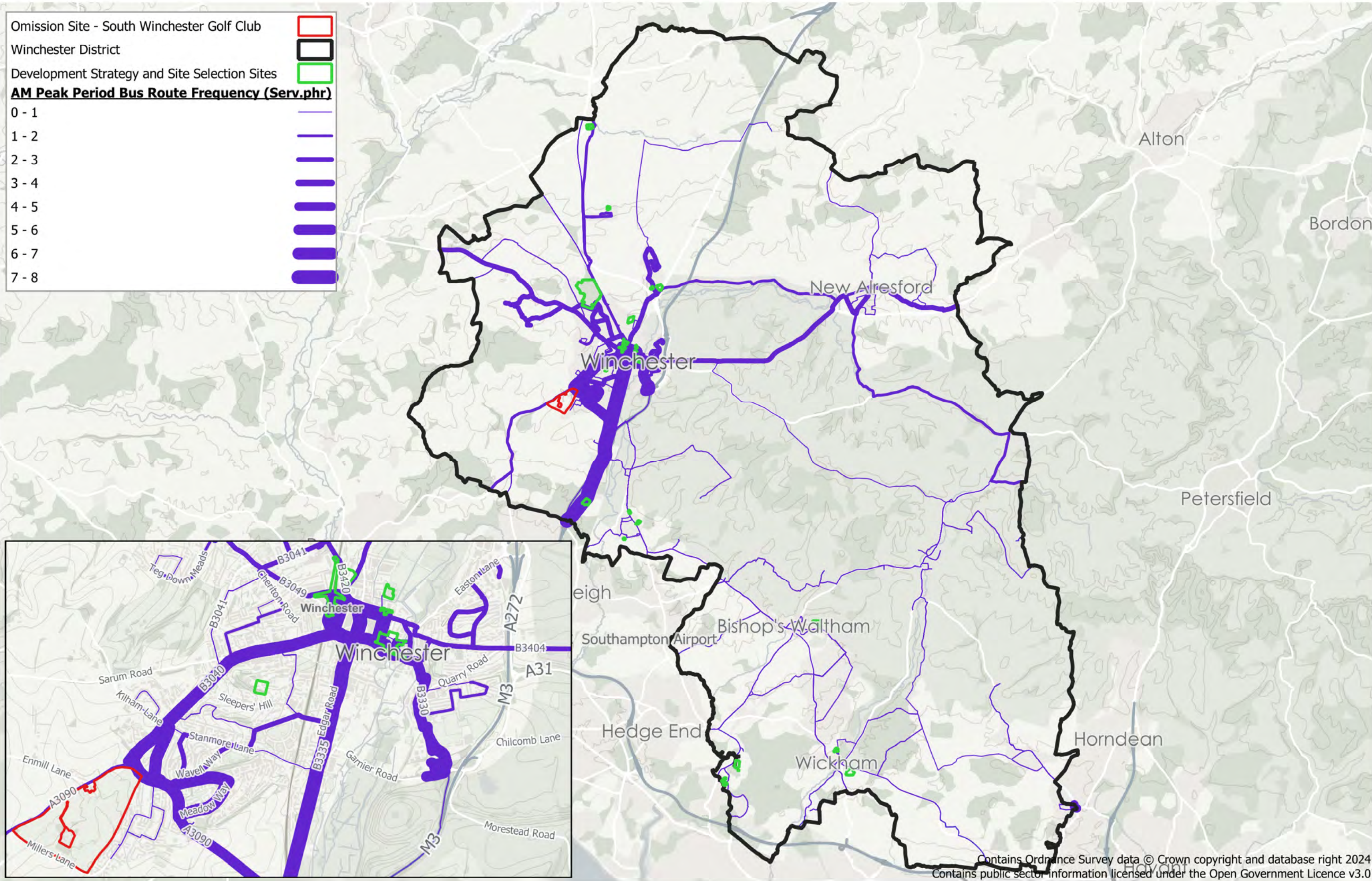
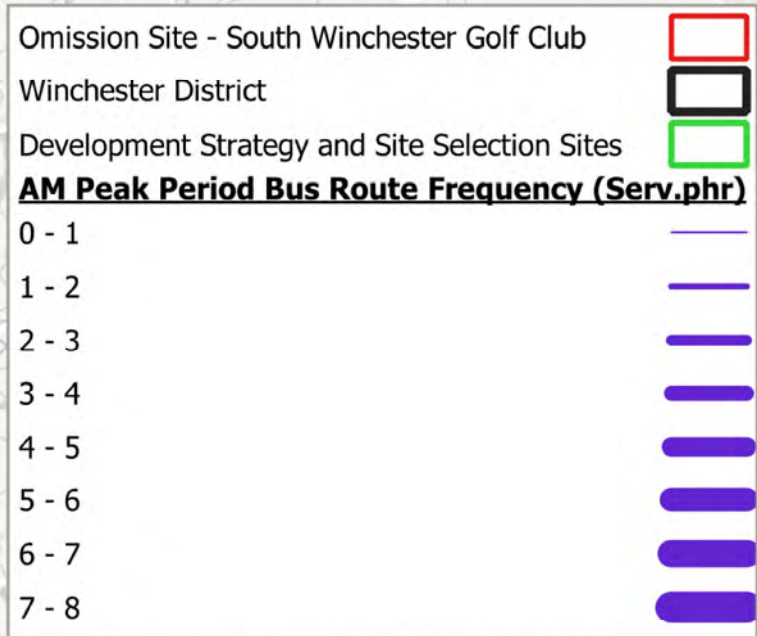
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## APPENDIX B

### Bus Route Frequency Plans



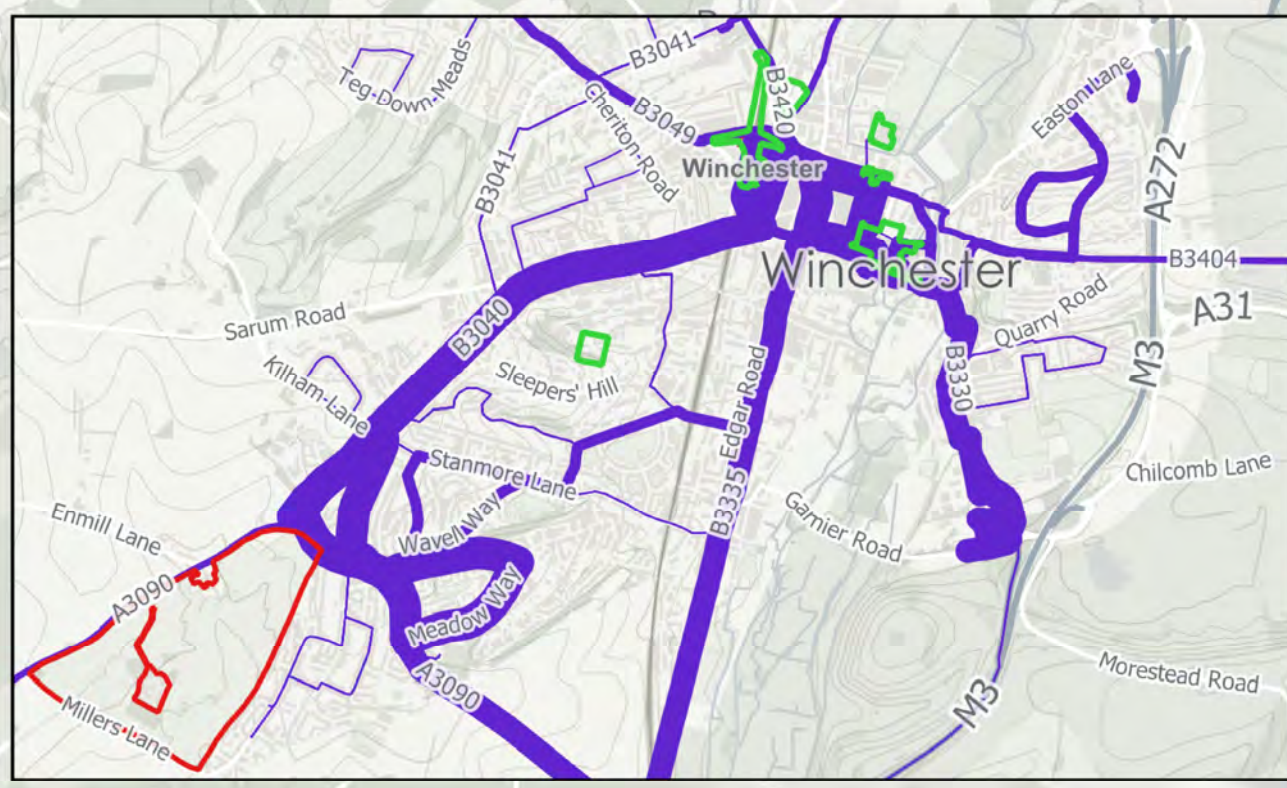
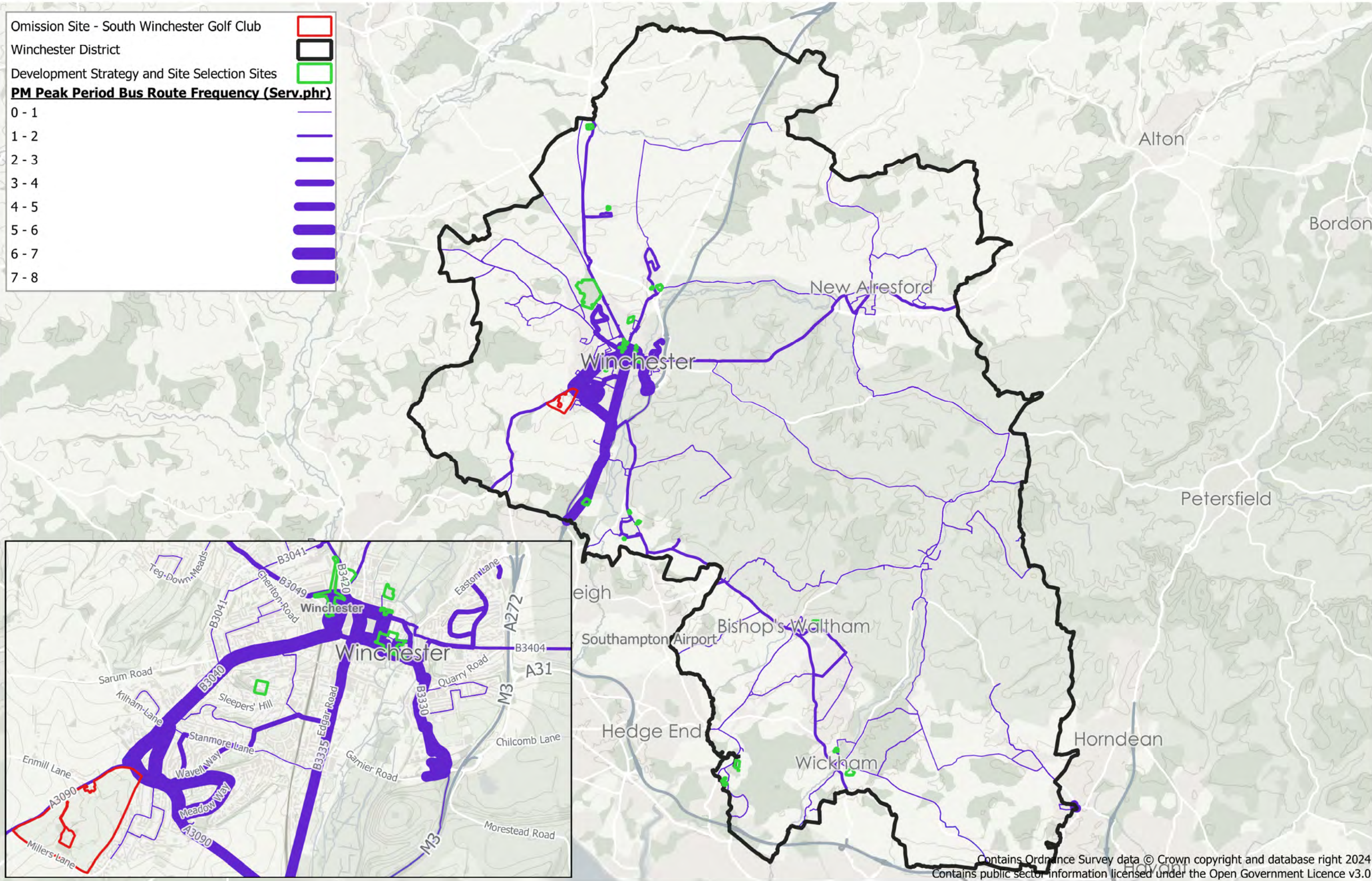
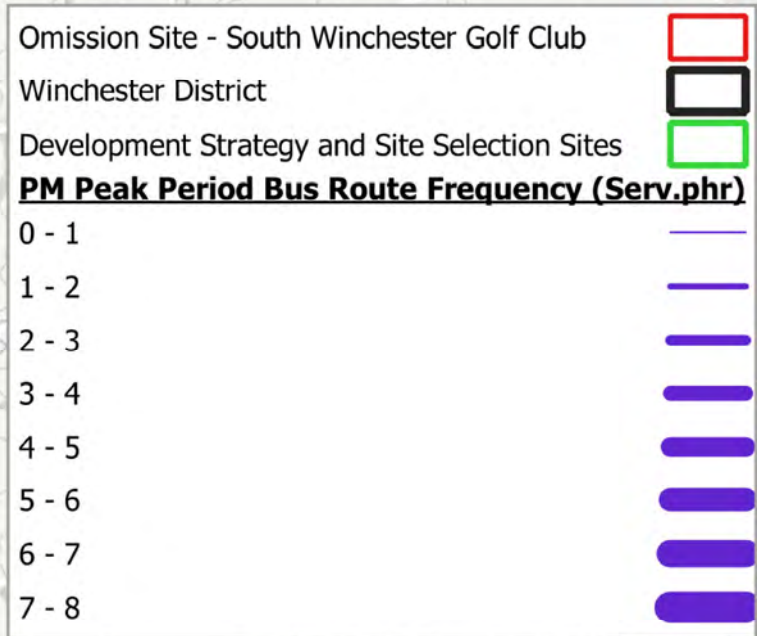


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23-413 Manor Parks, Winchester  
 Bus Route Frequency - AM Peak Period







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